

FIRST QUARTER PROGRESS REPORT

PROJECT: #99574 *Fostering interprofessional practice in rehabilitation and complex continuing care through collaboration and virtual learning. (note the title has changed slightly to incorporate OLT grant Appendix A project description title).*

QUARTER: Q4 (Jan. 1, 2001 – March 31, 2001)

1.0 PROJECT STATUS

1.1 Deliverables:

a) Forecast Deliverables:

Monthly Reports – At the outset of this research, we predicted, as a deliverable, a minimum yield of 16 notes every month contributed to a communal virtual learning environment called Knowledge Forum. Each month, separate views within the database are created to collect interprofessional monthly reports. Participants are asked to contribute monthly reflective narrative professional activity reports to Monthly Reports views within the Knowledge Forum® database. There, participants read and engage in threaded discourse about each other's activity reports with an eye to identifying shared problems of practice and opportunities to advance community knowledge and expertise.

Learning Portfolios – At the outset of this research, we predicted that participants would use the Learning Portfolios View within the Knowledge Forum database as a reflective practice repository. We predicted, as a deliverable, a minimum yield of 16 notes contributed to the Learning Portfolios View monthly. Each month, participants are asked to contribute their monthly reports to their Learning Portfolios and reflect on learning over time.

Knowledge Forum Analysis – At the outset of this research, we predicted as a deliverable, ongoing analysis of the discourse and patterns of activity within the Knowledge Forum database. Analyses address the following question: What are the affordances of using a virtual communal learning environment to foster interprofessional practice and continuous learning in health care?

Problem Solving – At the outset of this research, we predicted that discourse among participants in the database would lead to problem identification and problem solving. The problems would be harvested and stored in a view repository called “Problem Solving Holding Tank”.

b) Actual deliverables:

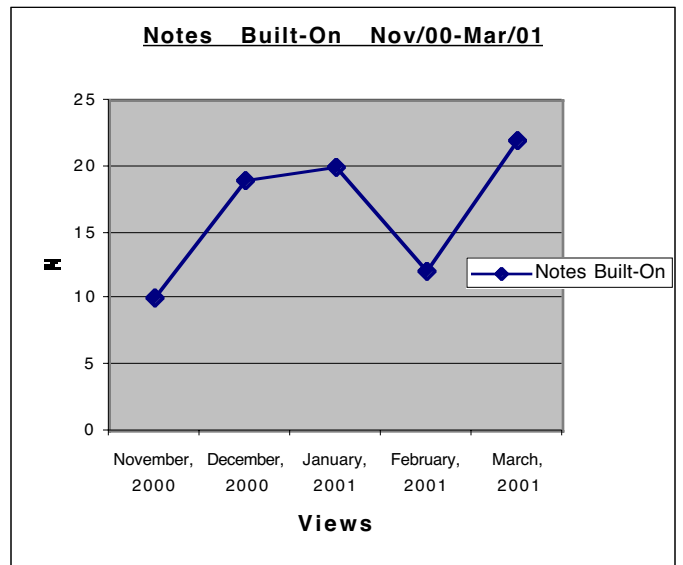
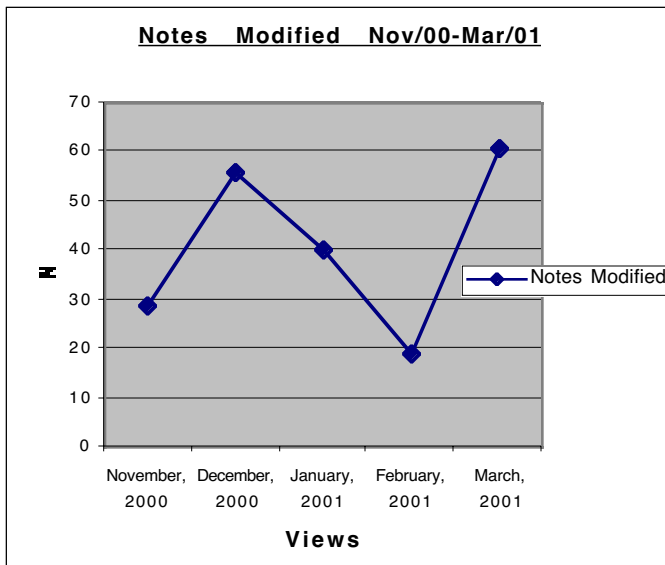
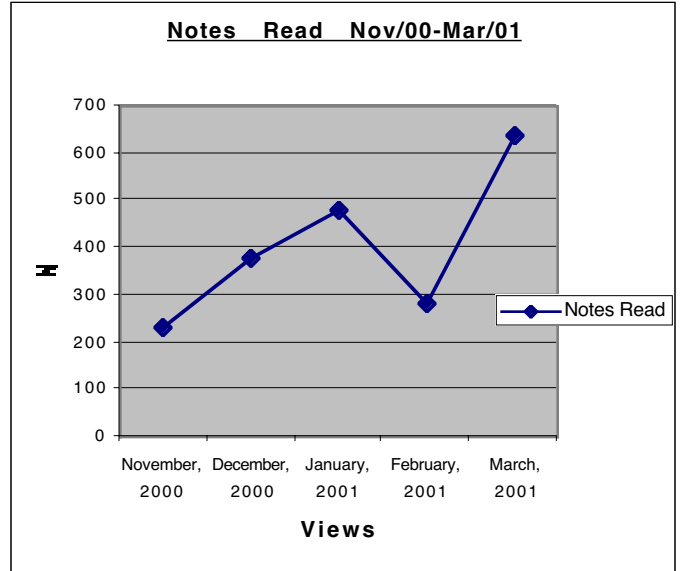
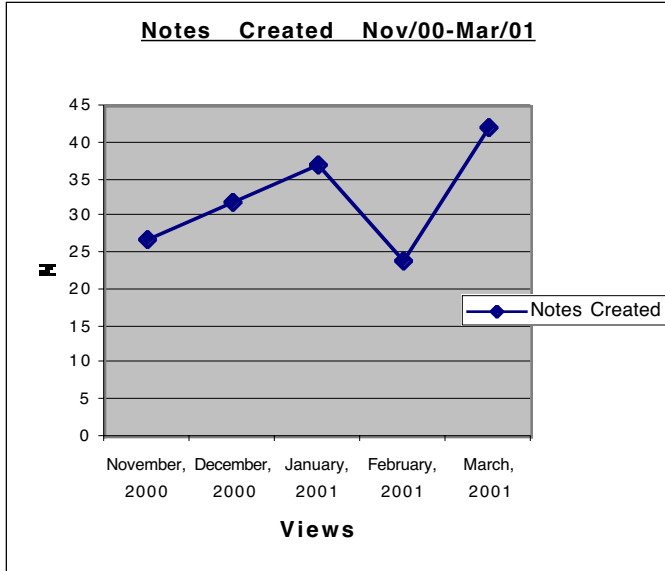
Monthly Reports – Data collection for this project began in November 2000. A total of 5 monthly report views were created in the Knowledge Forum database during this period. Participants contributed monthly activity reports to these views as requested. A summary table illustrates patterns of interaction with respect to notes created, read, modified and built-on. During all 5 months, participants exceeded predicted minimum outcomes for notes created (N=16) as observed in the summary table below. Participants exceeded expected outcomes for November by 41%, December by 50%, January by 57%, February by 33%, and March by 62%. This finding demonstrates that participants are engaged in discourse about their interprofessional activity and building on to each other's notes.

