Assessing the value created through participating in a graduate studies community of practice

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Abstract:

   In effort to overcome the challenges related to enhancing student learning and academic achievement in higher education, researchers continue to explore a myriad of educational strategies and best practices. Communities of Practice (CoPs) have been identified as a means to nurture the learning and expertise of members in a variety of contexts. Despite the numerous studies that have reported the many benefits of participating in CoPs, studies that assess the value created through such participation are lacking, especially within educational settings. The purpose of this study was to assess the value created through participating in a graduate studies CoP comprised of 14 graduate students and three professors. Using a case study design and a value creation framework, findings revealed that all group members gained personally meaningful and relevant value through participating in the CoP, which in turn led to enhanced learning and a gain of academic competencies. The findings provided empirical support for the value framework, which is discussed in relation to its implications for the future study and application of CoPs in higher education.

Key Words:

Collaborative learning, higher education, social learning, becoming an academic.

Introduction

   According to Weimer (2002), "after many years, the higher education community has finally discovered learning, and a need for resources that further cultivate and capitalize on that interest" (p. xi). The literature within this increasingly growing field portrays a shift from research studying the impact of various pedagogical strategies and best practices for teachers to an interest in better understanding the individual and social complexities of the learning process (Barr & Tagg, 2000; Huba & Freed, 2000). The teaching-learning dichotomy continues to be part of a critical and ongoing dialogue

among researchers and practitioners in higher education (Fry, Ketteridge, & Marshall, 2009), and it has been characterized by opposing paradigms – the instructional paradigm and the learner-centered paradigm (Harris & Cullen, 2010; Weimer, 2002). Harris and Cullen (2010) described the instructional paradigm in terms of an educational structure that "views knowledge as a quantifiable commodity that can be isolated, identified, and controlled" (p. 25). More specifically, it is presented as a paradigm of isolation in which the practice of peer collaboration is challenged, and often overshadowed, by the competitive hierarchy of power and control. In contrast, the learner-centered paradigm places emphasis on creating community and sharing power in an effort to create knowledge and achieve specific learning outcomes (Blumberg, 2012; Harris & Cullen, 2010). In line with a constructivist approach to learning, the learner-centered paradigm not only recognizes the influence of the learner's biography on his/her interactions with the material of teaching (Jarvis, 2009; Moon, 2004), but also stresses the need to embrace the social processes and context in which learning occurs (Bruffee, 1999; Garrison & Vaughan, 2008).

Lave and Wenger's (1991) theory of situated learning suggests that a learner acquires skills and expertise by engaging, or co-participating, in social situations rather than simply acquiring abstract knowledge and attempting to reapply it in future contexts. Moreover, in order to gain competency and form an identity through learning, learners need opportunities to engage socially and practically in real-life situations, and in turn influence the world (Lave & Wenger, 1991). Educational settings in particular are areas in which learners could greatly benefit from fostering a climate for learning through community (Devenish et al., 2009; Harris & Cullen, 2010). It has been suggested that classroom settings are sometimes disconnected from the world, and therefore fail to provide students with adequate opportunities to transform knowledge into real-world competence (Wenger, 1998). Integrating approaches that emphasize social learning and interaction gives students enhanced opportunities to develop knowledge and skills not acquired in the classroom (Garrison & Vaughan, 2008).

