



'Partnerships and Collaborations' Working Group Report

Review new and existing strategic initiatives around the sharing of eLearning tools, research and development and best practices.

Membership

Peter Azmi PhD, Continuing Professional Development, i+e Office

Avi Hyman PhD, Director, Academic & Collaborative Technology

Table of Contents

SECTION 1. INTRODUCTION.....	3
A. Objectives of the eLearning Task Force and the 'Partnerships and Collaborations' Working Group	3
B. Strategy of the 'Partnerships and Collaborators' Working Group	3
SECTION 2. METHODOLOGY.....	3
A. Semi-structured Interview Question Design	3
B. Participant Recruitment.....	4
C. Data Collection and Organization	4
D. Analysis	4
SECTION 3. RESULTS AND DISCUSSION	4
A. Participant Summary.....	4
B. Internal Partner Interview Findings	5
C. External Partner Interview Findings.....	8
SECTION 4. APPENDICES.....	12
Appendix A. Partnerships and Collaborations Working Group Targeted Recruitment List.....	12
Appendix B. External and Internal Partner Interview Questions	13
Appendix C. Further Elaboration on eLearning Technologies Used in Educational Practices (Internal Partners).....	14

SECTION 1. INTRODUCTION

A. Objectives of the eLearning Task Force and the 'Partnerships and Collaborations' Working Group

1. eLearning Task Force Objectives

The mission of the eLearning Taskforce is to make recommendations to senior leadership that will further position the Faculty of Medicine as a global leader in eLearning (i.e., teaching, learning and scholarship) across the education continuum so that we can provide the best education for today's and tomorrow's learners.

2. 'Partnerships and Collaborations' Working Group Objectives

Through structured stakeholder interviews, identify:

- 2.1.** present internal collaborations within Faculty of Medicine departments and Education Units;
- 2.2.** existing collaborative eLearning initiatives with external stakeholders/partners; and
- 2.3.** risks and opportunities.

B. Strategy of the 'Partnerships and Collaborations' Working Group

To achieve these objectives, the working group facilitated focused structured interviews with internal and external stakeholders; conducted an inventory of current eLearning offerings across the Faculty of Medicine; and sought to identify new and innovative opportunities for collaboration.

SECTION 2. METHODOLOGY

This section provides methodological details on each of the main phases of the 'Partnerships and Collaborations' Working Group.

A. Semi-structured Interview Question Design

The semi-structured interview questions for internal and external partners were developed by the 'Partnerships and Collaborations' working group, then circulated to and discussed among members of the eLearning Task Force prior to finalization (see Appendix B). The interviews were designed to be approximately 30 minutes in duration. The focus of the external partner interview was regarding participants' education-based assets and business model; the quality measures for partnering with an institution; and the benefits and barriers to forming partnerships. For internal partners, the interview questions focused on exploring how eLearning is used in their educational practices; the types of tools and technologies used; eLearning-based collaborations (institutional, industrial, etcetera); and internal partners' top needs for support in the use of eLearning.

B. Participant Recruitment

A purposive sampling strategy was used for the recruitment of both internal and external partners. A list of internal (N=6) and external partners (N=6) was generated by the working group and presented to the eLearning Task Force for further suggestions (Appendix A). Participants were invited by email to participate in the semi-structured interviews over the phone, with several attempts being made to contact individuals who did not respond (Appendix A).

C. Data Collection and Organization

Audio recordings of the interviews were used to draft abridged transcripts. Participants were given the opportunity to verify the accuracy and completeness of their interview sessions. The transcripts were edited by participants and additional information was added when and where necessary.

D. Analysis

The final interview summaries were imported into NVivo version 10 software for organization and analysis. Data intimacy was achieved by reading and re-reading responses, using memos to track insights gleaned from the data for later inclusion in analysis. Descriptive codes were initially assigned to the text. An iterative process of merging codes based on observed relationships and eliminating those deemed to be redundant was used to arrive at major and minor themes in the data. Code frequencies were used to prioritize themes.

SECTION 3. RESULTS AND DISCUSSION

A. Participant Summary

A total of 9 interviews were conducted with 10 participants (1 interview was conducted with 2 participants—see table 2). Five interviews were conducted with internal partners and 4 with external partners.