OFFICE OF LEARNING TECHNOLOGIES

Monthly Reports Summary Data Table				
Monthly Reports Views	Notes Created	Participants	Average	
Nov-00	27	13	2.08	
Dec-00	32	12	2.67	
Jan-01	37	16	2.31	
Feb-01	24	12	2.00	
Mar-01	42	15	2.80	
Monthly Reports Views	Notes Read	Participants	Average	
Nov-00	231	15	15.40	
Dec-00	380	17	22.35	
Jan-01	480	18	26.67	
Feb-01	282	16	17.63	
Mar-01	636	18	35.33	
Monthly Reports Views	Notes Modified	Participants	Average	
Nov-00	29	4	7.25	
Dec-00	56	7	8.00	
Jan-01	40	9	4.44	
Feb-01	19	6	3.17	
Mar-01	61	10	6.10	
Monthly Reports Views	Notes Built-On	Participants	Average	
Nov-00	10	3	3.33	
Dec-00	19	5	3.80	
Jan-01	20	11	1.82	
Feb-01	12	9	1.33	
Mar-01	22	12	1.83	

Knowledge Forum Analysis – The principal investigators and a Knowledge Forum consultant conduct ongoing analysis of the Knowledge Forum database. Over the first quarter, both quantitative and qualitative analyses have begun. To date, we have begun to analyse interprofessional learning trajectories within the Monthly Reports views using by measuring knowledge-building indicators (notes created, read, modified, and built-on). The Analytic Toolkit (Burtis, 1999), a knowledge-building quantitative tool, was used to perform analyses. An overview of this analysis presented in graphical form below. As well, all data from the five monthly report views was prepared and imported into NVivo, a qualitative data analytic tool. Over the first quarter, a method for data analyses was established and we are satisfied with the progress we have made to date.

First Quarter Summary Activity Graphs for Notes Created, Read, Modified and Built-on



Problem Solving - We have ample evidence that interprofessional discourse in the database leads to problem identification and solving of problems at more complex levels. Although at the outset, we anticipated collecting these problems in a ‘holding tank’, we are pleased that participants have extended beyond expectations of participation in the Monthly Reports activity, and have created new views called Problem Solving views. Over the past 5 months, a total of 7 new problem solving views have been created in the database and are summarized in the table below.

