Collaborating to Innovate and Improve Patient Care at Hamilton Health Sciences using Knowledge Building Epistemology, Technology and Methodology (Project 004)

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Project Overview
This collaborative project between the Patient Centred Care (PCC) Task Force at Hamilton Health Sciences and the Institute for Knowledge Innovation and Technology at OISE/University of Toronto sought to foster interprofessional teamwork, e-learning and knowledge building (Berente & Scardamalia, 1993) using online technologies. The intention of knowledge building communities is the creation of new knowledge of value to the community. This project succeeded at generating a new philosophy of patient centred care for one of Canada’s largest teaching hospitals by integrating patient and family discourse and communication (N=600) in an active online e-learning environment created by an interprofessional team of health care professionals and researchers. The barrier this project addressed was shifting interprofessional communication and collaboration from exclusive reliance on face-to-face meetings and one-way communication technologies (e.g., e-mail, voice-mail) to collaborative problem solving in a communal database technology (Knowledge Forum®). The main innovations realized in this project were successful design of a productive e-learning environment that generated a new philosophy of patient centred care based on what patients and families reported as “wished most”. The social impact of this project is improved service delivery to over 2,000,000 patients and families in south-western Ontario. Interprofessional collaboration and innovation at the workplace promises to solve many problems facing health care today (Romanow, 2002; Russell, 2002; Rachlis, 2004).

Design Goals
• To create a new philosophy of patient centred care for Hamilton Health Sciences using knowledge building epistemology, technology and methodology.
• To design strategies to integrate patient-family feedback in the e-learning environment of the Patient Centred Care Task Force at Hamilton Health Sciences.
• To design innovative methods to support of e-learning and interprofessional team work in a hospital setting.

Participants
Hamilton Health Sciences (HHS) is among Canada’s largest teaching hospitals and provides a comprehensive range of health services in the province of Ontario.
• Patients and Families’ focus groups and surveys (N=600)
• Steering Committee (N=4)
• Patient Centred Care (PCCF) Task Force at Hamilton Health Sciences (N=19)

Institute for Knowledge Innovation and Technology (IKIT) conducts research, develops technology, and helps build communities aimed at advancing beyond “best practice” in education, knowledge work, and knowledge creation.
• Research Team from the Institute for Knowledge Innovation and Technology, OISE/University of Toronto (N=10)

Duration
January 2003 through March 2004 (18 months)

E-learning outcomes and innovations
1. Development of effective and productive e-learning environment in Knowledge Forum®, a second generation computer supported intentional learning environment. The content of the e-learning environment was entirely the construction of participants and related to stages in the iterative design process described above. Fifty-nine views or communal workspaces and 902 notes related to creation of a new philosophy of care were created.

Discussion and Future Directions
“Doing what matters most to patients and families at HHS”
• Innovation not financial resources will solve Medicare’s problems in Canada (Romanow, 2002; Rachlis, 2004).
• E-learning projects and strategies must support interprofessional practice and innovation in health care.
• Communal technologies provide an ideal environment for sharing multiple sources of evidence (e.g., discourse, multi-media) to support learning and knowledge creation in practice settings.
• Online technologies offer a mechanism for capturing and using patient and family feedback in the innovation process.
• Integrated knowledge creation and knowledge management systems are essential for workplace knowledge building.

References

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