Cultivating a Doctoral Community of Inquiry and Practice: Designing and Facilitating Discussion Board Online Learning Communities

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This paper presents a promising and powerful approach used to cultivate a doctoral community of inquiry and practice and harness the intelligence, commitment, and energy of all of its members in a blended learning environment. The discussion board online learning community approach was developed to transform a traditional face-to-face doctoral course into a blended learning environment centered in dialogue, inquiry, critical thinking, valuing diversity, collaboration, reflection, and deep and life-long learning. This work benefits instructors and education practitioners who are looking for an effective approach that produces deep learning and develops individual and collective student efficacy and capacity (content, process, and leadership) by creating powerful virtual networks that shift facilitation of discourse and ownership for learning from the instructor to students.

Introduction

To succeed in today's global environment, traditional brick and mortar institutions must be transformed, and instructional design plays an important role in this transformation. What approach has the potential to produce profound student outcomes and deep learning? What approach mentally engages learners with clear, focused, meaningful content and makes the acquisition of knowledge and skill more efficient, effective, and appealing while creating an instructional environment that relies on collaborative forms of learning, sharing, inquiry, and group participation?

This paper describes a discussion board online learning community approach used to cultivate a doctoral community of inquiry and practice in a blended learning environment. This approach, known as the *doc (discussion board online community) approach*, was developed to transform a traditional face-to-face doctoral course into a blended learning environment centered in dialogue, inquiry, critical thinking, valuing diversity, collaboration, reflection, and deep and life-long learning. This work benefits instructors and education practitioners who are looking for an effective approach that produces deep learning and builds individual and collective student efficacy and capacity (content, process, and leadership) by creating powerful virtual networks that shift facilitation of discourse and ownership for learning from the instructor to students.

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Theoretical Perspectives

The *doc approach* was built on the theoretical underpinnings of communities of inquiry and practice, cultivating a questioning and learning culture through knowledge and learning networks, and facilitative leadership and dialogue. Advances in distributed-learning platforms and new theories of culture-mediated cognition have stimulated interest in the use of learning communities among instructional designers (Wilson, Ludwig-Hardman, Thornam, & Dunlap, 2004). A number of workplace innovations have occurred as a result of Lave and Wenger's (1991) communities-of-practice model, which has been acknowledged as "an organization's most versatile and dynamic knowledge source and form's the basis of an organization's ability to know and learn" (Wenger, 1998, p. 2). Learning communities share commonalities with communities of practice in that they are complex systems where control is not centered in hierarchical authority but rather is distributed among participants (Backroad Connections Pty Ltd., 2003). According to Ludwig-Hardman (2003), "An online learning community is a group of people, connected via technology-mediated communication, who actively engage one another in collaborative learner-centered activities to intentionally foster the creation of knowledge, while sharing a number of values and practices" (p. iv).

The use of computer-mediated-communication (CMC) continues to expand in higher education. A major shift in thinking has occurred from thinking about knowledge residing with individuals to thinking about knowledge embedded in a group or community; and intellectual communities can play an important role in practitioners' lives where they do the real work (Hauser, 2011). When considering the use of a learning community and computermediated-communication, Garrison, Anderson, and Archer (1999) suggested employing the Community of Inquiry (CoI) model. The CoI model is built on the premise that learning occurs within a community, and discussion boards can be a powerful method for creating, cultivating and maintaining this community. A community of inquiry is defined as a group of people who share a common educational objective and pursue the common objective through on-going interaction with one another (Heckman & Annabi, 2006). Garrison et al. (1999) contended that worthwhile educational experiences are embedded in a community of inquiry, and learning occurs when three core elements interact: cognitive presence, social presence, and teaching presence. An important component for thinking critically is cognitive presence and the extent to which participants construct meaning through sustained communication in the community of inquiry. In order to facilitate critical thinking and achieve deep learning as an outcome, Lipman (1991) explained that a community of inquiry is not only valuable, but also a necessary context for the educational experience. Critical thinking and inquiry are core elements and professional dispositions fostered in our Doctoral Program in Educational Leadership.

Any participant in the Community of Inquiry can perform teaching presence, which is comprised of two general functions, design of the educational experience and facilitation. However, these functions have primarily been the responsibility of the teacher or instructor in the educational environment (Garrison et al., 1999). The approach described in this paper shifts these two functions of teaching presence, specifically facilitation, from the instructor to doctoral students. Leaders must learn to harness the intelligence, commitment, and energy of all of its members in the organization, and this level of engagement can only be fostered by a shift in leadership from telling to asking, from controlling to facilitating. Directive leadership

in today's knowledge driven world can result in a terrible waste of human resources. Facilitative leadership empowers individuals in an organization, provides a venue for each member to take initiative and become a leader, and ensures that the best ideas of the organization's most expensive resource, its people, are brought forward. Facilitation is a core competency for effective leadership (Bens, 2005).

