

Leveraging Communities of Practice to Enhance Professional Development

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ABSTRACT

Soldiers in today's Army are geographically dispersed as a result of operational requirements preventing the traditional means of professional development from occurring. The study of historical vignettes, professional reading programs, staff rides, and mentoring have been the mainstay of a system that has produced the military leaders who have been tremendously successful for the nation. As executed in the past, these approaches are no longer practical. Soldiers are connected virtually in more ways today than ever before. The speed in which experiences and knowledge can be transferred among mentors, protégés, and peers has accelerated tremendously. This study explores how the Army has transformed its approach to professional development using Communities of Practice.

The Army's Professional Forums, operated by the Center for Army Lessons Learned, are a constellation of integrated communities of practice, the centerpiece of which is the Leadership and Leader Development Knowledge Network. These forums leverage their unique ability to bridge geographic distances to enhance traditional mentor – protégé relationships. Face to face relationships are now replaced with virtual ones; soldiers in the U.S. are now seeking the guidance of mentors in Iraq and Afghanistan. Thus mentors have evolved to become those individuals willing to transfer knowledge and share their experiences, regardless of age, rank, or position. Professional forums also enable members, regardless of their location, not only to engage in the time honored tradition of professional reading, but to participate in facilitated asynchronous discussions on reading topics with peers and mentors across the Army. Professional forums also provide a platform to engage in situational training and development exercises that provide opportunities for dialogue on complex ethical issues and leadership dilemmas. In this paper, we will describe how Communities of Practice enhance professional development, enable learning, and accelerate the knowledge transfer process.

ABOUT THE AUTHORS

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BACKGROUND

The Army established its professional forum program in response to the success of two independently established communities of practice programs, CompanyCommand and NCONet. These two ground breaking efforts created a tremendous following in the late 1990s and had begun to change how soldiers and leaders interacted, share experiences and lessons, and grew as professionals. They provided professionals the ability to converse with a wide audience for the first time. Where the informal exchange of ideas, questions, and stories was previously limited to the office, the Officer Clubs, the NCO (Noncommissioned Officer) Clubs, or the front porches and backyards of neighbors, soldiers began to see their circle of colleagues expand across the Army, both within the U.S. and abroad. The sites quickly grew in size, activity and influence, enough so to catch the notice of the Army's senior leadership.

In 2002, CompanyCommand and its sister site PlatoonLeader were adopted by the Army and brought into the military's .mil domain. In 2003, the Office of the Command Sergeant Major of the Army sponsored an initiative with the Combined Arms Center at Fort Leavenworth to formally adopt the suite of NCONet precursor sites to become the centerpiece for an Army wide community of practice program. In 2004, the Army established the Battle Command Knowledge System as the program to provide structure to the constellation of communities of practice known as professional forums. Over the next several years, the program grew dramatically in size and scope from its original 20,000 members and four communities. With membership roles in excess of 200,000, the Army Professional Forum program is currently sponsored by the Center of Army Lessons Learned (CALL) and features a diverse collection of professional forums that still include the flagship communities NCONet, which alone has over 40,000 members, and CompanyCommand. The CompanyCommand and Platoon Leader sites now coordinate their efforts through MilSpace and have more than 20,000 members. The collection of communities available

now includes those focused on particular leader cohorts - such as company commanders, NCOs, and Warrant Officers - functional based communities such as S1Net, focused on Army human resource management, and SustainNet, focused on logistical and sustainment operations - as well as those centered on particular operations types such as Homeland Defense and Civil Support Operations Net. Now with approximately 50 communities in number, this collection of forums provides soldiers coverage of the breadth and depth of military issues and operations. Critical to the success of the forums are the professional facilitators who are subject matter experts in each community's domain and practice. Facilitators lacking a depth of understanding of particular subject matter are often times not successful in eliciting tacit knowledge from community members.

