Leadership Education in a Community of Practice

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Abstract

This study used qualitative research procedures to evaluate the learning impact of a long term (3 ½ years) leadership education program on participants' cognitive models of leadership. Situated learning theory (Lave & Wenger, 1991) and communities of practice principles (Wenger, McDermott, & Snyder, 2002) were used to develop research questions, frame the analysis, and interpret the findings. Participants were drawn from a long established collegiate student organization that has as its objective the development of the leadership capabilities of its members. As members, these students have experienced a military academy type life style while also pursuing their undergraduate studies within a large university setting. Researchers content analyzed 200 to 300 word leadership essays written by 50 student-cadets to determine their cognitive models of leadership. Three models were identified. Leading through relationships was the most frequently discussed in participants' essays (80%), followed by leading by example (70%), and finally leading by influence (5%). Implications for findings for both practice and research are discussed.

Introduction

The purpose of this study is two-fold. First is to introduce situated learning theory and communities of practice principles to the leadership education domain. Second is to evaluate the learning impact of a long-term (3 ½ years) leadership education program on participants' cognitive models of what comprises effective leadership. Situated learning theory along with the communities of practice concept were used to develop research questions, frame the analysis and interpret the findings. Participants' cognitive schemas for the leadership task were selected for scrutiny because recent empirical and theoretical work strongly indicates that leaders typically behave according to a personal mental model of leadership (see Kane, et al., 2002; McCormick & Martinko, 2004; Wofford, Goodwin, & Whittington, 1998). These models, according to research by McCall, Lombardo & Morrison (1988), develop mostly from past experiences and to a lesser extent from formal training.

Here we investigate a naturally occurring leadership education community of practice (the Corps) that is physically and socially embedded in a large university setting. The stated purpose of this student organization is to develop the leadership capabilities of its members. Student members are referred to as cadets. Most days they wear uniforms that identify them as being members of The Corps of Cadets. For ease of reading, henceforth, the term "Corps" will be used to identify the student organization, and the term "cadet" will be employed to denote a student member of the organization. The Corps is responsible for a variety of ceremonial activities (for example, one unit raises and lowers the American flag every day), they do community service work, they represent the university at significant special events (like the Presidential Inaugural parade), and they conduct fund raising activities for the university and local charities. Of relevance to this study is the fact that there is no one style or model of leadership that has been adopted as the preferred or accepted way to lead others in the Corps. Thus, no one is selected on the basis of their predisposed style of leadership.

Selection for the Corps requires only university admission and an expressed desire to join it, that is, self-selection. Furthermore, the retired and reserve military officers who supervise the day-to-day operations of the various outfits in the Corps are not selected on the basis of their individual leadership styles. Given these facts the central question is: What are the cadets learning about being effective leaders? A review of situated learning theory and the communities of practice concept is presented next to set the theoretical framework for the paper.

Situated Learning Theory and Communities of Practice

Situated learning is a general theory of knowledge acquisition that recognizes the critical importance of the social setting to knowledge construction (Brown, Collins, & Duguid, 1989; Lave & Wenger, 1991). It is defined as, "education that takes place in a setting functionally identical to that where the learning will be applied" (Wikipedia–the free encyclopedia, p.1). In contrast to most formal classroom

settings, which often involve learning abstract concepts and dry facts presented out of context, situated learning theory proposes that it is through "doing" knowledge in its relevant performance situation that it is best acquired. A refinement of the situated learning model is Lave and Wenger's (1991) communities of practice concept.

The term, communities of practice, is of recent invention, though the learning phenomenon it refers to is age-old. For instance, in the Middle Ages there were guilds, associations of persons of the same trade (like metal workers, stone masons, carpenters, tanners and artists) formed for mutual aid, training apprentices, and economic and political protection. Members met at the guildhall not only to socialize but also to share innovative techniques and problem solve current difficulties. The economic, political, and social influence of the guild system remained significant until the advent of the Industrial Revolution. Still, communities of practice like the guilds flourish to this day, though mostly unrecognized as such.

Wenger, (2004) describes communities of practice as, "groups of people who share a common concern or a passion for something they do and who interact regularly to learn how to do it better" (p. 1). To be sure, not everything called a community is actually a community of practice. A neighborhood may be referred to as a community, but, because it typically does not involve a process of collective learning in a common venue of human performance, it is not a community of practice. On the other hand, the scientists, engineers, and technicians who lived and worked together to produce the first atomic device at remote Los Alamos, New Mexico six decades ago were indeed a community of practice.