Effective *dialogue* is a key to transforming organizational culture and helping its members solve problems. At the heart and soul of organizational learning is dialogue, a conversation form whose purpose is to support understanding and learning. Diversity is valued through dialogue; where diverse viewpoints are explored and what is to be accomplished and how interests within a system relate to one another are collectively clarified. Dialogue helps us stay in a place of inquiry by *staying in the question* (Gerard & Ellinor, 2001). The use of effective questions to create dialogue is a powerful tool, and the ability to ask good questions is an essential skill for today's education leader. Collins (2001) professed that organizations that made the leap from good to great created a climate where the truth was heard, and critical to creating that climate was *leading with questions*, *not answers* and *engaging in dialogue and debate*, *not coercion*. Great leaders push and probe with questions to get a picture of reality and its implications, and don't let go until the reason why is understood. Successful leaders lead with questions and create a questioning culture and the conditions and environment to ask and be asked questions. Questions build an inquiring culture and such inquiry and culture construct a learning organization (Marquardt, 2005).

Educators have known for a long time that questioning is a useful way to aid the transfer of knowledge and as stated in the 1860 edition of Barnard's *American Journal of Instruction*, to question well is to teach well (Ross, 1860). Two critical aspects of the *doc approach* presented in this paper are doctoral students serving in the role of facilitator and the instructor serving as coach. The instructor guides doctoral student facilitators and discussion board community members in the development and use of effective questions to produce deep learning and generate meaningful action.

Our online discussion board text-based communication approach provides time for reflection. Literature suggests that written communication and critical thinking are closely connected, and it's the reflective and detailed nature of the written work that promotes discipline and rigor in thinking and communication (Apple, 1984; Fulwiler, 1987; White, 1993). "Writing is the manifestation of thought. It is guided and grounded in knowledge and experience. It is self-generated, constantly reviewed, questioned, and revised" (Redmon & Burger, 2004, p. 158). Through our written approach to discussion, one person is less likely to dominate the conversation. According to Harvard, Du, and Olinzock (2005), our type of approach allows students time to construct their contribution, which is especially valuable for individuals who need more processing and think time to engage in the conversation as well as for those individuals not interacting in their first language. Additionally, our approach is built on the understanding that in order to achieve quality learning outcomes, instructional design and how technology is used are paramount (Anderson & Garrison, 1995; Clark, 1994).

Origin of the *Doc Approach*

In 2011, two state university campuses serving the central and southern San Joaquin Valley entered a six-year transitional program plan to offer a Doctorate in Educational Leadership in the south valley, with a specific goal of preparing administrators to meet the educational

challenges of today and the future. Faculty of the doctoral degree granting university, with more than 20 years of experience in offering doctoral courses and guiding dissertation and applied research, were charged with transforming the delivery approach of the traditional weekly on-campus doctoral courses to approaches that would accommodate the meeting structure needs of a doctoral cohort on a partnership campus more than a 100 miles away. Furthermore, the doctoral program offers both preK-12 and higher education educators the opportunity to pursue advanced studies that focus on professional practice and engages participants in important applied research through fieldwork—the program's signature pedagogy. Course design needed to take into account this important program component.

A blended or hybrid learning approach was used to transform the Conceptual Curriculum Perspectives for Educational Leadership core course. Although blended learning can mean many different things to different people (Discoll, 2002), the focus of the approach presented in this paper is primarily on the use of asynchronous technology to expand and enhance the traditional face-to-face (FTF) portion of the course. Blended learning through the use of the discussion board online learning community approach replaced a portion of FTF contact hours.

The *doc approach* is based on the following premises:

- We live in a knowledge society. Work in our organizations is collaborative individuals working in groups and teams characterized by distributed expertise and networked activities and experiences.
- The success of an organization, if not survival, depends upon creating a learning organization that adapts quickly to the changing environment and where every engagement becomes a learning opportunity (Marquardt, 2005).
- A questioning or inquiring culture in an organization builds a learning organization as well as a culture of accountability.
- Effective leadership is not about knowing all the answers. It's about knowing what great questions to ask and carefully listening to those responses.
- The interdependence of theory and practice and the processes of dialogue and disciplined inquiry are viewed as normative.
- Doctoral students enter fully into the community of scholarship evidencing accountable reading and building knowledge of self and others; giving and receiving ideas, information, sources and materials; and fully engaging in discussions and constructively participating as a learning community.
- In the learning community model, doctoral students with instructor guidance cocreate relevant and applicable knowledge and learning that positively impacts the practitioner and advances the work in the field.

As part of the blended learning model, the *doc approach* has been applied to two doctoral cohorts (comprising 37 students – 24 pre-K12 level and 13 higher education) and revised based on student feedback, analysis of approach use and alignment with intended outcomes, and instructor's lessons learned.