During this time of impressive growth, soldiers have shared the wide range of their experiences, routinely sharing documents, techniques, and stories based on their actual experiences in Iraq, Afghanistan, and other operations. It is not an uncommon occurrence for currently deployed soldiers to access the forums and query their peers for insights into problems or request examples of standard operating procedures, products, and successful techniques used in the field. But in addition to this valuable sharing of lessons and practices, soldiers have turned to forums to discuss ethical dilemmas and conduct professional dialogue on a variety of topics. With their ever widening acceptance by soldiers and leaders of all ranks, the forums have become an integral part of professional development.

COMMUNITIES OF PRACTICE

The Army has defined its communities of practice, or professional forums, as "groups or networks of people who share a concern, a set of problems, or a passion about a topic, and who generate and share understanding, solutions and capabilities (knowledge, skills and attitudes) in this area by interacting on an ongoing basis" (Battle Command Knowledge System, 2008). Communities of practice have three

fundamental building blocks upon which they are built: domain, community and practice. The domain is simply the general topic area of a community. Within the Army Professional Forums, the domains are the particular subject areas within the U.S. Army that the forums address. The domain provides the first level of focus for a professional forum.

The community is the group of people that the professional forum includes. It is unique for every community of practice. For example, NCONet restricts its membership to current and former Noncommissioned Officers. Warrant Officer Net is exclusive to Warrant Officers in the U.S. Army. Some professional forums are very exclusive such as NCONet and Warrant Officer Net while others are more open to a broader membership. Professional forums “thrive because they deliver value to the organization, to the teams on which community members serve, and to the community members themselves” (Wenger, McDermott, & Snyder, 2002). Therefore, whatever the membership policy of the forum may be, it is essential to the forum that it clearly defines that community of people it intends to service. Without that focus, communities run the risk of trying to service everyone resulting in a dilution of content that ultimately serves no-one adequately.

The practice of a community is the specific knowledge within a given domain that it is trying to advance. For example, S3-XO Net, one of the leader cohort specific professional forums, is designed to advance the practice of being an operations officer or executive officer for a battalion or brigade. The discussions, insights, and experiences shared all focus on advancing that practice. Thus the three critical building blocks of domain, community and practice make each professional forum unique. Over the lifecycle of a professional forum, conditions may change requiring each of these factors to be modified or adjusted. Done in a deliberate manner by a seasoned facilitator, modifications to the domain, community and practice of a forum help keep them vibrant and relevant to the membership and organization they support. On the other hand, simple inattention to these foundational elements can lead to a lack of focus, decreased relevance to the membership, and a decline in activity.

ARMY PROFESSIONAL DEVELOPMENT

During the past 10 years the dynamic environment and pace of operations, particularly in Iraq and Afghanistan, have put increasing pressure on the Army to learn and adapt faster than its enemies. It is widely thought that the events of the past several years have

eroded the competency of many junior leaders to perform what are considered the “basics” of leadership and professional development. The high pace of operations combined with repeated deployments has led to an almost complete focus on the accomplishment of the current mission at the expense of developing subordinates. In November of 2009, the Army released *A Leader Development Strategy for a 21st Century Army*. In it, the Army acknowledges that the future operational environment will “be even more uncertain, complex, and competitive as hybrid threats challenge us across the full spectrum of operations.” This will make it even more difficult for the Army to develop its leaders and necessitate that it incorporate new methods and techniques. Army Professional Forums have begun to fill that need, and as shown above, will most likely be required to continue to augment the Army professional development efforts. In fact, the Army’s pamphlet *Commissioned Officer Professional Development and Career Management 600-3* states that “leader development programs should be responsive” to several factors among them the environment and technology.