Table 1. Participant Summary of Internal Partners

Department/ Division/ Institute /Program	Campus	Contact	Position(s) / Role(s)
Faculty of Medicine	St. George Campus	Chris Perumalla	Director of The Division of Teaching Laboratories
Centre for Teaching and Learning	Scarborough Campus	Janice Patterson	Associate Director - Communications, Events and Grants
OISE	St. George Campus	Kurt Binnie	Director of Information Technology
Hazel McCallion Academic Learning Centre	Mississauga Campus	Simone Laughton	Instructional Technology Liaison
Faculty of Applied Science & Engineering	St. George Campus	Susan McCahan	Professor Vice-Dean, Undergraduate

Table 2. Participant Summary of External Partners

Company/Organization	Contact	Role
Pearson Canada	David Roker	Director, Media Production
CoursePeer Inc.	Hadi Aladdin	Co-founder and CEO
John Wiley and Sons	Maureen Talty	General Manager, Global Education Canada
Apple	Philip Hume*	Account-Executive, Higher Education
Apple	Willi Powell*	Strategic Development Manager

*participated in the same interview session

B. Internal Partner Interview Findings

1. Comparing perceptions of eLearning within the University of Toronto

eLearning terminology is in great flux, owing to the ever increasing pace of technological advancement. Participants were asked for their definition of eLearning to investigate whether differing perceptions of eLearning exist among those active in eLearning initiatives. Internal partners' definitions were compared to the 'How and Why' working group's definition:

eLearning is an approach to engaging faculty of medicine learners in a form of education that applies technological approaches to teaching, learning and scholarship and may include asynchronous and synchronous learning and interactions, which assist in the communication of knowledge and skills and their development and exchange.

All internal partners agreed that eLearning is the application of technology to teaching and learning. However, perceptions on the types of technologies and strategies that eLearning encompasses varied greatly between respondents. Interestingly, no one discussed eLearning pedagogy or made any comparisons to traditional learning methods. Some examples of definitions given by participants were:

"[eLearning is] not very differentiable from any other type of learning except that there is a computer or electronic medium involved"

"[eLearning is] learning with the use of any type of digital access"

2. eLearning Technologies and Strategies and Their Use in Educational Practices

Table 3. eLearning Tools and Strategies Used by Internal Partners

eLearning Tools and Technologies	Description	Frequency by Respondent	Percent of Total Respondents (n=5)
Collaborative learning tools	Discussion boards; Piazza; wikis	3	60%
Communication and Conferencing Tools	Video conferencing (Vidyo); GoToMeeting; Adobe Connect	2	40%
eLearning Modalities	CoursePeer; Peer Scholar; Simulation; WebWork	5	100%
Learning Management Systems	BlackBoard	5	100%
Multimedia	WebOption Lecture Casting; Video and audio lecture capture; Animation	5	100%
Online courses	EdX; Coursera	2	40%
Social Media Modalities	Social media (twitter); Blogs	2	40%
Turnitin	Used for rading and peer review	1	20%
Virtual Search Engines	SPOCK network for communicating with departmental faculty and T.A.s especially with regards to time sensitive, course-related information	1	20%
Website resources	Course or supplementary	1	20%

Table 4. eLearning Strategies Used by Internal Partners

eLearning Strategies	Frequency by Respondent	Percent of Total Respondents (n=5)
Blended learning	1	20%
Assist in proper tool selection	1	20%
Flipped classroom	1	20%
Use of technology on an as needed basis	1	20%
MOOC	1	20%

Table 5. eLearning Applications by Internal Partners

eLearning Uses	Frequency by Respondent	Percent of Total Respondents (n=5)
Accommodate different learning styles	1	20%
Learner Assessment	2	40%
Class presentations	1	20%
Classroom response system	2	40%
Facilitate collaboration	2	40%
Distance learning	2	40%
Synchronous learning	1	20%

3. Collaborations with Internal Partners

The results suggest that, overall, there is a high collaborative spirit at the University of Toronto. The University of Toronto Mississauga campus library (Hazel McCallion Academic Learning Centre) and the Ontario Institute for Studies in Education (OISE), in particular, have had many collaborations between departments (eg. physical education) and campuses within the University of Toronto, as well as with

international institutions (France, Germany and Japan), industry (eg. Common Craft) and the government (eg. creation of the OERB for the Ministry of Education). It would be beneficial to further consult these groups to help strategize collaborations within the Faculty of Medicine.