The Doc Approach

Setting the Context

The Conceptual Curriculum Perspectives for Educational Leadership course was comprised of preK-12 and higher education doctoral students. At the beginning of the course, each student researched an assigned notable voice in the field, and doctoral students were expected to represent not only their own perspectives, but also those of their notable voices during online and face-to-face class discussions. Each student was accountable for building knowledge and facilitating the learning of self and others through assigned core reading. Students participated in two different online discussion board (DB) learning communities based on assigned reading. The first set of DB learning communities was based on the students' level, preK-12 or higher education. Two different core curriculum texts were used and two DB communities were established in alignment with core text readings, operating for approximately two-thirds of the course. The second set of online DB communities consisted of a mix of preK-12 and higher education doctoral students, all using a common text. These two cross-level DB learning communities operated the last third of the course. Students had access to read the discussions taking place in the other learning community, though not required to do so.

Students were expected to actively assume two different discussion board roles: (a) facilitators of discussion board online learning communities during assigned weeks and (b) active learning community members or participants in discussions based on assigned reading representing not only their own perspectives with evidence-based support, but also the perspectives of their notable voices. The instructor divided the readings by week to guide the focus of the online discussions. Students signed up to serve as a facilitator twice throughout the course, facilitating one time in each DB community. Most facilitation was performed in pairs (at times trio), primarily due to the instructor's intent to (a) provide students the opportunity to have a colleague as a thinking partner in addition to the instructor and (b) afford students more than one facilitation experience. Class size and level of emphasis, and therefore, learning community size, were also factors in facilitation configuration. We have found through our research and experience that an optimum size for the online discussion board learning community is approximately eight, with two of the eight not only actively participating as members, but also serving as facilitators. We have operated discussion board learning communities as small as five with one facilitator and as large as 13 with three facilitators. However, to maximize the experience, we would recommend a configuration of no less than five and no more than 10, if possible.

Facilitator Role in the *Doc Approach*

The job of the facilitator(s) was first to generate prompts/questions based on the assigned reading that probe critical thought and reflection and build knowledge and deepen learning of discussion board community members. We understand that astute leaders use questions to encourage full participation in a group or team, spur innovation and outside the box thinking, wake people up, prompt new ideas, empower others, and solve problems. The most successful and effective leaders lead with questions that lead to the best possible insights (Marquardt, 2005). The purpose of doctoral students designing and facilitating discussion prompts was to build and enhance the leadership capacity of these educators; guiding and

supporting them to become stronger leaders by learning how to: effectively ask the right questions, listen effectively, and create a climate in which asking and responding to questions becomes natural.

In the learning community, when facilitators asked questions of their colleagues and invited each other to explore issues in the field and search for answers together, they not only shared information, but also shared responsibility as a system of education leaders. When responsibility is shared, ideas are shared, problems are shared, and ownership for results is shared.

The online discussion board facilitators were encouraged and pressed to develop great questions/prompts (based on assigned reading) that:

- Cause their colleagues, discussion board community members, to focus, to stretch, and to think critically.
- Create reflection.
- Challenge assumptions that prevent their colleagues from acting in new and forceful ways.
- Lead to breakthrough thinking.
- Provide the keys which open doors to the best insights and next best solutions.
- Enable colleagues to better view a situation or issue.
- Open colleagues' minds and get them to think more deeply.
- Test assumptions and cause colleagues to explore why they act in the way that they do as well as examine what criteria they use to determine action.
- Generate powerful action. (Marquardt, 2005)

The facilitator role required doctoral students to read ahead their assigned section, collaborate with a facilitation partner to create thought provoking prompts/questions, and send the proposed prompts/questions to the instructor two days in advance of the posting date to the discussion board community. Recognizing that the quality of the discussion was dependent on the quality of the questions/prompts, the instructor used the two days to provide guidance and coach facilitators in the refinement of their prompts. Also, acknowledging and respecting the diversity of discussion board members and recognizing that choice is one index of motivation and also builds empowerment and ownership, the majority of facilitators gave discussion board participants the opportunity to select from among a couple of connected and aligned prompts/questions. Most facilitator pairs developed (a) one common prompt/question for response and discussion of all members of the DB learning community and (b) two to three additional prompts/questions, in which members were expected to select and respond to one. Participants were asked in their response to identify the prompt they selected, explain why they selected that prompt, and initiate a discussion through their written response. All learning community members engaged in discussion of all prompts regardless of the one selected individually. Serving as leaders of learning, facilitators were expected to engage all discussion board members in dialogue and discussion by responding to the initial post of every learning community member.

Participant/Member Role in the Doc Approach

Discussion board members contributed to the learning community in three different ways: (a) initial post/response to the facilitators' prompts/questions, (b) response posts that addressed colleagues' initial posts, and (c) a reflection and assessment response. Initial responses addressed facilitator questions and included both respondents' perspectives and those of their notable voices. The goal of the response posts, which addressed colleagues' initial posts, was to engage in written conversation that deepened and extended thinking and learning. Participants were asked to consider responses that probe, affirm and build upon, express disagreement, predict, clarify, and ask why; and to avoid responses and questions that disempower and are leading. Participants supported their perspectives with evidence and concepts from the readings, the perspectives of their notable voices, and related experiences; including a reference, link, or citation when appropriate. At the end of the response, discussion board members were encouraged to leave a *food for thought* question or statement that prompts deep thought and further dialogue and discussion.