There are three distinguishing characteristics of a community of practice: (1) domain, (2) community, and (3) practice (Wenger, McDermott, & Snyder, 2002). The first factor, domain, refers to the common body of knowledge, the unifying topic, or the activity which gives the group a collective focus. For the Los Alamos group, it was harnessing the power of the atom; for soccer moms conversing at a game, it is kids and successful parenting. The nature of the domain attracts and motivates participants to contribute, and also directs participants' learning activities while engaged with the learning community.

The second factor, community, refers to the social environment in which members interact. Through regular social exchanges involving joint activities, discussions, helping each other, and sharing information, relationships are built. Trust and mutual respect are established. A safe psychological space is created that encourages a willingness to share ideas, reveal one's shortcomings, ask pointed questions, and be intellectually playful. Learning together requires some level of group cohesiveness, which can be accomplished only by sustained interpersonal activity and a common purpose.

The third factor, the practice, refers to what the members do in common, and what they want to learn how to do better. Members of a community of practice are

practitioners who share a common set of unique capabilities as a result of a collaborative process of building new knowledge and skillfully enacting it. The practice part is the craft building part: the set of tools, techniques, strategies, common body of knowledge, and ideas that the community members develop and share. Thus, each participant's capacity to perform is enhanced as a result, while the new knowledge that has been generated is preserved in some manner.

The Student Organization

The central premise of this paper is that the student organization selected for study herein can be viewed as a community of practice for leadership education. A description of the Corps, its purpose and organization, will be used to support this perspective. As noted previously, the three characteristics of a community of practice are domain, community, and practice (Wenger, McDermott, & Snyder, 2002).

The 1800 plus young men and women who are members of the Corps have chosen to experience a military academy type life style while also pursuing their undergraduate education. They are organized into 29 units, each with a unit commander and chain of command. Each unit, a company or squadron, is assigned to one of five larger unit formations. Coordination of large unit activities is provided by a leadership cadre made up of seniors selected by the Commandant of Cadets. The formal and informal leadership structures of the Corps afford numerous opportunities for cadets to both observe and practice leadership. In addition, cadets attend classes as part of their course of study that present various concepts, models, and theories of leadership drawn from the academic and applied literatures. Thus, the domain of the Corps (the activity that gives it a collective focus) is leadership development, which satisfies the first characteristic of a community of practice: a common domain.

The second characteristic of a community of practice is community, and the Corps meets this condition as well by virtue of the arrangements of the physical environment. Unit members live together in one of eight dormitories that border a large green space, which is used for military training exercises and physical conditioning activities. Included in the residence complex is a common dining hall, a band hall and practice field, a military stores building and administrative facilities. The entire complex (referred to as the "Quad") has a common entrance that clearly identifies this area of the campus as being dedicated to and for this unique student organization. It is for all practical purposes a campus within a campus.

Practice, the third characteristic of a community of practice, is the application of knowledge and skills to current performance demands. The purpose of practice is to refine individual capabilities. The organizational design of the Corps affords constant opportunities to practice leadership. For example, sophomores train and supervise freshmen (direct leadership), juniors observe and coach the sophomores in their training of freshmen (indirect leadership), and seniors mentor freshmen and

supervise juniors. Also, the unit commander and his or her staff coordinate overall unit activities in support of unit goals (executive leadership). In sum, the chances to practice and observe leadership behaviors are virtually non-stop on the Quad.

Purpose/Objectives

The essential task of a community of practice is to establish a baseline of common knowledge; that is, a basic body of knowledge that comprises a common foundation of understanding shared by community members (Wenger, McDermott, & Snyder, 2002). Thus, in a leadership education community of practice, one should find similar knowledge structures (cognitive models of leadership) shared by a large percentage of community participants. Based on the situated learning theory and communities of practice literatures, the following two questions were posed.

1. What cognitive models of leadership have cadets developed after being members of a leadership education community of practice (the Corps) for three and a half years?
2. How congruent were the cadets' cognitive models of leadership? Put another way, do the cadets have similar leadership models?

