

## Institute for Research on Learning Technologies Six Year Plan – 2005 to 2011

### 1. Background to the Plan

The Institute for Research on Learning Technologies (IRLT) has a broad mandate to engage in systematic inquiry, discussion, and information sharing related to the uses of technology in teaching and learning. Originally established in 1987 within the Faculty of Education as the Centre for the Study of Computers in Education, the institute became a university-based research unit in June 2001 and was re-named. IRLT encourages the formation of links with faculty members across the university and with schools, government, and industry to provide collaborative, multidisciplinary approaches to research problems and issues. More specifically, the goals of the Institute are as follows:

- To engage in research, study, and public discussion of issues related to the pedagogical uses of technology and to the moral, ethical, and educational implications of its use;
- To develop projects that make innovative uses of new technologies in teaching and learning;
- To actively disseminate findings of its research projects, activities, and developments to educators, trainers, developers, and policy makers at all levels and in all sectors and to other interested parties;
- To foster collaboration between academics, educators, and industry and government personnel on research and development problems and issues of mutual concern and interest.

During the 2004-2005 academic year IRLT underwent an interim review by the Senate Committee on Research (SCOR) as required by Senate regulations. Two York University faculty members, appointed by the Associate Vice-President (Research), reviewed IRLT and presented a report to SCOR in February 2005. SCOR, in turn, asked IRLT to respond to several issues raised by the reviewers. SCOR accepted IRLT's response and informed Senate in June 2005 of the completion of the interim review of IRLT.

The most prominent issue raised in the review was the absence of a six year plan for IRLT as required by Senate regulations for the chartering of research centres/institutes at York. IRLT did not develop this plan because at the time of its re-organization into a university-base centre, Senate regulations were in the process of being changed and IRLT was approved under the older regulations that did not require a six year plan. Other issues raised by the

reviewers related to IRLT's relationship with the Faculty of Education, the need for secure funding for support staff and the Senior Researcher, the desirability of an external advisory board, and a suggestion to increase the external profile of IRLT. We recognized the need for such a plan and held a retreat for members in September 2005 to begin the planning process. Follow up consultation with members and discussions among the Executive Committee led to the current document.

## **2. Where We Are Now**

This section summarizes the current status of IRLT's organization, membership, and research activities.

### ***Organizational Structure and Staffing***

#### **Personnel**

IRLT is managed by a director who is appointed to the position by the Vice-President (Research and Innovation) as it is a university-based research unit. The current and founding director is Professor Ron Owston (Education). He is provided with release time and an administrative stipend according to the YUFA collective agreement. Professor Mary Leigh Morbey (Education) has been Associate Director since 2001 (except during her sabbatical in 2004-2005 when Professor Renate Wickens, Fine Arts, assumed her responsibilities).

Herb Wideman is employed full time on annual contract as Senior Researcher, while Kathryn Cook (a faculty member at Georgian College) occasionally works part time as Research Assistant and is voluntary web master. Typically, three to four students are hired annually as Graduate Research Assistants on various research projects.

#### **Governance**

Shortly after IRLT was formed, the membership recommended not to proceed with forming a formal advisory board as set out in the original proposal for IRLT. Instead an enlarged (from the original proposal) Executive Committee was struck consisting of the Director, Associate Director, two Members-at-Large, and a Graduate Student. The Executive is responsible for setting strategic priorities and policies for IRLT.

#### **Website**

IRLT maintains an up-to-date website containing information about IRLT, publications of members, and resource links (see [www.york.ca/irlt](http://www.york.ca/irlt)). The website is among the most accessed websites of all research centres at York University according to web traffic statistics. Moreover, IRLT consistently ranks second on the results list of a Google search on the term *learning technologies research*, which undoubtedly generates traffic to the website.

#### **Publications**

IRLT publishes a series of technical reports based on members' research. These reports are made available to the research community at the Institute's Web site. Annual reports of IRLT, which contain a listing of members' research and development activities, are also available at the website.