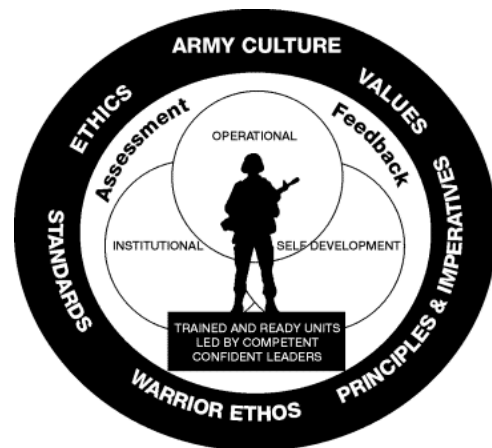


Figure 1. Army Training and Leader Development Program (Department of the Army, 2008)

So where do professional forums fit into Army professional development? The Army’s training and leader development program consists of three domains: operational, institutional, and self development (see figure 1). Forums have and can continue to play a role in each.

OPERATIONAL

Operational experience is considered the “linchpin” of the leader development (Department of the Army, 2010). The experiences gained in operational

assignments provide the practical lessons learned from training and actual operations, combined with training assessments, after action reviews, and feedback. Real world experiences are indispensable. But professional forums have played an invaluable role in not only making those experiences available to a wider audience but by expanding the feedback mechanisms available.

The Army has arguably the premier lessons learned dissemination organization in the world, CALL. It continually vets, distills, and compiles lessons from all over the Army and produces a variety of publications and information papers available for soldiers. The traditional CALL system is based on individual requests for information (RFIs) being submitted into its system resulting in a rapid response to the user inquiries. The system is effective but has limitations, most notably in that it is a point to point based system; the user requesting the information is the only individual who receives it. Forums provide another means for lessons learned and best practice dissemination. Forums incorporate “push, pull, and prod” mechanisms to encourage knowledge flow. Forum leaders “push” content to members through newsletters, “prod” members into conversation through leading questions and priority discussions, and ensure relevant content is available for members to “pull” from the forum. This creates a two-fold professional development benefit for the Army. First, since forums do not exclusively rely up an initial request for information to generate knowledge flow, forum members benefit from receiving lessons learned, in some cases, before they have a problem. They may also discover techniques to improve the execution of tasks they had not even previously considered as problem areas.

Secondly, the “push, pull, prod” approach greatly expands the impacted audience. While individual RFIs, posted in the form of questions, can still be utilized by the system, the “point to point” feedback loop is changed into a “point to many” mechanism potentially benefitting far more than only the original requestor. Moreover, discussions and documents posted on the forum in response to an inquiry remain there for others to access or expand upon at a later date.

INSTITUTIONAL

The Institutional component of the Army’s training and leader development program provides the structured professional military education (PME) and training available in Army schools. In addition to doctrine and task training, it is in the Officer Education System (OES) and NCO Education System (NCOES) courses

that students receive formalized instruction on Army values and the ethics of the military profession. Traditional classroom instruction includes classroom discussion of case studies and historical vignettes. Using a technique known as Leader Challenges, professional forums offer a means to conduct dialogue on complex ethics issues and extend the discussions far beyond the classroom to professionals serving in every capacity across the Army.

While there are a number of variations for presenting Leader Challenges, the common element among them is that they all include ethical or tactical dilemmas presented to Soldiers. In one robust five step technique, members first watch a vignette that immerses them into a “what would you do now?” type of scenario. Members are then limited to 400 characters to post their input to the forum; precise communication skills are cherished in the Army. Up to this point the members have been unable to see what their peers have recommended; after posting their input members can see what their peers have written. The fourth step is to view the conclusion of the video which describes the actions that the featured member has taken to solve the challenge. During the final stage, members that have completed the challenge share insights, doctrinal reviews, and operational experiences and receive insights or input from senior mentors.

Video based challenges are very well received by forum members. Consider that as of the date of this writing, 1074 members of MilSpace participated in the "Combat Leadership" Leader Challenge. This two part video exercise allows Soldiers to first hear and see a peer talking through a leadership challenge they faced in the line of duty. Participants are then given the opportunity to share how they would deal with the situation. After submitting their response, participants are then given the opportunity to hear "the rest of the story" as well as see how others responded.