List of Internal Collaborations (non-exhaustive):

- Academic Skills Centre
- Career Centre
- Centre for Teaching Support and Innovation
- Classroom Technology Support
- Department of Information Technology
- Department of Music
- Department of Physical Education
- Discovery Commons
- Faculty of Information
- Information & Instructional Technology Services (UTM)
- Leslie Dan Faculty of Pharmacy
- School of Continuing Studies

4. Institutional Support Needed for Use of eLearning in Educational Practices

Participants were asked how the university and/or their department/unit could better assist them in using eLearning for their educational practice. The following major themes were observed among participant responses.

4.1. Need for Improved eLearning Infrastructure

Institutionally and departmentally we need to improve funding available for research and for the development of eLearning technology. In addition, we need to raise awareness around existing funding opportunities, as there's a perception that current opportunities are not being well utilized.

Participants also stated the need to increase and improve upon technological support services for greater ease of eLearning tool use.

4.2. The Appeal of a Centralized Network for eLearning

The need for a centralized network that serves to facilitate the sharing of best practices, knowledge, resources and tools between researchers and educators was expressed by participants. This network could aid in the development of an institutional community that is supportive of eLearning, and in promoting and facilitating collaboration between units and departments. The need for collaborative efforts in developing eLearning tools and in resolving eLearning-related issues arises from the perceived ineffectiveness of having several people work on the same issues in parallel. This results in unnecessary repetition of material and inefficient strategies for problem resolution.

4.3. Technologies Tested for Effectiveness

The availability of well-tested, proven-to-be-effective technologies was expressed as being important for more seamless integration with other technologies in use by departments and programs; for greater ease-of-use; and for improved teaching and learning effectiveness.

4.4. Critique of Learning Management System (LMS) Platforms

Current Learning Management Systems in use by the university, namely Blackboard, were criticized as being inflexible and impractical in some teaching and administrative contexts. For example, one participant said that there are challenges with the “portability and re-usability of flash videos” on Blackboard. Participants wish to see improvements in the current Learning Management System platform and/or an expansion of LMS options.

C. External Partner Interview Findings

External Collaborations

Table 6. External Collaborations by Category

Category	Description	Frequency by Respondent	Percent of Total Respondents
Academic	Michener Institute; University of Waterloo; International institutions (U.S., Japan, Germany and France)	3	60%
Industry	Noldus; Studiocode; Commoncraft; Xtranormal; Coursera; Quanser	3	60%
Government	Ontario Education Resource Bank (OERB) developed for the Ministry of Education; Development of online courses for the Ontario Provincial Government	2	40%
Other	Educause; EdX (MOOCs)	2	40%

1. Business Models of Companies Invested in Higher Education

1.1. Education-Based Assets

All four external partners interviewed acknowledge that education-based assets are an important, if not crucial, component of their business model. External partners’ involvement in higher education includes creating, providing and distributing content systems and technology for academic institutions. In addition to this, one partner, John Wiley & Sons, also offers services and support with course and program development, development of business models, administration, marketing, and student recruitment. All of the partners interviewed offer the opportunity for customized educational solutions, enabling institutions to choose the most effective strategies for their courses and/or programs and to regulate partner involvement in educational initiatives to suit their specific needs (“offer customized solutions—can either do everything, or part of it, or can just give content and technology”—John Wiley & Sons). External partners from John Wiley & Sons and Pearson Canada spoke of the necessity to adapt to trends in educational technology integration by offering digital resources.

1.2. Large Investments in eLearning

The external partners interviewed claimed to have great interest and, for some, financial investment in eLearning:

- eg¹. “We are investing heavily in multimedia.” (Pearson Canada)
- eg². “By 2015, 70% of revenue generated will be through digital resources.” (Pearson Canada)
- eg³. Apple stated that they are largely focused on individual learning, and that there is a large market in medical education. Apple has institutional collaborations with computer science and medical school programs.

1.3. External Partner Involvement in Content Creation and Distribution

Most external partners interviewed indicated that their partners generally provide their own content, whereas John Wiley & Sons explicitly mentioned that they also create and provide content for their partners.

