

# Expanding the Reach of Continuing Educational Offerings Through a Web-Based Virtual Network: The Experience of InspireNet

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**Abstract.** Virtual platforms using webinars, e-posters, e-newsletters, wikis and blogs connect people who have common interests in new ways. When those individuals are healthcare providers, a professional network that operates on a virtual platform can support their needs for learning, professional development and information currency. The practice of e-learning for continuing professional development is emerging, particularly in nursing where shift work shift inhibits their ability to attend conferences and classes. This article reports the experience of the InspireNet network that provided e-learning models to: 1) provide opportunities for healthcare providers to organize themselves into learning communities through development of electronic communities of practice; 2) support learning on demand; and 3) dramatically increase the reach of educational offerings.

**Keywords.** Continuing education, virtual networks, Web 2.0 technologies, nursing, healthcare provider

## 1. Introduction

*InspireNet* (INnovative health Services & Practice Informed by Research & Evaluation Network) is a professional network that has been in existence for over six years, with a mandate to increase healthcare providers' interest in and capacity for

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health research and its use in British Columbia (BC), Canada. Funded by BC Nursing Research Initiative through the Michael Smith Foundation for Health Research (MSFHR), the network has attracted over 4,000 healthcare providers, managers, educators, researchers and students as members, primarily from nursing. The network's mission, to increase research capacity and professional development, has been achieved by providing both an infrastructure for networking and an environment to build providers' ability to connect with each other and design their own meaningful educational offerings. Following a brief description of InspireNet and the theory behind its development, these educational experiences are reported below, specifically the use of learning communities for continuing education.

## **2. How InspireNet Works**

InspireNet's virtual platform is comprised of three components: a Web 2.0 website, webconferencing, and social media. InspireNet's website was developed using Drupal, an open source content management system (CMS), which provides functionality for the website to have areas available on the open internet for public access, and password-protected areas available only to registered website users. Network members organize themselves into InspireNet 'Action Teams', 'Research Teams', and 'Coordinating Teams'. The teams are developed under a 'grass-roots' model such that providers interested in a topic area create a team and search through the network's database to find others with similar interests. Each team selects individuals who will serve as team leaders. The network provides each team with tools to establish a password-protected area on the website accessible only by team members. This is a unique advantage of a Web 2.0 site as this discrete area of the InspireNet platform is called the team's 'electronic community of practice' or eCoP. The technologies of the platform permit both synchronous and asynchronous participation and, like all virtual networks, permit active as well as peripheral engagement.

## **3. Theory of Why InspireNet Works**

InspireNet was designed based on the notion drawn from social learning theory that people who share common interests can come together as a group and will benefit from that group affiliation. Communities of Practice (CoPs) were initially described by authors who suggested that learning takes place within social relationships, rather than through the simple acquisition of knowledge [1]. Early writers on the topic suggested that when people come together to address a concern or to solve a set of problems, such CoPs deepen participants' knowledge and expertise by supporting interaction on an ongoing basis [2]. CoPs develop over time through a step-by-step of 'life-cycle phases' that describe a progression from an informal group to an actively-committed and engaged community. There are five life cycle phases that describe the actions and focus of the CoP in each phase: 1) Potential (an informal network); 2) Coalescing (people are beginning to establish a group identity); 3) Maturing (members clarify their focus and actively work together for a shared goal); 4) Stewardship (members sustain momentum for their work); and 5) Transformation (having accomplished a goal, members of the community either reestablish their purpose or disband the CoP). Once web-based technologies became available, people began using such technologies to support the

work of these CoPs and now refer to them as electronic CoPs, or eCoPs (with InspireNet's model, this is the name given to the teams' discrete website space, where the CoP is referred to as a team). Additional factors for achieving effective eCoPs include: problem focused; voluntary involvement and self-organization; using distributed leadership; transparency and public accountability; shared identity; sustainability; and, accessibility [3].