Problem Solving Views Summary Data Table

Problems Solving Views	Date Created	Problems of Inquiry
Knowledge Forum Consultations	11/29/01	How to track technical and pedagogical learning needs of participants?
Ethics, Privacy, and Electronic Information Technology	12/06/00	What do we need to understand about provincial and federal privacy legislation and use of virtual technologies in health care?
Chronic Non-Cancer Pain Guidelines	12/13/00	How might Knowledge Forum be used to evaluate chronic non-cancer pain guidelines with complex clinical cases?
Knowledge-Building versus Knowledge Telling	01/30/01	Why is knowledge-building a better pedagogical model in health care education?
Grants and Funding Cycles	02/12/01	How might Knowledge Forum be used for interprofessional grant writing?
Library Services	02/14/01	How might Knowledge Forum be integrated with library services at Toronto Rehab to ensure integration of research into practice?
Virtual Nursing Internship	02/22/01	How might Knowledge forum be used to support virtual interprofessional mentorship of a graduate-nursing student?

- c) **Variations from last quarter’s stated objectives:** The only variation from our submitted deliverables is that we did not actively engage in the Learning Portfolio View during the first quarter. However, overall participation in the database far exceeded expected outcomes in both the monthly report views and problem solving views. We do not anticipate activity in the Learning Portfolio view over the next quarter given high levels of participation in problem solving views. We will review purpose of Learning Portfolio View with participants to determine how this view supports interprofessional practice.

- d) **Areas of concern regarding deliverables:** To date, we have no concerns related to this project and have received positive feedback from participants in the study.
- e) **Next quarter's forecast deliverables:** Next quarter's forecast, like this one, will focus on activity in monthly reports and problem solving views, and data analyses.
- f) **Schedule:**

Updated Schedule for Remaining Project Deliverables

Activities	Completion Date	Deliverables
Monthly Reports	March 2002	12 Views, minimum 192 notes
Problem Solving Views	March 2002	6 Views
Learning Portfolios	March 2002	Minimum 192 notes copied into individual Learning Portfolios
Data Analyses	To be advised	Descriptive frequency data of participation patterns over time.

1.2 Budget:

(a) **Forecast quarterly expenditures:**

Direct Salaries and benefits:	\$N/A
Consultant fees:	\$16,500.00
Direct materials and supplies:	\$N/A
Printing & dissemination:	\$N/A
Evaluation:	\$N/A
Other:	\$N/A

(b) **Actual quarterly expenditures:**

Direct Salaries and benefits:	\$N/A
Consultant fees:	\$33,670.00
Direct materials and supplies:	\$N/A
Printing & dissemination:	\$N/A
Evaluation:	\$N/A
Other:	\$N/A

(c) **Variations in expenditures:** We are \$17,170.00 over budget this quarter. We did not spend the forecasted amount on printing and dissemination (\$2,000) nor did we spend the \$7,500.00 for the period November 1 to December 31, 2000. This is because the consultant did not begin work on the project until January 2001 and we have not had printing and dissemination costs this quarter. We will, however, request permission to carry over these amounts for the remaining period of the grant.

(d) **Budgetary concerns:** None at present.

(e) **Next quarter's forecast expenditures:** \$16,625.00 estimated expenditures for next quarter.

Direct Salaries and benefits:	\$N/A
Consultant fees:	\$16,625.00
Direct materials and supplies:	\$N/A

Printing & dissemination:	\$N/A
Evaluation:	\$N/A
Other:	\$N/A

2.0 OVERVIEW

2.1 Changes Affecting Project

None.

2.2 Dissemination and Promotion Plan

Preparation for upcoming conferences:

1. Russell, A. (May 2001). *Why e-Learning? Benefits and drawbacks of building an e-Learning Environment for Health Professionals*. E-Health 2001: The future of health care conference, Toronto.
2. Russell, A. (May 2001). *Interprofessional knowledge-building in rehabilitation and complex continuing care*. Invited participant in daylong workshop hosted by the Office of Learning Technologies, CANARIE and Health Canada.
3. Campbell, H., Spevakow, D., Russell, A., & Hamilton, L. (June 2001). *Knowledge Forum: Developing chronic non-cancer pain clinical practice guidelines, putting them into practice and using virtual technologies to evaluate*. New Frontiers in Pain, 4th Annual Pain Management Conference, Toronto.
4. Russell, A., Bereiter, C., Scardamalia, M., Campbell, H. (August 2001). *Knowledge-building in health care: Fostering professional development, continuous learning and reflection*. Knowledge-Building/Knowledge Forum Summer Institute, Toronto.
5. Russell, A. (October 2001). *Knowledge-building in health care*. Workplace Learning Conference, Germany-Canada-EU Health Telematics Partnership, Toronto.

3.0 PROJECT DESCRIPTION

I have spoken with Julie Vaillant, Project Officer, OLT about changes to date.

Author: Ann Russell, Principal Investigator
Researcher, Toronto Rehab & OISE/UT
(416) 923-6641, ext. 2454