Building Connections: Development and support of a virtual nursing research network in British Columbia

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Introduction

Building connections among researchers can enable nurses to create collaborative advantages, identify practice-relevant research questions, disseminate best practices, share research findings, and sustain an enthusiasm for the work. The British Columbia Nursing Health Services Research Network, **InspireNet**, was developed for this purpose and has become an active virtual network since its inception on November 1, 2009.

Objectives

InspireNet works toward four outcome goals to be achieved by 2013.

Increased nursing involvement in research	Coordinated planning and priority setting
Strategic partnerships	Innovation in care delivery and education

Table 1: InspireNet's goals

Materials and methods

The network is modeled using Wenger's framework of communities of practice and guided by social learning theory. Thus, the network is based on assumptions that learning takes place within social relationships and that groups of people deepen their expertise by interacting with each other on an ongoing basis. As a virtual network, InspireNet uses Web 2.0 technologies to connect people who are geographically dispersed in the province of BC and beyond. The network operates by supporting Action Teams – content-specific groups of interested members – with electronic communities of practice (eCoPs) with synchronous and asynchronous functionality. Knowledge translation and exchange is a key network component in bringing knowledge to users, highlighting research needs for researchers and illustrating new findings for policy/decision makers.

Figure 1: Bridging geographic and institutional distances: synchronous discussion via webconferencing.

Figure 2: Asynchronous discussion via team's eCoP

Results

Membership

At 18 months of age, InspireNet has over 800 members who are researchers, practitioners, policy-makers, educators and students working together virtually to improve nursing health services.

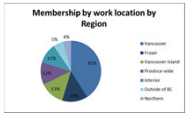

Figure 3: membership by geographical region

Figure 4: membership by sector

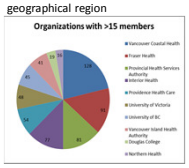

Figure 5: membership by organization: place of work or study

Figure 6: First year website activity = 14,000 hits from 220 Canadian cities/towns

Team participation

Of these 800 members, 253 participate in an Action Team or other team to develop and grow InspireNet's capacity to ultimately meet its goals. In total these members fill 385 'seats' on 14 teams.

Code	Team	Number of members
NEARR	Nursing Education and Research Rounds	154
eHealth	e-health, e-technologies and informatics	42
APN	Optimal utilization of advanced practice nursing roles	42
KTE	KTE Strategy Planning Workshop	34
NES	Nurse Educators' Scholarship	29
HWC	Healthy Workplace Climate	18
KTA	Knowledge to Action Team	16
ILC	InspireNet Leadership Council	15
ET	Evaluation Coordinating Team	9
IFWG	InspireNet Workshop Working Group	9
PPBRC	PHC Practice-based Research Challenge	8
PBRC	Practice-based Research Challenge	8
MT	Management Team	7
CT	Communications Team	6
	Total team members' seats	385
Action Team		
Other InspireNet membership opportunities		

Table 2: InspireNet's current Action Teams and other teams

# of Teams	14
# of Members participating in teams	253
# of Team 'Seats' filled by these members	385
# of Members in 1 team	195
# of Members in 2 teams	36
# of Members in 3 or more teams	22

Table 3: Teams and participation

Figure 7: Number of members in 1, 2 or 3+ teams

Community of Practice Life Cycle

Teams are currently in different stages of the phases of the CoP Life Cycle model.

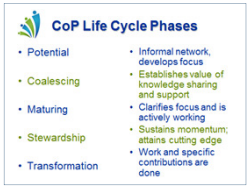

Figure 8: Wenger's CoP Life Cycle Phases

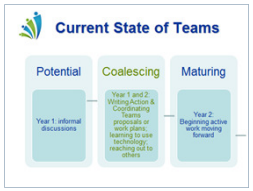

Figure 9: Current state of InspireNet's Action Teams

Graphing Networking

Members' connections across Action Teams and other teams illustrates the strength of virtual networking across institutions and geographical boundaries.

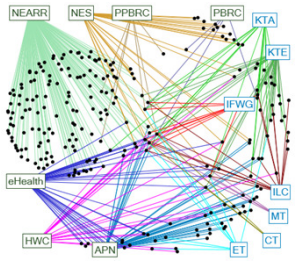

Figure 10: InspireNet's teams as a graphed network

Discussion

Members come from a variety of institutions, although most (63%) work in nursing practice. The divergence of backgrounds of members in a virtual network creates unique needs for technical support in facilitating members' use of InspireNet's platforms and services. The differences in knowledge of information and communications technologies is one variable. Another is the differences in the use of web browsers and IT infrastructure available to members at their place of work/study. Using a Content Management System (CMS) for its website platform where no HTML programming skills are required, InspireNet reduces barriers to members, facilitating their ability to add content to the website, making it a truly sharable platform fully leveraging Web 2.0 functionality.

Conclusions

At the 18-month mark, InspireNet has made good progress in developing its infrastructure to support members in working toward accomplishment of InspireNet's goals. More work is yet to be done and new members are joining the network and Action Teams every day.

Evaluation activities include members surveys, key informant interviews and other tools. Feedback received through these evaluation mechanisms will be used to continually improve InspireNet's systems, augmenting the strength of virtual networking.

Literature cited

Mousavidin, E., & Goel, L. (2009). A Life Cycle Model of Virtual Communities. *Proceedings of the 42nd Hawaii International Conference on System Sciences*

Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating Communities of Practice*. Boston: Harvard Business School Press.

Wenger, E., White, N., & Smith, J. (2009) *Digital Habitats: Stewarding Technology for Communities*. Portland, OR: CPsquare.

Acknowledgments

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For further information

www.inspirenet.ca