One such approach is a *Community of Practice* (CoP) – a highly recognized term originally coined by Lave and Wenger (1991) and later fully developed by Wenger (1998); more recently, it has been referred to as a learning community (Li et al., 2009a). CoPs are defined as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott, & Snyder, 2002, p. 4). According to Wenger, CoPs are characterized by (a) mutual engagement (i.e., engaging in actions and negotiating meaning together), (b) joint enterprise (i.e., dealing with situations as members pursue agreed upon goals, implying one or more common purposes), and (c) shared repertoire (i.e., creating resources the group utilizes, such as stories, routines, tools, symbols, actions, concepts, or ways of doing things). Due to the benefits associated with CoPs, such as gaining a sense of community and access to knowledge and expertise, as well as developing and/or retaining knowledge, skills and expertise (Saint-Onge & Wallace, 2003), these complementary learning spaces have become a commonly used strategy for enhancing performance within the fields of education (e.g., Akerson, Cullen, & Hanson, 2009; Printy, 2008), health (e.g., Li et al., 2009b; Short, Jackson, & Nugus, 2010), business (e.g., Gray, Parker, Rutter, & Williams, 2010; Wenger et al., 2002), and sport (e.g., Culver & Trudel, 2008; Stoszkowski & Collins,

2012). Specifically in higher education, CoPs have been used to enhance students' knowledge sharing and collaboration, as well as individual and group development (e.g., Chang, Chen, & Li, 2008; Cambridge, Kaplan, & Suter, 2005). Moreover, researchers have reported increases in students' reflective skills and enhanced practices through the implementation of diverse teaching methods (Harford & MacRuairc, 2008). Despite the increasing popularity of CoPs, our understanding of optimal design elements, mechanisms of implementation, and strategies to effectively assess the value created through CoP interactions is limited (Li et al., 2009b).

In an attempt to fill this gap, Wenger, Trayner, and De Laat (2011) created a conceptual framework for promoting and assessing value creation in communities and networks. Adapted from Kirkpatrick's (1994) four-level model for evaluating training programs, Wenger and colleagues' framework provides a "toolkit for helping professionals to tell stories on the value that networks and communities create when they are used for learning and to articulate how these activities result in desired outcomes that improve teaching practice" (p. 5). Considering the multifaceted and complex nature of assessing value, the framework outlines five types of value: (a) immediate value, (b) potential value, (c) applied value, (d) realized value, and (e) reframing value. First, Wenger et al. proposed that community interactions and activities provide group members with *immediate* value in and of themselves by, for example, the sharing of a story or useful tip. However, not all value is realized immediately. A community's activities and interactions can also produce value that has the *potential* to be recognized in the future. For example, a community member can learn from a story told by another member that may produce value in the future, particularly if he/she encounters a similar situation. Potential value can take different forms, such as personal assets, relationships and connections, resources, collective intangible assets, and a transformed ability to learn. *Applying* value can lead to changes or innovations in members' approaches, practices, or actions. The application of new practices and/or tools however does not guarantee an improvement in performance. Thus, Wenger et al. highlighted the importance of reflecting on how the application of knowledge capital affects the achievement of goals and improvement of performance (*realized* value). Finally, value can be achieved when social learning results in a reconsideration of learning objectives and how success is defined. This could include *reframing* the community's goals, values, and strategies, and can occur at an individual and/or collective level. To provide additional insight into how the five types of value can interact with one another and be nuanced in a practical scenario, we present the following fictional vignette, or *value creation story* as proposed by Wenger et al.:

> A sales associate attends a bi-weekly team meeting to discuss the launch of a new product (immediate value). During the meeting, the associate makes note of several interesting product features and selling strategies discussed by the group (potential value). By applying this information in his/her next sales opportunity (applied value), his/her ability to satisfy the customer's needs is enhanced (realized value), which in turn leads to a reconsideration and reframing of the importance of team meetings for enhanced performance and productivity (reframing value).

In addition to a table of value creation stories similar to the one presented above, the authors' framework further provides researchers and practitioners with a series of key questions for reflection and a comprehensive list of value indicators to aid in their efforts to identify and make meaning of the five types of value intricately embedded within individual and group narratives. In light of the potential benefits associated with adopting Wenger et al.'s (2011) framework in higher education, the purposes of this study were to assess the value created through participating in a CoP within a graduate program using the above framework, and to explore how it can contribute to our understanding and assessment of CoPs in higher education.