The third type of response, the reflection and assessment post, occurred after the designated week of discussion. All learning community participants, including facilitators, were expected to reflect on the week's discussion and provide insight and feedback on the content of the discussion and assess the functioning of the learning community, offering insight and feedback on strengths and opportunities for growth and development. Lateral accountability and capacity building were two important elements of this type of contribution.

Table 1 presents the expectations, guidelines and protocol used in the *doc approach*.

Table 1
The Doc Approach: Expectations, Guidelines and Protocol

Expectations, Guidelines and Protocol for Discussion Board Online Learning Communities

The purpose of the discussion board online *learning* community approach is to cultivate a doctoral community of inquiry and practice in a blended learning environment centered in dialogue, inquiry, critical thinking, valuing diversity, collaboration, reflection, and deep and life-long learning. Active and regular participation is important to extend and deepen your learning of course content and develop your thoughts and positions on various topics in collaboration with your colleagues in this class.

The three cardinal rules for online conversations through the use of the discussion board:

- 1. Please remember that the culture of mutual respect that is part of this course extends into the virtual classroom environment.
- 2. Active participation in discussion board communities is required.
- 3. Participation alone is not enough; a thoughtful and meaningful approach in your posts is important. (Quality counts!)

Protocol for Posting and Contributing to the Discussion Board Online Learning Community

- A. You are expected to participate at least 3 times each week: (1) initial post to prompt, (2) at least two responses to colleagues' initial posts, and (3) reflection/assessment post.
 - Prompt will be posted by Friday at 12:00 noon
 - <u>Initial post</u> should be completed by Monday at midnight
 - Response to posts should be completed by Wednesday at midnight
 - Reflection/Assessment post occurs between Friday and Sunday each week

- B. Discussion Board Posts:
 - 1. **Initial post** should be approximately $\underline{250 500 \text{ words}}$. Initial post should include not only your perspective supported by research and evidence of others, but assigned *notable voice* as well.
 - 2. **Response posts** should address colleagues' initial posts approximately 100 150 words. The goal of the response is to extend and deepen thinking and learning as well as create new knowledge. Consider responses that probe, affirm and build upon, express disagreement, predict, etc. Whether you agree or disagree, explain why with supporting evidence and concepts from the readings, the perspective of your *notable voice* and/or a related experience. Include a reference, link, or citation when appropriate. At the end of the response consider leaving a "food for thought" question or statement.
 - 3. **Reflection/Assessment posts** should include:
 - a) A sentence reflecting content learning (knowledge and skills developed and new knowledge created) during the week's discussion. What is your main take away?
 - b) A sentence regarding implications for practice and for you as a leader.
 - c) A sentence reflecting facilitation strengths and opportunities for growth.
 - d) A sentence reflecting strengths and opportunities for growth as an online learning community.
- C. Be organized in your thoughts and ideas.
- D. Incorporate correlations with the assigned readings or topics, support with evidence/research from other readings, share the perspective of your assigned *notable voice*, and stay on topic.
- E. Provide evidence of critical, graduate/doctoral-level thinking and thoughtfulness in your responses and interactions. Avoid summarizing.
- F. Contribute to the learning community by being creative in your approaches to topics and relevant in the presented viewpoints, inspiring a culture of inquiry, and motivating and probing deeply the discussion.
- G. When disagreeing with another person's post, respectfully disagree by responding as if you were face-to-face with the person.
- H. Be aware of grammar and sentence mechanics.
- I. Use proper etiquette. Remember that being respectful is critical.

Facilitator Role

Twice during the timeframe of the course, each student, with a partner or two, will facilitate and lead an online discussion board community. The first job of the facilitator(s) is to generate prompts/questions based on the assigned reading that probe critical thought and reflection and build knowledge and deepen learning of members of the discussion board community; questions/prompts that encourage full participation of the group, spur innovation and outside the box thinking, wake people up, prompt new ideas, empower colleagues, and solve problems.

This role requires that you read ahead your assigned section so that you have time to collaborate with your partner(s) and create thought provoking prompts that you will send to the instructor by 5:00 p.m. on Wednesday (two days prior to Friday post). The instructor will review prompts and provide guidance and coaching for revision and refinement, as appropriate. The instructor will post final prompts by Friday noon. In addition, you will facilitate learning by responding to each initial post of all participating colleagues (by Wednesday midnight), and complete a Reflection and Assessment at the end of the week.

Facilitator Expectations:

- <u>Send Prompt</u> to Instructor on assigned Wednesday by 5:00 p.m. Revision and refinement to prompts made as appropriate.
- **Post Prompt** on assigned Friday by 12:00 noon (Instructor).
- Colleagues' initial posts should be completed by Monday at midnight.
- Respond to Each Participating Colleague's Post by Wednesday at midnight.
- **Post Reflection/Assessment** between Friday and Sunday of the given week.