InspireNet leaders actively encouraged healthcare providers to form such communities of practice and provided them with not only the Web 2.0 tools, but also with coaching for optimizing their use. It became clear over time that the InspireNet Action Teams each developed at their own pace. While all of the teams moved through the life-cycle-phases of a CoP, they were each unique. These teams became spontaneous organizations supported by their eCoP: behaving in ways that best met the needs of team members. The InspireNet evaluation committee viewed the network as a living laboratory and as such the role of management and evaluation encompassed observing and documenting behaviours, while at the same time supporting the educational and professional development needs of each team.

#### **4. Evaluation of the Continuing Educational Mission**

InspireNet's evaluation plan includes process and outcome metrics related to overall website activity. Member surveys and interviews, reports from network and team leaders, and internal network records were used to inform these process and outcome metrics. This evaluation work was carried out in partnership with the eHealth Strategy Office of the University of British Columbia, Vancouver, Canada, (now Digital Emergency Medicine). To ensure transparency evaluation reports are available publicly (<http://www.inspirenet.ca/Evaluation>).

Most of InspireNet's members work in BC's health authorities (n= ~2,300 or 60%); some members work or study in BC's academic settings (n= ~1,000 or 25%); fewer work at smaller organizations (n= ~y 500 or 15%). After six years of operating, InspireNet has 46 teams: 10 topic-based 'Action Teams's (such as 'e-health'); 31 'Research Teams' (i.e. researchers using eCoPs to develop research proposals/projects); and five 'Coordinating Teams' performing management functions. Each team operates with one or more eCoPs to support their work. According to member surveys, InspireNet as a continuing professional development resource tool has led to a significant growth of the network [4,5].

Among all of the options for learning activities, the teams' self-directed webinars became the most popular. Webinars provide focused content of interest to team members and serve as an exemplary modality for professional development delivery. For example, the Knowledge to Action Team or KTA, an Action Team devoted to knowledge translation (KT) programmed webinars in two categories: 1) the *Virtual Podium* initiative, which invites any network member to 'step up' to the virtual podium for dissemination of their research project; and 2) the *Lunch and Learn KT* webinars, a 'how to' series on KT; topics have included knowledge synthesis, impact factors, and introductions to research. The eHealth Action Team holds monthly webinars by inviting experts worldwide to discuss technologies, practices and problems. This team has had speakers from Canada, Europe, Australia and the USA. As InspireNet webinars can be attended virtually from anywhere in the world, barriers to accessing global experts dissolve as people can access the webinar from their home or office device. In

addition, webinars are password-protected and only members of InspireNet can gain access. Our experience has been that expert speakers have not been reluctant to share their knowledge in such a password protected environment. Webinars are recorded, then archived and uploaded so that members can view them at any time (Table 1), again in a password-protected eCoP.

**Table 1.** InspireNet's Teams' Webinar Metrics @ June 2016

	# of Webinars	Length (Hours)	Asynchronous	Participants		Total	Total Contact Hours	Avg # participants
				Synchronous	In-person			
Action Teams Webinars	163	171	5,860	2,185	827	8,872	9,012	52
KTA: Virtual Podium	7	7	4,028	37	0	4,028	4,065	581
KTA: Lunch & Learn	8	8	5,320	93	0	5,413	5,413	677
ePoasters	5	5	4,973	0	0	4,973	4,973	997
Total	183	191	20,181	2,315	827	23,286	23,463	122
Total Synchronous Participants				3,142				
Total Asynchronous Participants			20,181					

The webinars have been evaluated favourably as documented in InspireNet's qualitative evaluation noted by a member: "The Webinars are the most popular feature of our Action Team, and as co-leaders, we actively pursue interesting and relevant guest speakers for our Webinar calendar...[I was surprised with] how successful the webinars have been and how often the archived webinars are accessed" [4]. Furthermore, the webinars provide the starting point or stimulus for ongoing discussion, blogs and other means of sharing information, ideas/reactions and advice.