Method

Researchers have suggested that the case study design can be an effective means for investigating a unique phenomenon and providing a rich description of the case by presenting narratives and situational explanations (Stake, 2005). This provides the reader with an opportunity to relate the case to his/her personal experiences (Stake, 2005), and to interpret and apply what has been learned from the case to his/her own reality (Merriam, 2002). In light of this, a case study method was used to explore the value created through participating in a graduate studies CoP.

The Case – The Graduate Studies CoP

The Graduate Studies CoP, referred to as the Coach Development Research Group (CDRG) moving forward, is a group of students and professors nested within a graduate program in Human Kinetics at a Canadian university. As authors who in our own research are examining sport coach learning and development through various means including social interactions, we deemed that the group had the necessary features to be considered a CoP – engaging in the *practice* of becoming academics in sport pedagogy and psychology. The CDRG was created by a group of professors and graduate students in 2008 as a supplementary learning space to increase learning and academic competencies (e.g., research skills, critical thinking, and writing). In relation to the CDRG's structure and interactions, data confirmed that the primary group activity involved bi-weekly meetings beginning at the start of the fall term (beginning of September) and concluding at the end of the winter term (end of April). The meetings were designed to help group members engage in critical readings of and reflections on current literature, collaborate on research projects, and share ideas, information and perspectives related to academia and, to a lesser degree, work experiences. A subgroup meeting took place on alternate weeks for group members interested in additional collaboration and peer support. Typically, these meetings were attended by newer members of the group and one professor, and they focused on the challenges of becoming a graduate student, as well as the process of getting familiarized with the literature relevant to our field. Group members (referred to as participants moving forward) also organized activities outside of academia to further cultivate group dynamics, such as attending sporting events and taking part in potluck dinners. Membership of the CDRG varies in accordance with incoming and outgoing graduate students. However, at the time of the study, the CDRG consisted of three professors and 14 graduate students (6 PhD students, 4 MA students, 4 recent MA graduates), which included the four authors (the first three authors were graduate students and the

fourth author was a professor). Among the professors, two were female associate professors who started their respective careers in academia following time working in the sport domain, and one was a male full professor who has been conducting research on coach development and pedagogy for over 25 years. The students (6 males, 8 females) ranged in age from 23 to 43 years ($M = 29.50$, $SD = 3.16$) and had amassed a variety of degrees in fields such as kinesiology, physical education, and psychology. Pseudonyms are used to ensure the anonymity of participants.

Procedures

The authors approached the other CDRG members and asked if they would be willing to participate in this case study. As a whole, the group decided that the first step would be to conduct a focus group. During the focus group (102 minutes), the potential research design was introduced and the group's perceptions were sought concerning the activities of the group and the impact of their participation within it. Following the analysis of the focus group transcript, a semi-structured open-ended individual interview guide (see Appendix) was developed to probe in greater depth participants' experiences in the group (e.g., "What are some of the activities involved with being a member of the group?"), their participation (e.g., "Describe your participation in the group. What are your intentions for participating in the group?"), and the perceived impact of their participation in the group (e.g., "Have you benefitted from your participation in the group? If so, please describe."). Seventeen audio-recorded interviews were conducted by the first and third authors ($M = 69$ minutes; $R = 41$-89 minutes) and member-checked to reduce threats to validity. The interview of the first author was conducted by the second and third author, and the interview of the third author was conducted by the first and second author.

During the data collection process, one of the authors participated in a four-day retreat with Wenger and Trayner, in which she was introduced to their framework for promoting and assessing value creation in communities and networks (i.e., Wenger et al., 2011), and therefore, the research questions and interview guide were not created with the framework in mind. Given the data that had been collected, the authors decided to conduct a theoretical (deductive) thematic analysis (Braun & Clarke, 2006) guided by the framework. The interviews were transcribed verbatim, and transcripts were uploaded to the qualitative analysis software Nvivo10 and analyzed according to Braun and Clarke's six-phase procedure: (a) becoming familiar with the data, (b) generating initial codes, (c) searching for themes, (d) reviewing themes, (e) defining and naming themes, and (f) producing a report. All stages of analysis were conducted jointly between the second and third authors; this has been recommended by Maxwell (2005) as another strategy to reduce threats to validity.