Response Posts should address each colleague's initial post, approximately 100 - 150 words. The goal of the response is to extend and deepen thinking and learning as well as create new knowledge that generates relevant and powerful action. Consider responses that probe, affirm and build upon, express disagreement, predict and clarify; and avoid responses and questions that disempower and are leading. Whether you agree or disagree, explain why with supporting evidence and concepts from the readings, the perspective of your *notable voice* and/or a related experience. Include a reference, link, or citation when appropriate. At the end of the response consider leaving a "food for thought" question or statement.

Note:

Great questions/prompts should:

- Cause discussion board members, your colleagues, to focus, to stretch, and to think critically.
- Create reflection
- Challenge assumptions that prevent your colleagues from acting in new and forceful ways.
- Lead to breakthrough thinking.
- Provide the keys that open doors to the best insights and next best solutions.
- Enable your colleagues to better view the situation or issue.
- Open your colleagues' minds and get them to think more deeply.
- Test assumptions and cause your colleagues to explore why they act in the way that they do as well as examine what criteria they use to determine action.
- Generate powerful action. (Marquardt, 2005)

Jim Collins in his book, *Good to Great*, offers *best practices* if you want to create a climate where the truth is heard. Keep these in mind as you facilitate and lead the learning.

- 1. Lead with questions, not answers.
- 2. Engage in dialogue and debate, not coercion.
- 3. Conduct autopsies, without blame.

Reflection/Assessment Posts should include:

- a. A sentence reflecting content learning (knowledge and skills developed and new knowledge created) during the week's discussion. What is your main take away?
- b. A sentence regarding implications for practice and for you as a leader.
- c. A sentence reflecting facilitation strengths and opportunities for growth.
- d. A sentence reflecting strengths and opportunities for growth as an online learning community.

Reflection Findings and Analysis

Two hundred ninety-six discussion board reflection and assessment responses were analyzed regarding facilitator strengths and opportunities for growth. Four main themes emerged relative to facilitator or facilitation strengths: (a) construction and quality of prompts/questions, (b) quality of facilitator responses to initial posts and on-going discussion, (c) timely facilitator response to initial posts, and (d) the use of multiple facilitators. Almost

every one of the 296 reflection responses contained some reference to facilitators crafting powerful and effective prompts/questions as a major strength. High quality prompts and questions resulted in critically thought out, high quality participant responses. Table 2 depicts the four facilitation strength themes that emerged from using the *doc approach* with corresponding student reflection responses.

Table 2
Facilitation Strengths: Themes and Reflection Responses - Using the Doc Approach

Strengths	Reflection Responses
Construction and Quality of Prompts/ Questions	 "Use of thoughtful questions, which allowed candid discussions and prompted the use of real life examples to express an idea." "Facilitators crafted thought-provoking prompts." "Facilitators had valuable prompts that caused me to reflect on the material in a meaningful way." "Facilitators posed questions that were significant." "Facilitators did a good job this week coming up with a strong set of prompts." "The questions were significant as they cause us to think deeply." "Discussion questions were very focused but at the same time broad which made them applicable to all participants." "Prompts this week were very well constructed because they encouraged comprehensive discussion that made the readings meaningful in practice." "Prompts were thought provoking. I do appreciate the opportunity to select between some options, because I am usually attracted to at least one of the 'choose one' grouping. Then I have a chance to reply to someone who chose another option and made it equally attractive." "Prompts this week were thought provoking - a lot of time went into crafting them." "As a group we are really starting to challenge each other with prompts that elicit critical thinking and result in synthesizing information gained from the reading." "They [facilitator questions] require us to dig deeper, seek out answers as we read and probe the practices of others." "Facilitators did a good job in developing questions that our diverse group could
Quality of Facilitator Responses to Initial and On-going Discussion Posts	 "Facilitators responded [to initial posts] with some thought provoking questions." "Facilitators added to the discussion by providing probing questions." "Facilitation this week was great with some thought provoking follow-up questions. The online discussion boards certainly keep use engaged and allow us to expand our knowledge base thanks to our colleagues." "Strengths of the facilitators were the ability to generate more engagement and discussions among group members, which can be attributed to the questions and responses provided back from the facilitators." "Facilitators allowed for deep reflection of the topics through their questions and responses." "Facilitators provided meaningful insight and provoked thoughtful discussions with their responses."

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	"Facilitators did a great job providing feedback and furthered my learning by providing me with additional questions to ponder."
	"Facilitation was successful at following up on each student's post even though the students were each choosing entirely different sections of the reading."
	• "It appears all group members, including facilitators, do an excellent job of selecting key points to focus their responses and unfolding the discussions."
	"Facilitators and group members contributed excellent examples, responses, and questions."
	• "It is unclear if we have just settled into the discussion board groove or if facilitation continues to improve. Each week the facilitation seems to become exceedingly better and this week was no exception. The use of probing questions in reply has led to an interesting back and forth between cohort members."
Timely Facilitator Response to Initial Posts	 "Facilitators responded quickly and appropriately to create dialogue and discussion." "Facilitators made a diligent effort to respond to every original post in a timely manner."
	• "They [facilitators] responded promptly and with thought provoking questions that contrasted my own ideas with other possibilities."
	"Timely response this week from facilitators."
	"Facilitators timely in their responses."
	"Facilitators added to the discussion by providing a timely response to continue the collaborative approach."
Use of Multiple Facilitators	• "Having more than one facilitator helped in shaping the questions and having different perspectives when responding to peers' entries – a major strength of this format – eliciting multiple viewpoints on one issue allows everybody to grow to have a much deeper understanding of the concept and implications for practice."
	"Role of the facilitator seemed to be favorably enhanced when there were three people serving as moderators for the discussion board."
	"I believe three facilitators who work well together help make the facilitation process more beneficial as there were opportunities to respond in depth to some posts as opposed to responding in a 'surface, short fashion' because of the sheer amount that must be addressed."