Even without the benefit of video technology, Leader Challenges are well received and effective as well as address the ethical dilemmas leaders face on the battlefield. In a complex discussion started on 16 December 2008 and lasting through April 2009, leaders discussed the complexities of the counter-IED fight. The discussion “Force Application Mistakes: Why not kill the emplacements?” challenged members to consider the tactics employed, roles of the commander, and the ethical implications of alternative tactics. With arguments coming from Soldiers deployed in theater, Soldiers at home-station, NCOs and officers (including one General Officer), the dialogue was professional and characterized by more than one participant as a “great

discussion.” Another interesting aspect of this particular discussion is the level of participation. In total, there were only 15 written responses to the initial question. But as is the case with many forum discussions, there was far more passive participation, 447 individual page views, than active participation. So unlike a small group discussion held within the traditional classroom, this suggests that the insights shared in this discussion may have benefited a far greater audience than the relatively small number of active participants.

Other Leader Challenges tackle the issues confronting leaders on the home front. In a recent post on NCO Net a member asked, “The Army is at a 26 year high in suicide rates. What are you doing in your units, beside the normal suicide prevention training, to mitigate this trend?” In the 31 replies to the question, NCOs shared numerous personal experiences concerning the stigma associated with seeking help for mental health issues from Post Traumatic Stress Disorder and how surviving team members dealt with the death of a Soldier in their unit. The discussions provided the participants insights into situations they may have never personally encountered themselves. While every issue concerning the stigma of seeking mental health care was certainly not solved in the discussion, the Leader Challenge did provide a means for the NCOs to educate one another on ways to seek help with this common problem facing Soldiers today.

In January 2010, the Center for New American Security published “Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan,” a document written by the senior intelligence officer in Afghanistan, a company grade officer, and a civilian with the Defense Intelligence Agency. The paper presented a critical examination of the relevance of the U.S. intelligence community to the counterinsurgency strategy in Afghanistan. The document was republished on Maneuver Net, a community whose practice is to promote the sharing of capabilities, vulnerabilities, lessons learned, and best practices unique to the Infantry, Cavalry, and Armor communities. The paper’s recommendations for sweeping changes to the way the intelligence community approaches focusing its efforts caught the attention of the community garnering 312 individual replies offering opinions of total agreement to near total disagreement. In what the professional forum program refers to as a reading challenge, the discussions were held within a special topic area of Maneuver Net set up specifically to support the Army Reconnaissance Course. What is even more remarkable than the number of replies or the over 2600 individual pages

views the discussion had is that this discussion has been ongoing for 17 continuous months. This reading challenge is demonstrative of a type of forum activity that supports not only the Institutional component but the Self Development component of Army Training and Leader Development.

SELF DEVELOPMENT

Structured and guided self-development form the final component of the Army’s Training and Leader Development program. Central to these components is the time honored tradition of professional reading. Former Chief of Staff of the Army, General Gordon Sullivan explained the tradition and importance of professional reading to the U.S. Army, “Our first commander in chief, George Washington, established the practice of learning, Soldiering by observation and application of a knowledge enhanced by books, then from drill on the village green and finally in battle in two wars. His broad reading gave him a sense of vision, a political view that affects us to this day and a military victory that changed the world. A man of curiosity, courage, self education, imagination, and practicality, Washington approached any endeavor with a foundation in knowledge gleaned from what he read.”

Professional reading is still very much a part of today’s Army as successive Chiefs of Staff have regularly released recommended professional reading lists tailored to the various officer and NCO grades. With the backlog for available Professional Military Education (PME) course slots approaching 50%, today’s professional reading is being used as a self development means to fill voids caused by the delays getting students into the courses. When soldiers face the decision to attend a PME course that requires twelve weeks away from their families during their short time home between deployments, many are depending on the reach back provided by professional forums to complete their development.