Findings

In order to assess the value created through participating in the CDRG, our findings are divided into five sections according to the five types of value outlined in Wenger et al.'s (2011) framework. It is important to note that the separation and distinction between each type of value is not always obvious, and therefore it is difficult to be mutually exclusive when presenting indicators of each one (Wenger et al., 2011).

Immediate Value

Throughout the focus group and individual interviews, all 17 participants presented indicators of gaining immediate value by participating in the CDRG activities and interacting with others. Participants identified engaging in a wide variety of activities that directly stemmed from being a member of the CDRG. Among these activities, it is apparent that all participants believed the bi-weekly meetings played a critical role in the group's learning function. For example, Peter (3rd year PhD) said, "the group meetings are where our group lives. All of the other activities branch off from the readings we do and the learning that takes place during those meetings". Within the group meetings, participants reportedly engaged in "reading, editing, discussing, familiarizing ourselves with the literature, and sharing ideas" (Lisa, MA graduate). In addition to the scheduled meetings, group activities included "individual get-togethers, constant interactions in the labs, email interactions, and all of the other individual interactions like going for a walk or grabbing a coffee" (David, 1st year MA). Participants discussed the importance of these interactions and suggested that they provided an opportunity to receive much needed support throughout the many trials and tribulations encountered while pursuing a graduate degree. Further, participants were able to receive valuable immediate feedback from both professors and peers regarding their work.

Potential Value

As stated above, Wenger et al. (2011) differentiate between five forms of potential value, all of which were highlighted during the interviews. First, indicators of *personal assets* were presented by all participants when discussing how their participation in the CDRG exposed them to new ideas, useful information, and feedback. For example, Cathy (4th year PhD) said, "you're constantly seeing all of these perspectives and receiving all these different opinions and ideas from the others". Moreover, most participants spoke of the value of being exposed to a breadth of strategies to enhance the skills of reading, writing, and conducting research. Deborah (2nd year PhD) provided an example related to her process of publishing a manuscript, "when I was writing an article, I sent it to a few students in the group. They read it, critiqued it, and gave me a lot of feedback, so before I even submitted it I already had access to four or five peer reviewers".

Value was also noted through developing *relationships and connections* with other members of the group. Fifteen participants described that these interactions and bonds provided support and helped them enjoy the process of conducting research and fulfilling the requirements for their degree. For example, Carroll (4th year PhD) highlighted the joy of creating relationships with group members, "it's more than just participating in activities. We're creating bonds with each other, and we care enough to help each other out, instead of just focusing on learning and the readings; it makes the process more fun and rewarding". William (MA graduate) discussed the importance of seeing and relating to the struggles of other members, "you see your peers' projects, the challenges they face, and you don't feel alone; you don't feel like you're the only one going crazy as you're trying to complete your degree".

Next, all participants provided indicators for gaining value through the acquisition and utilization of group *resources*. For example, Tracy (4th year PhD) indicated that the group facilitated access to information, documents, and reference material:

The group is a place where we have access to so many resources. Someone could share with me their contacts or references, and I could send them mine. I set up a Dropbox folder to share my review of literature and articles so other students can use them.

Furthermore, Cameron (4th year PhD) discussed the importance of not only having access to resources, but the opportunity to access them quickly, "for students [who are] on their own [not belonging to a CoP], it might take days, or even weeks, before finding an answer. In our group, it could take maybe a minute or two because of all the resources we have".

With respect to *collective intangible assets*, 12 participants presented indicators for the value they gained from the group's reputation and status, as well as from the collective voice and identity produced by the group. For example, these participants proposed that individual success enhanced the group's recognition, as highlighted by Danielle (1st year MA):

If I produce good work, people will see it and think, 'there's the coach research group…they're doing really interesting things'. We all strive to produce high quality work, which we can then all build upon. I think that's why the work being produced from this group seems to be respected and recognized.