Doctoral students also commented on the additional learning benefits gained by performing the facilitator role. "As a facilitator, I found that I was more engaged in the discussions and learned more by reflecting on the posts and searching for a *food for thought*. The previous facilitators had performed so well that I want to meet the expectation and the bar they set." "Facilitating discussions this week caused me to look deeper at the concepts discussed in our reading in order to promote continued communication between peers."

Two hundred ninety-six discussion board reflection and assessment responses were analyzed relative to the strengths and opportunities for growth as an online learning community. Four primary themes emerged regarding the strengths of the online learning community: (a) diversity of participants in the learning community, (b) increase in depth of dialogue and discussion, (c) development of self and others, and (d) collective sharing of resources. The diversity theme was explained as a strength from two main perspectives: the cross-level mix of preK-12 and higher education and participants' diverse expertise and experiences from working in a wide range of education settings and positions even within the same level (preK-12 or higher education). With each week of discussion, doctoral students professed that not only did the depth of discussion profoundly increase, but also the

willingness of participants to challenge one another and the status quo while pushing each other to think more critically. Students expressed that the discussion board learning community made a profound impact on building the individual and collective efficacy of the cohort. Table 3 depicts the overarching themes with corresponding reflection responses relative to online learning community strengths.

Table 3
Online Learning Community Strengths: Themes and Reflection Responses - Using the Doc
Approach

Approach Strengths	Reflection Responses
Diversity of Learning Community Participants	 "Strength of online learning community is the mix of K-12 and higher education participants as it enhanced the discussion and learning." "The possibilities for growing through an online learning community are innumerable; allowing for collaboration in this venue ensures that many diverse backgrounds can add to the discussion."
	"I have found the peer base is so much more diverse, which allows for different access to knowledge. We all communicate from different backgrounds and cultures – that's cool!"
	• "I am very excited to engage in conversations with this heterogeneous group of educators ranging from elementary to higher education."
	• "I think the combination of folks from different areas in education added to the dynamics of the discussion."
	• "Pleased with the responses due to the diversity our cohort - provided within each persons own area of expertise, which only serves to provide more opportunities for richer learning in the weeks ahead."
	"Members of the group bring an outstanding variety of experiences that make our discussions interesting and useful."
	• "Learning from each other in this venue is beneficial because of the amount of perspectives and depth of discussion to truly reflect on my own perspectives."
	• "We are hearing meaningful perspectives from each member and I am learning from each of you!"
Increase in Depth of Dialogue and Discussion	• "It seems like we are starting to engage one another's points of view rather than just enjoying the practice of reading our own writing."
	• "Our group seems to be doing better every week in engaging in discussion and posting earlier. We are coming around a lot since the first week."
	"In this week's facilitation, I saw our group really spend time with more aggressive engagement, challenging each other and asking for clarification. I like what this type of interaction requires of me. I continue to challenge myself to research other members' notable voices as a way of seeking the experience of experts in formulating my own response."
	• "I am impressed with the increasing level of rigor that has continued to increase each week within the cohort despite the exhaustion that we experience from time to time due to the dedication of all the members of the group."
	• "This week's discussion revealed an authentic willingness to seek out new strategies and challenge the status quo."

	"Conversations get more in-depth as we continue our online learning community."
	"I appreciate the honesty and candidness that proliferates within our weekly discussions. I think it makes for more interesting and engaging medium for the sharing of knowledge and opposing viewpoints."
	"As an online learning community we have the ability to increase the amount and quality of our conversations."
	"I continue to be amazed at the depth of knowledge generated by our online discussions and the clarity that resonates from reading different posts."
Development of Self and Others	"I am pleasantly surprised with the sense of community that is developing from our online participation. I am growing and my understanding is being developed by their individual posts."
	• "The online learning community is enhancing my development of critical thinking skills and it is also reinforcing the fact that I am also contributing to the expansion of knowledge of my classmates."
	• "I have a tremendous amount of respect for the process. It's a great opportunity to learn from some of America's most brilliant minds."
	"Online class is providing many ways to increase communication between class members on a weekly basis and add value to our learning."
	• "The work and respect that is behind each post facilitates team building both online and in class. On the discussion board, we share in a thoughtful way, with evidence—which is sometimes difficult with the time constraints in [FTF] class."
	• "I am finding the online community to be somewhat akin to the comments one receives from the various social networks. As I post and then I read others' replies, I find myself edified. It causes me to step back, reflect, and refine my thoughts. I cannot thank my peers enough for taking the time to do so."
Collective	"I like the collective resources of the group."
Sharing of Resources	• "I especially like it when people included references to other resources."
Resources	"Continue with the in-depth topics each week as this online format allows a dynamic interaction between us as students. The resources and ideas that are shared online would have taken up too much class time."