Today’s reading rooms have become virtual places where members of the profession can connect with their peers to discuss leadership and leader development cohort specific areas. Virtual reading rooms also serve as venues for discussion among a broader group of professionals focused on specific functional issues. Based on the degree of sponsor involvement, individual forums provide varying degrees of support to the members. Some communities, such as those affiliated with MilSpace, entice their members to read certain publications by providing bound books; others provide books in digital formats. In cases where professional forums are not afforded those resources, forum

members often agree to purchase their own books to participate in the discussion. Our experience has shown the highest participation rates occur when the forums provide their membership with bound print resources.

Some professional reading challenges focus on specific areas of operation. Recently Donald P. Wright, Ph.D., a lead author from the Combat Studies Institute, conducted a professional reading program on Warrant Officer Net based on his study entitled "A Different Kind of War." Many of the forum members had participated in Dr. Wright's study effort and could share personal insights from their experience. "A Different Kind of War" is the U.S. Army's preliminary history of its campaign in Afghanistan between October 2001 and September 2005. Based on hundreds of oral interviews and unclassified documents, this study offers a comprehensive chronological narrative of the first four years of Operation Enduring Freedom. The Warrant Officer Net reading challenge included members from the ranks of Chief Warrant Officer 2 to Chief Warrant Officer 5. Some members directly challenged some of the key premises of the work; this created a give and take dialogue between the author and the participants, an opportunity most of these Warrant Officers would not have had otherwise.

The topics of reading challenges are not strictly limited to books. As demonstrated by the example of the "Fixing Intel..." discussion on Maneuver Net described in the **INSTITUTIONAL** section above, professional journals, editorials, and even emerging doctrine or concepts are all candidates for reading challenge material. Each provides the opportunity for professionals to discuss, share insights, and contrast their operational experiences. Within the functionally focused forums, we have seen the forum facilitators take a very narrow focus on emerging doctrine within a specific functional area for their professional reading initiatives. S1 Net our Human Resources professional forum had the officer responsible for a recently published doctrinal manual conduct a professional reading challenge using the manual as the assigned reading. This challenge served a number of purposes: to highlight changes made for seasoned professionals to change procedures, to help younger members grasp the importance of the new doctrine and to provide a means for those within community to provide immediate feedback to the doctrine writers based on their observations in the field. This reading challenge was a truly Socratic event for all involved giving the new manual a 360 degree review from the perspective of the writers to that of those implementing the doctrine in the field.

MENTORING: PROVIDING CONTINUITY TO PROFESSIONAL DEVELOPMENT

Arguably one the greatest contributions to the Army the professional forums has made is their support to mentorship. Mentoring is an essential component of professional development in all three of the training and leader development domains: operational, institutional and self development. Soldiers develop mentoring relationships during operational assignments that may continue during their assignments to courses in the Army education system and may also seek advice from mentors in the self development areas of career progression. Army Professional Forums leverage their unique ability to bridge geographic distances to enhance traditional mentor – protégé relationships. Face to face relationships are now augmented and or even replaced with virtual ones; soldiers in the U.S. are now seeking the guidance of mentors in Iraq and Afghanistan. Thus mentors have evolved to become those individuals willing to transfer knowledge and share their experiences, regardless of age, rank, or position. Professional forums supplement traditional mentorship by facilitating a peer to peer connection between those "in the experience" and those "with the experience." These allow our members to gain insights from not only the more traditional senior mentors in their units who possess tremendous experience but are lacking recency, but also from peers across the Army who have more recent experience.

Traditionally, a mentor is viewed as a senior more experienced individual serving as a trusted counselor or guide. Within the military it is common for a subordinate to seek a role model for professional development, to learn from and to emulate. As early as the spring of 2000, Army professionals were connecting online within professional forums in peer to peer driven discussions that permitted not only conversation but an exchange of professional knowledge learned via experiential development. Here was a place where a member could glean kernels of knowledge from those that have learned through doing, or as it is referred to, "the school of hard knocks." Little did we realize that within two years that the traditional model would be upended by events occurring in Afghanistan and Iraq.

Over the past eight years those military members with the most recent and relevant experience are the more junior cohort members of the profession that have learned the hard lessons on the barren deserts or mountainous battlefields of two very different theaters of conflict. Units are also incorporating new equipment, unavailable during pre-deployment training.