Lisa discussed how attending conferences as a group affected her interactions and connections:

Because we are such a big and productive group, I was able to meet a lot of people…probably more than students who attend conferences alone or in smaller groups. Because of the group, I was able to create better connections with other academics.

Finally, indicators of *transformed ability to learn* were presented by 15 participants who spoke of being able to transfer their experiences of learning within the group to other situations and contexts. For example, Peter said, "I've taken a lot of my learning to help support my relationships with people, whether that's my relationship with friends or family members. My ability to learn in different situations has increased". Chad (1st year MA) also discussed how learning within the group has transformed experiences in other areas of his life:

I think the group is great for my learning as a student and a person. Now when I coach, instead of just jumping to conclusions about why a player makes a certain decision, I take time to view it as an opportunity [to learn] and better understand the situation and that player.

Applied Value
By leveraging the potential value presented above, 13 participants presented indicators of applied value through changes or an innovation in actions, practice, and approaches both inside and outside of academia. Within academia, participants

discussed changes to their reading, writing, critical thinking, and approaches to learning. For example, Brenda (1st year PhD) commented on how participating in group meetings has specifically translated into a change in her approach to reading:

> Experiencing others' perspectives has helped me reframe my thoughts and think in different ways when I'm reading. I now break down readings, sometimes sentence by sentence, and go deeper into the meaning of the material to better understand it.

Similarly, Lisa commented on changing her approach to learning, "I use the information I have learned from others to do more in-depth learning. I have forced myself to really understand the material by changing the way I look at it".

Outside of academia, seven participants referenced the application of value gained from the group in their work as coaches and consultants. One of the professors, Claire, discussed how she applied the information she learned within the group related to lifelong learning to her coaching practices:

> In any type of coaching situation, the ability to use these critical thinking skills is going to be important. Sometimes you'll be in a situation where you see how people are reacting to your coaching and go, 'Oh, that's interesting! I wonder what's in that person's biography that's making them react like that.' It helps me understand the situation.

Another example was provided by Peter, who spoke of using the knowledge created through his interactions within the group to make changes to his work as a sport consultant:

> Following each group meeting, I always try to bring bits of the information from our discussions into my consulting work on the weekend or during my next Skype call with an athlete. I will try to integrate the theory into practice. Learning is one thing, but applying it is something completely different.

Realized Value

Eight participants discussed realized value and performance improvement. Indicators of this type of value were presented in terms of increases to participants' productivity and enhancing skills important to their success in higher education. Tracy stated that "the group has helped me progress a lot faster with my work and better adhere to timelines". This feeling was shared by one of the professors, Wendy, who said, "I'm positive I get things done more efficiently from speaking with people in the group. Any time anybody gives you a hint about doing something, or referring a book or a website, you get things done more efficiently". Another participant, William, noted the improvement in his ability and confidence to engage in critical discussion:

> Being part of the group helps improve your skills. If someone was to give me an article to read, I'm not just looking for commas and spelling errors anymore. I'm now reading from a critical point of view and I feel confident voicing my opinion.

Similarly, Danielle stated, "at first, I didn't even know how to discuss what I read with the group. I am now more reflective, and the depth of learning is now much greater when I read something and discuss it with the group". A more specific example of realized

value was mentioned by David, who credited the group's support for his successful performance at an academic conference:

> The group showed me so many helpful ways of improving the presentation I was preparing. Before then, I was really insecure about what I was going to do, but receiving all their advice was extremely important and led to my success at the conference…. All the feedback I received from the audience was very positive.

In short, Cameron summarized the influence of his involvement with the CDRG, stating "participating in this group has made me a better researcher, a better student, and an overall better thinker".