The reach of these web-based educational offerings is far and wide. One hour of educational programming offered by archived webinar recording can extend to approximately 122 contact hours of continuing education. (23,463/191; Table 1). Qualitative data validated that nurses have learned from their exposure to new ideas through the webinars, and then through the asynchronous virtual discussions that only a Web 2.0 network can provide. A member whose view is representative of what our members expressed commented "[The eCoP] brings everyone to my doorstep" [4] and when that doorstep is in a rural or remote community, and the professional cannot attend an educational meeting scheduled during the day due to shift work or other responsibilities, the reach of the network's activities is profound.

## 5. Discussion

InspireNet's membership of over 4,000 individuals far surpasses initial projections. The distribution of the membership fosters an interchange between practice and research that helps to bring evidence, data, and current thinking about issues closer to practice. Webinars provide a cost-effective, accessible mode of providing continuing professional development. It is likely that nurses and other healthcare providers have taken up these webinars because of their affiliation with InspireNet as a member and because of their connection to a specific team that they volunteered to join. Other

organizations, such as professional nursing organizations, also support webinars for professional development, yet data on uptake of such offerings is not available; for example, the College of Registered Nurses of Alberta report user satisfaction with a continuing educational webinar series, but do not report offering webinars on-demand [6]; the American Nurses Association advertises educational webinars, but do not address on-demand access [7] and the American Association of Critical Care Nurses report well-attended webinars and provide on-demand access, but do not report ratio of uptake between the two formats [8]. The number of those who access InspireNet webinars asynchronously vastly exceeds that of those who attend in real time. This indicates that nurses and healthcare providers will take up professional development when it is provided as an archived recording, available at any time. Nurses' shiftwork may explain this finding and this may be an indication that they inherently undertake their continuing professional development using technology to address scheduling issues. In addition to this, nurses save time with no travel required to participate in professional development opportunities. Further research into the use of asynchronous professional development offerings is recommended, as it is unclear if the connections and affiliations to the group as an InspireNet member, as suggested through social learning theory, is a factor that has impacted InspireNet's member experience.

## 6. Conclusion

A virtual platform is designed for scale up and spread, and thereby could be adopted by other organizations for professional development. Such adoption could be an effective and accessible self-directed method for healthcare providers to engage in informal learning in their workplace or through professional associations. The InspireNet experience shows that healthcare providers, primarily nurses, will adopt such a platform for their own learning and that by providing the appropriate supports, this model can be a cost-effective mode of educational offerings.

## References

- [1] L. C. Li, J. M. Grimshaw, C. Nielsen, M. Judd, P. C. Coyte, I. D. Graham. Evolution of Wenger's concept of community of practice. *Implement Sci* **4**(1) (2009), 11.
- [2] E. Wenger, R. McDermott, W. Snyder, *Cultivating Communities of Practice*. Boston: Harvard Business School Press; 2002.
- [3] K. Ho, S. Jarvis-Selinger, C. D. Norman, L. C. Li, T. Olatunbosun, C. Cressman, A. Nguyen, Electronic CoP: Guidelines from a project. *J Cont Ed in the Hth Prof* **30**(2) (2010), 139–143.
- [4] InspireNet Comprehensive Evaluation Report. 2012, [cited 2016 Sep 15]. Available at: <http://www.inspirenet.ca/document/inspirenets-comprehensive-evaluation-report>.
- [5] N. Frisch, P. Atherton, E. Borycki, G. Mickelson, J. Corderio, H. Novak-Lauscher, A. Black, Growing a professional network from zero to over 3,000 members in less than four years: the experience of InspireNet. *J Med Internet Res* **16**(2) (2014), e49. Doi:10.2196/jmir.3018
- [6] College of Registered Nurses of Alberta. Webinar retrospective: a year of CARNA webinars. *Alberta RN*, 2013; 68(4): 23.
- [7] American Nurses Association. ANA webinar offers examples and strategies. *American Nurse*, 2013;45(3) 16.
- [8] American Association of Critical Care Nurses. Well-attended AACN critical care webinar series available live. On demand. *Bold Voices*, 2013; 5(11): 5.