## **Membership**

Unlike most other research centres at York, IRLT does not have different categories of membership for faculty; although there is a category for honorary membership (one former external member was given this distinction). The main criterion for being a member of IRLT is that the individual supports the goals of the Institute. IRLT had 46 members at the time of writing. The membership is comprised of at least one member from each of York's Faculties, two from Seneca College, and one from Georgian College. This represents a rich cross-section of researchers and is a unique strength of IRLT in that it can bring to bear multi-disciplinary perspectives on research problems. At the same time, the diversity can lead to a lack of a common understanding among members making it difficult for the Institute to represent all interests within current structures.

## **Research Activities**

Some IRLT members focus on learning technologies as their primary research interest with all of their publications and grant writing centering on this topic; others have it as a secondary or joint research interest and publish less regularly in this area; while still others are mainly interested in improving their teaching through the use of technology, receive teaching/project development grants, and/or write conference papers about their teaching with technology and more generally support IRLT's goals. The breakdown of these categories is approximately 20%, 40%, and 40% respectively. Members in the first categories are in the best position to bring national and international credit to IRLT through their publications, grants, guest speaking, and conference presentations. They also can serve as a valuable resource to other members who seek to enhance their research expertise in the field of learning technologies. Work of members in the other third category brings more limited external visibility to IRLT, but benefits York University internally.

## **3. Where We Want to Go**

In this section we outline our plans and aspirations for IRLT over the next six years. We begin by describing the planning dilemma research centres at York University face, provide our vision for IRLT, and detail where we would like to go over this six-year period.

### ***Planning Dilemma***

Planning six years ahead is fraught with difficulties for all research centres at York University. Senate regulations require centres to be self-sustaining as no core funding is available from the university to provide year-to-year continuity. This makes centres dependent on the overhead they generate from external grants and contracts to cover basic research infrastructure. This problem is not as critical for some centres that have endowments or long term foundation or external agency support, however IRLT has no such support. Therefore, IRLT is fully reliant on the vagaries of external contractors, shifting strategic themes of granting councils, and changing priorities of governments for its infrastructure. Nonetheless, IRLT members and members of its predecessor, CSCE, have had a solid track record of securing external funding for every year of its 18 year existence. This track record can provide a measure of confidence that we will be able to continue into the future knowing in all likelihood that we will be able to continue to secure grants and contracts to sustain IRLT's activities. At the same time we can set out a plan of where we would like to go over the next

six years based on the assumption that we will be at least as successful as we have been in the past, and we hope, even more successful.

### ***Our Vision***

IRLT is undoubtedly the foremost research group in Canada in this field. To be sure, there are other individual learning technology researchers in Canada with outstanding international reputations and other strong research teams that collaborate on specific grants. What makes IRLT unique, however, is the established critical mass of researchers that we have from diverse disciplinary backgrounds whose collaboration continues beyond specific projects or grants. *Therefore, we now strive to become, within six years, one of the premier university-based research institutes in North America focusing on the study of teaching and learning with technology.* Our strength derives from our members who provide multidisciplinary perspectives to research problems, a strength for which York University has been long noted.

To achieve this goal will not be easy, nor will it happen overnight. We will need to focus our efforts on research in four areas where we are best able to make the most unique and strongest contributions. These areas are:

- *Evaluation of technology-based teaching and learning.* This area is a long-standing strength of IRLT and is its primary source of grants and contracts. In our current era of accountability, external project and program funders seek evidence for the effectiveness of their investments. Therefore, IRLT is well-positioned to provide evaluation services to these agencies. Opportunities also exist within York University for IRLT to provide implementation, advising, and evaluation services to academic units and individual faculty for technology-based programs and courses, although the funding prospects are not at the same level of magnitude. In addition to the conduct of formal evaluation studies, research in this area will also focus on developing new evaluation methodologies and tools.
- *Digital Culture and the Arts.* The digital era has dramatically transformed society in the ways we interact with each other, play, are entertained, and express ourselves. Inevitably with any societal transformation, there are winners and losers. As a result, there are those who have become empowered through new technologies and those who are now marginalized because of their lack of access to new digital tools. A group of IRLT members are studying various dimensions of these issues such as web culture and cybercolonialism, and are constructing websites as new ways of artistic expression and communication.
- *Digital Games, Simulations, and Tools for Learning.* Technology is viewed by many as an excellent way to motivate and engage learners, especially those who have growing up in a world where it has always been around them. Some IRLT members are exploring the development of advanced learning environments including games, simulations, and interactive learning objects and tools to assess them. This work holds significant promise in transforming learning from its traditional lecture-recitation forms into a process involving students in active construction of knowledge.
- *Scholarship of Teaching and Learning with Technology.* Ernest Boyer in the now classic work *Scholarship Revisited* proposed that university faculty should be engaged in the formal study of their teaching. He called this endeavour the

scholarship of teaching, which now is more commonly referred to as the scholarship of teaching *and learning* to reflect the importance of studying the learner. IRLT members have applied Boyer's notions to the formal study of teaching and learning with technology. This emergent field is beginning to be known among IRLT members engaged in it as the *Scholarship of Technology Enhanced Learning* (SoTEL). SoTEL emphasizes teaching (with technology) as a professional and scholarly activity in which faculty engage in reflection, inquiry, and communicating publicly about their teaching practices.

Beyond focusing our academic efforts, we need to make concerted efforts to develop internal structures for us to function more effectively, increase our external academic profile, attract outstanding visiting scholars to work with us, advocate for new tenure stream appointments that will complement our work, and secure significantly more funding to support us.

In the next two sections, we will lay out strategies that will help us move forward over the next six years, beginning with plans for the first three years.

#### **4. How We Will Get There: Plans for 2005 to 2008**

Plans for the next three years need to be concrete, achievable, and provide us with some "early successes" to generate sufficient momentum to carry us beyond 2008. With this in mind, we present the following strategic goals:

##### *Strategic Goal 1. Form Special Interest Groups in Focus Areas*

We will formally constitute the four focus areas outlined above as Special Interest Groups (SIGs) within IRLT. These foci are starting points around which members of similar interests can come together. Over time we fully expect that SIGs will evolve according to members' interests. The SIGs will provide increased opportunities for faculty to collaborate on publications, conference presentations, talks, and grant writing. SIGs must have a minimum of four faculty members who will meet or collaborate regularly. Additionally, they will be expected to organize at least one formal event for the IRLT Speakers Series each year, and provide updated content about their activities for the IRLT website. To support their work SIGs will be provided with one graduate research assistant to share among them who will act as SIG coordinator. The SIG coordinator will be able to assist them in arranging meetings, gathering material for the IRLT website, and assisting SIGs in grant writing, research, and publication to the extent that their 10 hour a week allotment will permit. SIG coordinators will be selected by the Executive Committee on the basis of nominations from members and will normally serve a two year term.

##### *Strategic Goal 2. Increase Our External Profile*

One of the first steps we will take is to form an external advisory committee who will not only give us guidance and direction on major initiatives that we undertake, but will also help us forge links with business, government, and schools and, more generally, increase our external profile. Other steps that we will take to raise outside awareness are:

- Encourage members to always use the institute's name when they list their affiliation in articles, conference papers, and talks and to list their affiliation with IRLT when they have their business cards printed.

- Host at least one external guest speaker a year as part of our Speakers Series and invite the York and non-York community to attend. This will be streamed over the internet, if the speaker grants permission, and archived at the IRLT website.
- Develop a coordinated graphics for all or our publicity materials, be they electronic or paper based. We will also develop a print brochure and continue to develop our already successful website.