The result is that many junior Soldiers now possess more relevant operational experience than Soldiers years their senior. In turn, a new mentoring paradigm has emerged where more experienced but junior Soldiers are sought out to guide more senior ranking members on equipment use or best practices learned in theater.

In an attempt to seek lessons learned from others that may have been asked to perform similar missions, a young Army officer posted his stories of how his unit conducted MRAP (Mine Resistant Ambush Protected) vehicle recovery missions on Warrant Officer Network. The vignettes he posted, entitled "MRAP International CAT I Actual Recovery Missions," were his attempt to connect with subject matter experts (SMEs) within the Army Schools and Centers. Almost immediately a response came from a SME, who, from the safety of his office, began to denigrate the manner in which the recovery operation was done as being unsafe. The SME's reasons were all quite valid for a recovery mission performed under peacetime conditions. However, as the young Army officer explained, the conditions on the battlefield and enemy disposition all influenced the time constraints under which this mission had to be performed. The ensuing forum discussion resulted in the development of new tactics, techniques and procedures later published in newsletters and recovery doctrine.

The centerpiece of mentoring activity on the Army Professional Forums is the Leadership and Leader Development Knowledge Network (LLDKN), a network of integrated communities that focus on specific Army leader cohorts. Each of these communities service a membership restricted to a specific demographic; Non-Commissioned Officers, Warrant Officers, Platoon Leaders, Company Commanders, and Operation Officers/Executive Officers all have private forums focused on their specific leader development needs. These forums are facilitated by subject matter experts, many of who have twenty or more years of military experience. Facilitator subject matter experience and credibility are critical to the success of the LLDKN forums, since it is the facilitators who are responsible for connecting members to one another and to SMEs as well for researching member issues and concerns. Equally important is for each facilitator to fit the demographic of the community they serve. As is the case with face to face discussion, who is in the discussion shapes the nature of the discussion - meaning that members are normally more open in conversation with individuals they perceive they can trust. The bonds of trust are typically established between individuals of the same

peer group quicker than between individuals of differing demographics. CompanyCommand supplements traditional mentorship by facilitating a peer to peer connection between those "in the experience" and those "with the experience."

While the LLDKN is at the heart of the mentorship efforts for Soldiers, the forums in the Functional Knowledge Network and Specialty Knowledge Network all contain numerous examples of mentoring relationships. In the Installation Management Command Network, senior-subordinate relationships within the civilian workforce are fostered. The mentorship in these networks mainly pertains to technical issues, organizational design, and business processes versus career path questions and professional development issues. In addition, many peer to peer exchanges occur enabling the sharing of best practices. Since these forums are not restricted to by rank or peer groups, discussions include responses from very diverse perspectives.

MEASURING SUCCESS

In the current environment of shrinking fiscal resources, every program must be able to demonstrate value or risk being cut. Up to this point in this paper, we have hinted at a few of the measures used to evaluate professional forums. In the broadest terms, organizations use a combination of measures of performance (MOP) and measures of effectiveness (MOE) to assess various aspects of the program.

MOP are those measures used to understand how well various initiatives or aspects of the forums are influencing the behavior or activities of the community members. They consist of System measures and Output measures. System measures are the countable data the supporting information system can provide. Examples of these include membership counts, page visits, and the number of documents uploaded, all which provide valuable information to forum leaders, facilitators, and the organizations they support. Output measures are the "direct process output for users, give a picture of the extent to which personnel are drawn to and actually using the knowledge system" (Department of the Navy Chief Information Officer, 2001). These include measures showing how members draw from the forums such as the number of downloaded documents or replies to discussions, which can also be categorized as System measures as they are easily counted. The key aspect of Output measures is that they provide an indication of the flow of knowledge from one member to another. This provides an indication that the

potential for knowledge transfer and learning has occurred.