Table 7. Overview of Education-Based Assets of External Partners

Education-Based Assets	External Partners			
	Apple	CoursePeer	John Wiley & Sons	Pearson Canada
Incorporation of Higher Learning into Business Models	-“30+ year focus on education...” -Can use and create educational applications for Apple platform (library of medical apps and textbooks available) -Large market for iPad and iPhone in medicine -Devices provide rich textbook experience	-Learning Management System (LMS) Technology provider -Software developer	-“Create, provide and distribute content, systems and technology” -Provide services and support for course/program marketing, student recruitment and administration	-Develop educational technology and resources -Ex. My Lab, digital collections of e-text and resources accessible for a flat fee to students
Content-Based Assets	-Content acquired by partners/ institutions -Open market place: institutions can create own learning materials and publish on iTunes or iStore -“[The] application ecosystem [is] driving [the] adoption of [the] Apple platform [in medical education]”	-Content acquired by partners/ institutions -Content must adhere to SCORM industry standards -Preferred to have multiple people involved in creating content	-Can provide content, help develop content with partners or use content produced by institutional partners	-Content not mentioned specifically -Focus is on value-added technologies (ex. multimedia, learning applications, interactive media, etc.)

2. Importance of Evaluating the Efficacy of eLearning Resources

Tracking and monitoring student progress in their use of digital resources is considered important to demonstrate product efficacy and impact. In terms of quality measures for partnering with a content provider or institution, external partners are looking for “efficacy to the actual learning that’s provided” (John Wiley and Sons).

3. Advantages to Forming External Partnerships for Universities

3.1. Facilitate Course and Program Development, Marketing and/or Administration

3.2. Greater Assurance of Product Efficacy

Product efficacy was mentioned as a crucial component of external partners' business agendas. External partners collaborate with institutions in conducting research to assess the efficacy of eLearning tools, by tracking and monitoring student progress in using their products, for example. This information is also used to help provide more personalized learning experiences for students.

3.3. Innovation

External partnerships help universities stay innovative by helping to deliver effective technologies tested with learners in institutional settings.

3.4. Investment Capacity

External partners can invest heavily in institutions in areas that also help them to grow as businesses. In the words of one participant, "We know Universities do not have unlimited resources. [We can] help [our] partner and fund some initiatives which will have a win-win situation for both sides, dependent on [the] outcomes."

4. Top Qualities of Desirable Partners

4.1. Content Quality

External partners look for institutions that are able to create good quality content, specifically by groups of experts that can input multiple perspectives and that possess the necessary "know-how" to do so, in accordance with software providers, for example.

4.2. Credibility, Influence and Previous Work Experience

Credibility, reputation and influence on other potential partners were described as some of the top qualities of desirable partners. Credibility was defined by one participant as having, "breadth and depth of research and investment capacity". In terms of previous work experience, partners were interested in the types of organizations a potential institutional partner has served, and aligning it with their own focus and goals or strategies.

4.3. "Openness to Innovation"

As described by one participant, external partners prefer "...institutions who are trying to be innovative [and are] driving change. We want to work with partners who want to look at things differently and change things for the better." There is a desire for partners that are open to change and whom are able to evolve and try different things. This applies both with regards to creating products, programs and courses as well as in their business model. Interestingly, there is an apparent perception among global organizations that Canadian institutions are slower to innovate and change their business models, largely on account of the public education system. This is based on the idea that private institutions (which are abundant in the U.S.A, from which most of these external partners are based in) are more apt to introduce and adopt different business practices, and to change as the market changes, for example.

4.4. Other Qualities Mentioned of Desirable Partners

- “Possess an institutional vision for the use of company materials and/or assets”
- The number, scope and breadth of opportunities available for partnership
- Willingness to invest in a long term relationship with external partners

5. Top Qualities of Competitive Partner Targets

5.1. Business and Legal Frameworks in Place to Enable and/or Support Partnerships

The process of establishing partnership frameworks is described as lengthy, therefore, potential partners need to have clear options for development models and frameworks “up front” (such as governance and ownership models and fiscal frameworks).