Methods/Procedures

This study is grounded in the qualitative research paradigm. The general characteristics of this qualitative study reflect those identified by Fraenkel and Wallen (1999) as professionally acceptable and appropriate methods for studying a phenomenon when: The natural setting is the direct source of data (qualitative) versus a "snapshot" in time (quantitative); data are collected holistically from a participant's perspective (qualitative) versus relying on a participant's quantitative response (quantitative); the process (qualitative) as well as the variables of interest (quantitative) are considered; data are analyzed inductively (qualitative) versus deductively (quantitative); and data attempts to capture concern for a participant's behavior, attitude, reason, or motive (qualitative).

The natural setting and prolonged engagement for this study was two sections of a 15-week undergraduate course. The learners in the course were senior cadets who had participated in a learning community (Corps) for 3.5 years in a large Research 1 institution. One of the researchers was the instructor for the course sections, while the other served as a peer debriefer, methodologist, and data interpreter. Each respondent was coded with a number for confidentiality. The study was approved by the Institutional Review Board – Human Subjects in Research.

Content analysis techniques were used by the researchers to analyze a 200-300 word writing assignment where 50 cadets were asked to define leadership, describe their personal philosophy or personal model of leadership, describe the actions of an effective leader, and describe characteristics or behaviors that distinguish a successful leader. "Content analysis is a technique that enables researchers to study

human behavior in an indirect way, through an analysis of their communications" (Fraenkel & Wallen, 1999, p. 405).

Activities to increase credibility for this study included triangulation and peer debriefing. The narrative descriptions of the data constructs and themes provided sufficient detail so interpretations and transferability decisions can be made by the reader. An audit trail including initial data analysis and compilation of units was kept with each coded writing sample to ensure dependability and confirmability (Lincoln & Guba, 1985).

The constant comparative method was used for data analysis (Lincoln & Guba, 1985). This method includes four stages: 1) comparing incidents applicable to each category, 2) integrating categories and their properties, 3) delimiting the construction, and 4) writing the construction. Each paper was read and highlighted individually to determine initial category formulation in the first stage of the content analysis. Inter-rater reliability among the authors was achieved through a process of individual category identification and reconciliation of differences by consensus during a peer debriefing in stage two. Theoretical triangulation and construction of thick description and representative quote selection provided the framework for the narrative included in the findings.

Results/Findings

The constant comparative method revealed three distinct cognitive models of leadership, though one student had no clear cognitive model. This respondent, who had an indefinite, simplistic model of leadership stated, "Just being part of the Corps makes you a leader" (4). This illustrates that someone can be in a community of practice for years and never move from the periphery. However, Wenger, Snyder, and McDermott (2002) emphasize that this is acceptable and legitimate for a community member to stay at the periphery. It is not necessary to have *everyone* participate; the community of practice will function with learners who choose to just observe from the boundary.

The first cognitive model clearly articulated in the essays was *leading through relationships*. Forty, out of fifty (80%), of the respondents mentioned leading by relationships in their narrative. One respondent captured the essence quite eloquently:

> I have a good working relationship with my underclassmen. They all
> seem to get along with me. I have some favorites in each class that I
> can count on and trust them to get something done in a timely
> manner. I think that's how I motivate my subordinates. I make sure
> that they can trust me and count on me to do something for them if
> needed. I try to not talk to them as a higher ranking cadet but instead,
> as a friend. If my underclassmen respect and trust me, I know that I
> can get them to do whatever is needed to get done (1).

Another participant mentioned the specifics of leading through relationships:

> It is also very important to know your subordinates – know the small
> things about their family, personal goals, and general well fare. Come
> to understand what drives them and influence them to strive towards
> their goals intertwined with the group goals. Some people work well
> under pressure, stress, encouragement, or freedom. Know your
> subordinates; find what works best for each person and tailor your
> motivational style to fit their needs (2).

Words such as *trust, integrity, ethics, respect, honesty, care/concern, responsibility, communication, developing others, fairness, consistency, reliability, authentic, humble, loyal,* and *high expectations* were indicative of this category.
The second cognitive model of leadership expressed by respondents was *leading by example*. Thirty-five papers out of fifty (70%) used verbiage and descriptions indicative of this leadership model. One respondent expressed, "There is no better motivation than seeing someone that you look up to doing the right thing and being inspired to do the same thing…" (6). Respondents often mentioned terms they had heard from their instructors and leaders, such as "leadership of presence."

> He was always around and often was the only senior with us
> for outfit activities. [He] never said anything very profound,
> but he truly led by example and had the biggest impact on all
> the [freshmen] in the outfit because he had a ministry of
> presence (26).

Respondent 26 added that leading by example is "influential impact involving no words."