Forum leaders utilize measures of performance to track and analyze behavior of members, and in turn evaluate the effectiveness of the various initiatives undertaken. In the "Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan" discussion vignette discussed above, there were 312 individual replies to the discussion. This is an example of a highly successful reading challenge in terms of activity. Many reading challenges have garnered fewer than 20 replies. The forum facilitator can draw the initial conclusion that the "Fixing Intel..." discussion was relevant to the community and successfully captured the interest of the members. To complete the analysis though, the facilitator must take into account the context under which the challenge was conducted. Was the reading challenge conducted as a mandatory requirement that compelled some minimal level participation by the members? If so, did single members engage discussion repeatedly and, from a subjective standpoint, were the contributions from members substantive? In this case, a segment of the forum membership was required to participate in the discussion, however, they returned to the discussion with follow-up posts and the large majority of the replies were substantive. Now with a greater understanding of the context, we can use example as a successful reading challenge against the measures of performance and look to repeat its success.

While we have cited several examples of success, not every forum endeavor has proven so positive. As stated earlier in this paper, a proactive forum facilitator, who is a subject matter expert in the domain and practice, is essential to each of these communities. In the Spring of 2007, Warrant Officer Net was languishing. The taxonomy included over 63 individual topic areas organized by military occupational specialty, complicating the search for knowledge and people. The result was clearly demonstrated by the measures of performance; member visits to the forum were extremely infrequent and there were few new discussions on the forum. It was essentially a dead community. With the arrival of new proactive facilitator, a retired senior leader in the community, the taxonomy was completely revamped. Within a short period of time, members returned to the community, discussions flourished and the number of members tripled within 8 months.

Similarly, in early 2010 the first attempt to start IMCOM Garrison Commander's Net stalled. The first facilitator was proactive but had never served on a

Garrison Command staff and thus lacked domain expertise. The structure and content of the site reflected his inexperience and were not relevant to the community. As a result, both the visit and discussion activity fell well below expectations. The leadership assessed the measures of performance and assigned a new facilitator. Her domain knowledge enabled her to restructure the taxonomy, add new content that was relevant to the members, and refocus discussions on member interests. Additionally, she built a volunteer support team of subject matter experts to assist in connecting with the forum members. As expected, the focus on the member community netted dramatically improved visit and discussion activity which continued on an upward trend during the coming months.

Measures of effectiveness, or outcome measures, provide the means to determine what impact forum activity is having on the achievement of organizational objectives. Directly measuring this impact is often quite challenging. For individual professional development efforts, such as a Pro-Reading Challenge or Leader Challenge, forum leaders may have to draw inferences based on the number of participants in the event and the content of the written responses on the forums; this is especially true when there are indicators within the responses that show that a participant changed their view or approach to a situation based on the discussions. This method does require a subjective evaluation being made by the forum leader or the facilitator but can render some significant anecdotal evidence.

Another means to ascertain effectiveness is through member surveys. The Army Professional Forums are currently configured to allow members to provide instantaneous feedback on whether a particular discussion question, reply to a discussion, or a document posted was helpful. In May and June of 2011, NCONet featured a discussion on two provocative papers that discussed the role of women in combat. The discussion resulted in 150 individual replies to the discussion and 2681 page views; these measures of performance provide a strong indicator that there is a significant *potential* for the transfer of knowledge and learning. But to determine whether or not the discussion actually had an impact requires a measure of effectiveness. If we accept the proposition that if a member's assessment of a helpfulness of posting is a good proxy for a measure of effectiveness, then the above mentioned women in combat discussion reveals a very positive outcome. The initial discussion, not including the replies, was rated by 11 participants as helpful. Participants also indicated that many of the replies were helpful, one reply being rated helpful by as

many as 21 individuals. Added together, the replies received over 408 selections by members as being helpful. This very informal survey method provides valuable insight into the discussion's effectiveness.