Some doctoral students also expressed that even though they were not required to do so, they read the discussions taking place in the other discussion board community. One of the participants explained, "I read everyone's exchanges because I need to learn so much from my peers who are K-12 leaders." Some written conversations continued even beyond the focus of a given week as evidenced by this participant's response, "Interestingly, when I log on I can see that group members still sometimes post to the previous weeks' topics, as the conversations have continued on some important points. I think this illustrates the type of continuing interaction and reflection over time that the discussion boards were established to create."

One overarching theme emerged regarding opportunities for growth and development as an online learning community: challenge and continue to challenge one another and prompt each other for deep reflection. Reflection responses evolved and changed dramatically from Week 1 to Week 3 implementation of the *doc approach*. A Week 1 participant stated, "As a discussion group we are mostly playing it safe and have been unbending in our existing perspective...hopefully we will soon all begin to push our discussion out of the comfort zone," however, by Week 3 a participant expressed, "Member's

posts are becoming more focused, action-oriented, and memorable. In order to keep our momentum going through the end of the semester, it will be nice to see more of these powerfully presented, evidence-based arguments." By Week 2, participants acknowledged that the discussion board interactions had shifted to more "real discussion" and strongly encouraged colleagues to contribute more and continue to challenge one another's thinking, assumptions and the status quo. Discussion board learning community participants stated:

- "As an online community we are the individuals that drive the learning process but we all must be willing to contribute and engage more." (Week 1)
- "We need to challenge our belief systems more, play devil's advocate and really try to stretch the boundaries of our comfort zone. It is hard to build muscle if you never try to push the existing muscle past its limits." (Week 2)
- "Continue challenging each other and using examples to better understand participant responses." (Week 2)
- "Continue exploring educational best practices and not be afraid to bring up the unspoken, unheard or what most people won't say." (Week 4)
- "As an online learning community, I think the cohort needs to keep challenging the status quo and people's thought processes this is both our opportunity for growth and strength." (Week 5)
- "Keep challenging each other and asking questions, which prompt deep reflection." (Week 6)
- "Continue the hard conversations in regards to things that are normally considered sacred ground." (Week 8)

Participants commented during Weeks 1 and 2 about the importance and benefit of posting early, not only initial responses but also their replies to one another. One participant noted, "Posts made late on the due date caused some difficulty for me as a facilitator to navigate through all posts and provide continuous thoughtful responses." Another participant expressed,

I wasn't able to post until Wednesday, so even though I met the deadline, I missed out on anyone responding to my post. I need to hold myself accountable to get this week's post in earlier. It is the questions and interactions from my peers where I am most forced to grow.

During the beginning weeks of participation in the discussion board online learning community, a few participants noted that technology was a concern for them. They expressed the need to get used to operating in the Blackboard platform and the "need to get the feel for the mechanics, format and timetable for responses and discussion board participation." One respondent noted "As a person whose biggest fear was technology, I had my reservations. I am getting more and more comfortable with the system though." These types of comments diminished after Week 2.

Additionally, a participant commented Week 1 about the need for further "clarification on the concept of *doctoral level responses*" [reference to the discussion board protocol], and asked the instructor and cohort to "consider if this may be in conflict with the word maximum." The following week at a FTF class session, the instructor facilitated a discussion

with the doctoral cohort to further clarify the intent of the protocol as a guide to help frame expectations, and not a tool for compliance. The cohort engaged in a dialogue about the concepts of compliance and quality and arrived at shared understanding of adherence to the protocol and a focused quality response. This dialogue appeared to have been helpful in shifting the way participants engaged in the discussion board learning communities the following week as evidenced by one of the participant's reflection responses at the end of Week 2, "There seemed to be more *real discussion* this week. I think we adjusted well based on instructor feedback."