Reframing Value

Although five participants presented indicators of reframing value, only two provided concrete examples of how they were able to, due to their involvement in the group, redefine their understanding of academic success and learning and reframe how they view themselves and the world. For example, William reflected on reframing how he sees challenges, and ultimately how he defines success:

> I always wanted to be successful, but I understand success differently now. When I face a challenge, I don't rush it anymore just to get through it; I take a moment to think and really analyze the situation and go from there. I'm more excited for challenges.

Peter discussed how being a member of the CDRG has helped him redefine his view of learning and the role he plays as a learner:

> My understanding of learning is completely different now. I now view myself as a learner, whereas before I was a person who was trying to learn, hoping to learn. I realize I need to be much more active in my learning. I can't wait for learning to happen to me.

Moreover, he continued by discussing how his participation in the group has led to an understanding of multiple realities, which in turn has transformed the way he views and creates knowledge through interactions with others:

> I no longer view things as being right or wrong. I used to live in a very black and white world. Now I see that there are a lot of shades of grey…. If somebody disagrees with my perspective or consulting strategies, that's fantastic! Let's hear your thoughts, because if you believe that there's merit to that, I want you to help me. Let's see what we can create together and how we can grow and learn together.

Discussion and Conclusion

The purposes of this study were to assess the value created through participating in a CoP within a graduate program using Wenger et al.'s (2011) framework, and to explore how the framework can further contribute to our understanding and assessment of CoPs in higher education. Findings revealed that value gained from participating in the CDRG occurred at various levels. By engaging in a variety of activities (e.g., bi-weekly group meetings) and interacting with colleagues on an ongoing basis (immediate

value), participants received a breadth of useful insights, resources, and strategies (potential value), which they were able to apply (applied value) and, in most cases, benefit from both inside and outside of academia (realized value). Moreover, in a few cases, participants made note of a reframing and/or reconsideration of perspective due to their involvement in the group (reframing value). Although all five types of value were noted, it is important to highlight that there was an unequal distribution of indicators presented in the participants' transcripts. More specifically, the number of participants who spoke of gaining value, as well as the number of indicators from the sample of participants, steadily decreased from immediate value through to reframing value. Wenger et al. proposed the framework not be viewed as a linear model, and noted that one type of value does not necessarily lead to another, nor is success only defined by gaining the fifth type of value (reframing value). One of the strengths of creating a CoP is that it provides a platform from which group members are able to benefit individually and/or collectively in different ways:

> Different aspects are likely to be important to different stakeholders. Facilitators may be more interested in successful activities or the production of outputs (immediate and potential value). Members might care about solutions to challenges in their practice (applied value) and definition of success (reframing value). Managers might be most interested in performance (realized value). (Wenger et al., 2011, p. 21)

Therefore, the type of value garnered by members is not important, but rather that they are indeed gaining value, and that such value is relevant and timely given the community's practice and the members' respective intentions for participating in the group (Chang et al., 2008).

Differences in the importance and value placed on different aspects of a learning situation, such as participating in a group meeting, can be largely attributed to the learners' biographies – the sum of learners' prior experiences and knowledge (Jarvis, 2009). Learners' biographies have been investigated by numerous authors within the learning and education literatures (e.g., *reservoir of experience*, Knowles, 1984; *perspective*, Mezirow, 1991; *cognitive structure*, Moon, 2004). Our biography acts as a lens through which we see the world and ultimately experience and filter the plethora of information we are exposed to on an ongoing basis (Jarvis, 2009). The meaning and value we attribute to any experience is directly linked to who we are at that moment in time. The shift in the literature to learner-centered (i.e., constructivist) approaches to education places considerable emphasis on recognizing learners' biographies, most notably through the careful design and delivery of material that not only engages learners based on their interests, but also promotes personally meaningful learning experiences (Weimer, 2002). Thus, if CoPs are to be used as a supplementary means of enhancing student learning in higher education, it can be argued that group members must create an environment that encourages each member to continually reflect on and share their individual academic objectives, perspectives, interests, and learning needs.