5.2. Engaging and Willingness to Maintain a Strong Line of Communication with External Partners

Communication was considered to be of great importance for reaching each other’s business vision for a partnership. It is necessary to understand each other’s business in order to use each other’s assets most effectively. For example, Apple has a Briefing Committee used to explore avenues for collaboration and/or investment with their partners

5.3. Fewer Administrative Restrictions to Partnering

5.4. Corporate Involvement

External partners want to see evidence of corporate involvement in the creation of courses and programs (providing the “know-how”). However, corporate involvement was noted as being less important for the field of health care by one participant.

D. Conclusion

The results of this study indicate that there is untapped potential both within and outside the university to advance the state of eLearning in the Faculty of Medicine. Several successful collaborations have occurred internally that have enabled the sharing of resources and expertise to develop innovative eLearning products and services now in use by the university. External partnerships could serve as an additional source of revenue to help foster innovation in eLearning and provide well-tested materials for greater teaching and learning effectiveness.

SECTION 4. APPENDICES

Appendix A. 'Partnerships and Collaborations' Working Group Targeted Recruitment List

Table 8. External Partners Targeted Recruitment List

Company/ Organization	Contact	Role	Interview Status
Pearson Canada	David Roker	Director, Media Production	Complete
John Wiley & Sons	Maureen Talty	General Manager, Global Education	Complete
MaRS	Krista Jones	Senior Advisor and Lead of the EdTech Cluster at MaRS	No response (followed up 4x)
Rogers Healthcare Group	Rick Campbell	Editorial Director	No response (followed up 3x)
Apple	Philip Hume	Account-Executive, Higher Education	Complete
CoursePeer	Hadi Aladdin	Founder, President	Complete

Table 9. Internal Partners Targeted Recruitment List

Department/ Division/ Institute/ Program	Contact	Role	Interview Status
SCS	Cynthia Bettcher	Director, Academic Programs	No response (followed up 4x)
UTM	Simone Laughton	Instructional Technology Lead, UTM Library	Complete
UTSC	Janice Patterson	Acting Director, Centre for Teaching & Learning, UTSC	Complete
OISE	Kurt Binnie	Director of Information Technology, OISE	Complete
Teaching Labs	Chris Perumalla	Director, Teaching Labs	Complete
Engineering	Susan McCahan	Vice-Dean Undergraduate, Engineering	Complete

Appendix B. External and Internal Partner Interview Questions

1. Survey/Interview Questions for External Partners

1. How does content/education-based assets fit into your business?
 - What is your business model/ revenue model for education?
 - How do institutions like UT/FOM play a role in your business?
2. List at least 3 quality measures you look for when partnering with a content provider or an institution like UT/FOM?
3. What can you provide educational institutions (like UT/FOM) in a partnership?
 - How do you describe your value-add to an institutional partner?
4. From your POV, what can institutions like UT do to be competitive partner targets?
 - What types of business and legal frameworks can institutions have in place that enable
 - or support partnerships?
 - Copyright frameworks?
 - Finance and business frameworks?

2. Survey/Interview Questions for Internal Partners

1. How do you define "eLearning"?
2. How does your unit/lab/org use eLearning in common educational practices?
3. List all innovations/technologies and/or strategies your unit/lab/org commonly use for eLearning.
4. List all known collaborations your unit currently manages.
 - Industrial, Institutional, Academic etc.
5. How could the University and/or your unit/department better assist you in using eLearning for your educational practice? List the top 3 to 5 top needs on your wish list.

Appendix C. Further Elaboration on eLearning Technologies Used in Educational Practices (Internal Partners)

Table 10. eLearning Tools and Technologies used by Internal Partners

eLearning Tools and Technologies	Frequency by Respondent	Percent of Total Respondents
Adobe Connect	1	20%
Animations	1	20%
Blogs	1	20%
Collaborative learning tools	1	20%
CoursePeer	1	20%
Discussion tools	3	60%
Downloadable content	1	20%
GoToMeeting	1	20%
Multimedia	2	40%
Online courses	2	40%
WebWork	1	20%
Peer Scholar	4	80%
Piazza	1	20%
Simulation	2	40%
Social Media	1	20%
Software Platforms	5	100%
Telecommunication Tools	1	20%
Turnitin	1	20%
Video conferencing	1	20%
Video or audio lecture capture	1	20%
Video production	1	20%
Virtual search engine (SPOCK)	1	20%
Webinar platforms	1	20%
WebOption Lecture Casting	1	20%
Web resources	2	40%
Wikis	1	20%