Another respondent wrote,

> People's pride makes it difficult for most people to take
> orders from another and leading by directive measures often
> causes resentment. But leading by example allows people to
> notice privately and to take action on their own, not because
> they were told (7).

Words such as *demonstration*, *what you see*, *actions*, and *role model* were often used when referring to this cognitive model of leadership. "Leaders are more effective in their actions than they are in words. People naturally follow what they see, not necessarily what they hear" (10).

The third cognitive model of leadership was *leading by influence*. Only five out of fifty (10%) expressed this cognitive model in their narratives. One cadet wrote:

> Leadership is influence – nothing more, nothing less. This moves beyond the position of defining what leadership is, to looking at the ability of a leader to influence others – both those who would consider themselves followers, and those outside that circle…Your job as a leader is to provide a clear vision that the team is to follow. The team also needs to understand why those goals are valuable to them (31).

The *leading by influence* framework requires a systematic and integrated understanding of the other two cognitive models. For example, "true power is getting someone to perform by influencing them, not specifically making them do it (6)" implies that leading by example and relationships is also present. Reviews of the leadership literature indicate that leading by example and by relationships are two excellent techniques for providing leadership in small groups (see Bass, 1990). Leading by influence requires a more complex understanding of the interrelationships of the other cognitive models. Expressions in the narratives included words like *foresight, charisma, charm, vision, expectations, influencing, and motivating others*. Overall, it's about the ability to lead others to willingly do what you want them to do regardless of your formal position or any personal relationship that may or may not exist. In addition, this model indicates recognition that there are ways to motivate and direct others through mechanisms such as reward systems, organizational culture, and expertise. "Great leaders establish an atmosphere of excellence (40)."

The second objective of this study was to determine the congruence of the cognitive maps from the cadets within this leadership education community of practice. The findings indicated that a significant majority (70%) described leading by example and (80%) leading through relationships. This tells us that the community of practice is functioning effectively, since it has fostered the development of these two leadership models among a very large percentage of the sample.

Most cadets in this community of practice, however, have not adopted the more complex model of leading by influence. Although the intent of this research was not to determine cognitive complexity of the leadership models, but to merely identify the models, these finding are not surprising. Anecdotal evidence suggested that leading by example and leading through relationships was what these cadets are seeing and being told to do daily on the Quad. Leading by influence, on the other hand, is not recognized by most cadets because it is a more complex understanding of the leadership process that goes beyond imitation of observed behavior or building positive relationship (though both are important). It emerges only after reflection and abstract conceptualization of the leadership process from a systems perspective (Schwarz, 2004).

Conclusions/Recommendations/Implications

This study identified cognitive models of leadership, evaluated the congruence of these models, and field-tested the grounded theory of situated learning and communities of practice. To start with, the researchers found that there were three cognitive models present in this leadership education community of practice (Corps of Cadets): (1) leading by example, (2) leading through relationships, and (3) leading by influence. Next, there was very strong consensus among the participants (almost three fourths of the cadets) for two of the leadership cognitive models (leading by example and relationships). The third, leading by influence, had less congruence but was also less likely to be observed, discussed, and practiced within this learning community, given its greater demand for reflective thinking and abstract concept development.

We have evidence that the communities of practice and situated learning theoretical constructs were appropriate conceptual models for understanding the leadership education process in this setting. Although this study was conducted with the Corps of Cadets as a community of practice, there are indications that this theory can guide leadership educators in various settings. While these results should be considered preliminary, the study does suggest that situated learning theory, and especially the communities of practice concept, will help leadership educators improve their instructional impact. The communities of practice literature has identified characteristics and conditions that enhance the developmental impact of a community of practice (see Wenger, McDermott, & Snyder, 2002; Young, 1993). It remains for leadership educators to incorporate the community of practice literature into their program designs especially since communities of practice exist everywhere on college campuses – sororities and fraternities, student service organizations, student professional organizations, etc…

The first thing leadership educators must do is to recognize leadership education communities of practice on their campuses. Secondly, there is a need to explore the notion of the complexity of leadership models as well as the depth of understanding the individual has of his or her leadership model. The communities of practice model proposed by Wenger et al. (2002) posits that the greater people's involvement in the community of practice, the greater will be their understanding of the common content (for example, the conditions that support effective leadership). Further research to explore the usefulness of situated learning theory and communities of practice concepts for informing leadership education approaches is merited.

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Biography

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