At the macro-level, determining the effectiveness of the program relies almost exclusively on survey methods. In July and August of 2010, the Army Professional Forums program, then part of the Battle Command Knowledge System, conducted a survey of the 150,000 members in the program at that time. A statistically significant, random sample of the members was asked to participate in the survey; 84% of the individuals responding indicated that the professional forums supported their professional development or that of their subordinates, with 21% identifying the professional forums as assisting the mentoring process.

The survey also attempted to demonstrate the linkage between professional forum participation and improved operational effectiveness via proxy measures. The survey asked each respondent to report an estimate of their individual savings of time and money as result of something they read or downloaded from one of the forums. The survey results indicate that each participant, or their unit, saved on average 2 1/2 hours of time and \$675. If these results were extended to all 150,000 members of the Army Professional Forums at that time, those average savings add up to over 360,000 man hours and \$100 million.

CONCLUSION

During the past nine years, the operational environment has presented considerable challenges for leaders to conduct professional development. The high pace of operations combined with repeated deployments has led to an almost complete focus on the accomplishment of the mission at hand at the expense of developing subordinates. Accordingly, the Army has had to adapt the techniques it uses to provide quality professional development to its subordinates. During this same period of time, Soldiers, like other segments of society, have increasingly come to rely on social media to do research, connect with peers, and find expertise. The Army's Professional Forum program has provided a viable collection of tools, processes and techniques that have been effectively integrated into all three components of Training and Leader Development. Professional Reading Challenges, Leaders Challenges, and the search for best practices and lessons supported by the Army's communities of practice have demonstrated their value to Soldiers and organizations. Forums cannot now, nor will they ever be able to replace traditional methods of instruction and

mentoring entirely. However, they do provide powerful mechanisms to augment those practices while bridging geographic distances in a high tempo environment.

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REFERENCES

- Bartlett J., Kotrlick J. & Higgins C. (2001). Organizational Research: Determining Appropriate Sample Size in Survey Research. *Information Technology, Learning, and Performance Journal*, Vol. 19, No. 1. Retrieved from <http://www.osra.org/itlpj/vol19no1.html>.
- Battle Command Knowledge System. (2008). *Army Professional Forum Facilitation Guide, version 1.0*. Retrieved from <https://forums.bcks.army.mil/secure/CommunityBrowser.aspx?id=689255&lang=en-U.S.>.
- Defense Acquisition University. (2007). *Community of Practice (CoP) Implementation Guide, version 3.0*. Fort Belvoir: Defense Acquisition University Press.
- Department of the Army. (2010). *Department of the Army Pamphlet 600-3. Commissioned Officer Professional Development and Career Management*. Washington, DC: Department of the Army
- Department of the Army. (2008). *Department of the Army Pamphlet 600-25. U.S. Army Noncommissioned Officer Professional Development Guide*. Washington, DC: Department of the Army.
- Department of the Army. (2008). *Field Manual 7-0. Training for Full Spectrum Operations*. Washington, DC: Department of the Army.

- Department of the Navy Chief Information Officer. (2001). *Metrics Guide for Knowledge Management Initiatives*. Arlington: Department of the Navy.
- Dixon, N. M, Allen, N., Burgess, T., Kilner, P., & Schweitzer, S. (2005). *Company Command: Unleashing the Power of the Army Profession*. West Point: Center for the Advancement of Leader Development and Organizational Learning.
- Israel, G. (1992). *Determining Sample Size*. Retrieved from <http://edis.ifas.ufl.edu>.
- Nelson, J. (2009). *Analyzing Community of Practice Metrics to Enhance Organizational Effectiveness*. Orlando: Proceedings: Interservice/Industry, Training, Simulation and Education Conference.
- Nelson, J. (2009). *Analysis of Metrics to Assess Organizational Impact and Shape Behavior in Communities of Practice*. Fort Leavenworth, KS: Proceedings: 77th Military Operations Research Society Symposium.
- U.S. Army Training and Doctrine Command. (2009). *A Leader Development Strategy for a 21st Century Army*. Washington, DC: Department of the Army.
- Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston: Harvard Business School Press.