Key Insights and Lessons Learned

Based on findings and analysis of more than 2,000 discussion board entries and reflection responses of two cohorts over a period of two years, the following are key insights gained and lessons learned about the use of the *doc approach* as part of a blended learning delivery model:

- Face-to-face (FTF) sessions were greatly enhanced by the level of knowledge built during the online discussion board learning communities, which weekly represented the perspectives of all doctoral students, not just some. In order to maximize FTF discussions and work, it was important that the instructor frontloaded the focus of the discussion board communities through strategically assigning reading sections.
- Students appeared more prepared for FTF sessions in the blended learning model than the traditional FTF model due to the implementation of the *doc approach*, which involved written inquiry, dialogue and discussion, and reflection and assessment.
- The skills of facilitation and developing the right questions and a questioning culture are essential competencies for today's leaders. Setting the expectation (doc approach guidelines) of participating students to ask powerful and compelling questions was not enough. The capacity of students had to be built in this area. This development required specific guidance, training, time, energy, and coaching, but was well worth the effort because results were profound.
- The criteria used to determine the composition of the online discussion board learning communities greatly impacted the type and depth of participant experience. As instructor, it was essential to clearly establish intended learning outcomes for each specific discussion board learning community and think critically about the composition of participants that would best support achievement of those outcomes. Two different criteria: (a) level emphasis (preK-12 and higher education) with customized curriculum text readings and (b) cross or mixed-level with common text readings were used to establish two different sets of discussion board communities for the Conceptual Curriculum Perspectives for Educational Leadership course. Both compositions produced desired outcomes, however, if the criteria for the composition of the common text reading discussion board learning communities had been same level emphasis vs. cross-level, the discussion and impact of the *doc approach* experience would have been significantly different, and we believe not nearly as powerful. The system in

- which we live greatly influences the lens from which we view things. As a result of cross-level configuration, the depth to which participants: (a) caused their colleagues to stretch, think critically, and reflect, (b) tested and challenged colleagues' assumptions to explore why they act in the way that they do, (c) enabled their colleagues to better view an issue and (d) provided better insights to break through thinking was greater, and the experience was more powerful.
- The traditional brick and mortar classroom experience was transformed; students led the learning and built the capacity of one another with the instructor serving as a coach. As a participant explained, "interesting how online discussions spilled outside the Blackboard community." Conversations continued in Google Hangout fieldwork groups, and students entered FTF sessions discussing topics and points presented in their online learning communities that then deepened and pushed the work in the FTF sessions. A participant expressed, "as an online community, we have grown and bonded quite a bit, which has made it easy to support one another."
- Through the *doc approach*, students created a questioning culture and the conditions and environment to ask and be asked questions. This approach was not only extremely effective to deepen content learning, but also effective as a vehicle for building the capacity of students on how to ask the right questions effectively, how to listen effectively, and how to create a climate where asking questions is the norm and the way successful systems operate to continuously improve.
- The *doc approach*, including the use of the notable voice concept, helped students more fully engage in the community of scholarship and supported the interdependence of theory and practice. Weekly reflections regarding implications for practice as a leader in the field generated real world actions that prompted participants to take next day steps in their respective organizations. These reflections provided a strong foundation for creating strategies and action plans related to a number of critical issues in the field of education, and serve as a valuable resource to be used way beyond the timeframe of this course.

Summary and Significance

This is a pivotal moment in history for education. Our world is one of multiple answers and infinite possibilities. The economy is driven by innovation and knowledge, and the fundamental shifts in the economy demand a need for bold and creative policies and practices. In response to economic changes, organizations have made significant shifts, both organizationally and behaviorally, changing how they are organized and the way they do business such as "flatter management structures, decentralized decision making, information sharing and use of task teams, cross-organizational networking, ...and flexible work arrangements" (Partnerships for 21st Century Schools, 2008, p. 5). According to several studies (Black & Lynch, 2003; Gera & Gu, 2004; Pilat, 2004; Zoghi, Mohr & Meyer, 2007), these shifts frequently have been associated with increased productivity and innovation. Workers today have more responsibility and contribute more to productivity and innovation, and diverse workplaces and communities hinge on collaborative working relationships and social networking.

New and different skills are demanded of the workforce today and in the future; requiring more educated workers who are agile and possess the knowledge and skills to: (a) respond flexibly to complex problems, (b) communicate effectively, (c) manage information, (d) work in groups and teams characterized by distributed expertise and networked activities, and (e) produce new knowledge. The success of an organization is dependent upon creating a learning organization that adapts quickly to the ever-changing environment and views every engagement as a learning opportunity.

Smith (1988) expressed the cultural view of learning as, "we learn from the company we keep," and learning represented by this view means coming to belong to a community of practice (Brown, Collins, & Duguid, 1989; Lave & Wenger, 1991). The concept of learning communities is the result of this view applied to the educational setting. The outcome of the learning community is to expand the community's knowledge and skills, maximizing its learning. This requires the community to take advantage of the knowledge and expertise of all its members and what they learn – pooling individual knowledge to expand and deepen collective knowledge as well as create new knowledge. Additionally, effective leaders in a learning organization maximize the use of resources (their people) by shifting their leadership from telling to asking, from controlling to facilitating.

The *doc approach* provides a mechanism where knowledge and skills gained by cohort members are shared throughout the community, and each student becomes a leader and facilitator of and learner and contributor to producing both deep understanding and new knowledge. It is an approach that transforms a traditional face-to-face course into a blended learning environment centered in dialogue, inquiry, critical thinking, valuing diversity, collaboration, reflection, and deep and life-long learning. This paper presented a promising and powerful approach to cultivate a doctoral community of inquiry and practice and harness the intelligence, commitment, and energy of all of its members in a blended learning environment.

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