Although learning is an individual process, it is important to keep in mind that the influences of learners' biographies on the value they gain by participating in a CoP are nested within a larger social context. Our findings revealed that the social context created by the CDRG was critical in framing the value gained by participants, as

highlighted by the indicators presented for each type of value. For example, much of the value described can be attributed to the inherent social characteristics of CoPs (i.e., mutual engagement, joint enterprise, and shared repertoire; Wenger, 1998). Moreover, it is important for students to engage in opportunities where they can apply and integrate their knowledge in social settings (Devenish et al., 2009). Participating in the CDRG allowed students pursuing similar fields of study to partake in the process of co-creating knowledge related to relevant topics, and in turn represent their understandings in social and practical settings (e.g., group meetings). Participants acknowledged that most of the value gained from these group experiences would not likely have been leveraged in a traditional classroom setting. This is highlighted by a first year PhD student who suggested, "being a member of this group has given me so many advantages and learning opportunities that I would not have had if I only attended classes, met with my supervisor, and focused only on my own research" (Brenda).

It must be noted that a comparison between the impact of CoPs and formal classroom settings is not the intent of this study. Instead, we have provided support for the value that can be gained by using CoPs as an ancillary strategy to enhance knowledge creation and overall academic performance within the context of higher education. In doing so, we have explored and provided support for the use of Wenger et al.'s (2011) framework to assess value created through participating in communities and networks within this particular academic setting. Although the framework was not introduced into this study until the data analysis stage, it proved to be an effective tool to guide the interpretation and representation of the data collected. The fact that our findings fit within the framework also speaks to its practicality, ecological validity, and provides it with empirical support in the context of higher education. The utilization of the framework for the purpose of this study, however, provides only a glimpse of its potential application for researchers and practitioners moving forward. For example, the different types of value that were perceived by our participants came out of the somewhat general interview questions we asked. The framework outlines a comprehensive interview guide to facilitate the production of rich narratives pertaining specifically to each of the five types of value created through communities and networks. In addition to its obvious use as an interview guide for researchers, these questions can be used in a more practical manner as part of reflective group activities to increase member awareness and enhance group outcomes.

Although the framework was not designed to assess the potential drawbacks and obstacles associated with communities and networks, by focusing solely on the leveraging of positive influences and outcomes, we believe it presents an incomplete and possibly biased perspective of overall group functioning. As it relates to the findings of this study, it is important to note that in addition to value reported by group members, several participants discussed internal and external pressures to attend meetings and achieve learning outcomes, as well as the conflicts that can arise due to power imbalances among group members. Wenger (1998) stressed that not all aspects of CoPs are inherently positive; therefore, in order to paint a complete picture of the processes and interactions resulting from CoPs, future research initiatives should consider including an examination of the potential challenges and disadvantages of CoP participation.

In conclusion, it has been suggested that "higher education leaders must provide students with an opportunity to engage their professors and peers in critical and creative reflection and discourse – the conventional ideals of higher education" (Garrison and Vaughan, 2008, p. ix). Our findings indicated that participating in a CoP provided these opportunities for the graduate students and professors involved in this study. Moreover, among the many indicators presented for each of the five types of values outlined in Wenger et al.'s (2011) framework, the group members' participation in the CDRG was accompanied with increased knowledge and enhanced academic competencies. In addition to extending our understanding of the value created through communities and networks using Wenger et al.'s framework, future research is needed to explore the implementation and sustainability of CoPs in higher education.

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Appendix

1. Can you please provide a brief overview of your biography?

2. What are your overall perceptions of the group?

3. What do you think are some of the underlying intentions that guide the research group?

4. What are some of the activities involved with being a member of the research group?

5. Describe your participation in the group.

6. What are your intentions for participating in the group?

7. Have you benefitted from your participation in the group? If so, please describe.

8. Has your participation in the group had an influence on you outside of the group?

9. Do you have any other comments or thoughts to add?