*Strategic Goal 3. Initiate a Visiting Scholars Program*

Visiting scholars can contribute greatly to the academic life of any research centre by bringing in new ideas, theories, and approaches. They not only can stimulate discussion but cause us to re-examine our current practices and beliefs. IRLT has not had a formal visiting scholars program. Over the years we have had many inquiries from overseas scholars (often from Asia) who seek to come to IRLT for sabbaticals, but we have not been able to respond to these requests adequately. Often their interests don't coincide with those of IRLT members and we have no procedures in place to evaluate their potential contribution. Therefore, beginning with the 2006-07 academic year we will initiate a more formal visiting scholars program. We will formally solicit, through advertisements and our website, letters of interest from faculty at other universities who intend to take a sabbatical or leave and who are interested in spending a year or semester at IRLT. We will then review applicants for the best match with interests of faculty working in the SIGs described above. Although we currently are not in a position to offer financial remuneration to the person(s) selected, we will be able to provide office space and access to York facilities. A longer term goal will be to raise funds to provide a stipend to at least one visiting scholar a year.

*Strategic Goal 4. Influence the Hiring Process*

Organized research units have no formal input into the hiring of tenure stream faculty at York, yet their membership is drawn from the ranks of York's departments and faculties and subject to hiring priorities of those units. As mentioned above, the number of IRLT members who have learning technologies as their core research interest is relatively small. Therefore, we are vulnerable if any of these members leave the university. To protect against this and to increase the research capacity and strength of IRLT, we need to ensure that we influence the tenure stream hiring process in academic units to the extent that is possible so that faculty with strength in learning technology research are appointed. (An area that we had identified where there is a need for an appointment is in the Learning Sciences as we currently do not have any members with this expertise.) Members may influence the hiring process by providing input into priorities of their own academic departments, participating in their department's appointments committees, and informing the Director of upcoming academic appointments.

*Strategic Goal 5. Establish an External Advisory Committee*

The SCOR review recommended the establishment of an advisory committee to maintain links and establish contacts with the external community. We intend to do this during the 2005-2006 academic year. We will seek 4 to 5 members from the corporate and non-profit sectors whose responsibility will be to provide advice to the IRLT executive on possible strategic directions, increase our external profile, assist with funding raising, and point out new research opportunities.

### *Strategic Goal 6. Restructure the Executive Committee*

At our retreat in September 2005, members felt that there should be greater recognition of those who participate in SIGs. After some follow-up thought and consultation, we decided that the coordinators of the SIGs should become members of the Executive Committee. The new Executive will be made up of the director, associate director, a member-at-large, a student, and all SIG coordinators. This committee will meet as needed, but at least once per term. We will continue with the current pattern of having a meeting of all IRLT members at least once a year.

### *Strategic Goal 7. Raise Funding for Infrastructure*

As mentioned above IRLT does not have a secure financial footing. Up until now we have not actively sought funding for IRLT's infrastructure, as members' efforts have focused on securing specific grants for their own research. We need to be proactive to secure funding that will assure long term financial stability for IRLT. To realize this goal we will develop a fund raising plan with the York Foundation as well as pursue personal contacts and follow-up on suggestions from the advisory board.

### *Strategic Goal 8. Obtain Secure Support Services*

IRLT currently has limited secretarial/clerical support from the Faculty of Education. In return for this, IRLT contributes all of its overhead. As recommended by the SCOR review, this arrangement is not viable because the staff person is in another building, which makes it inconvenient for members, and because the arrangement does not give good value for the money. There is a Seneca staff person located by IRLT's facilities who provides voluntary support, however this person will be relocated in the near future. Therefore, IRLT has to make arrangements to secure part time clerical assistance. Only one strategy seems viable to pay for this position in the near term: pay for this position from overhead and seek assurances from the Office of the Vice-President (Research and Innovation) to cover any shortfall when overhead is not sufficient.

## **5. How We Will Get There: Plans for 2008 to 2011**

During this period we intend to reach our overall goal of becoming one of the premier university-based research institutes in North America focusing on the study of teaching and learning with technology. In order to do so we need to ensure all of our strategies for 2005-2008 are accomplished successfully. Once this happens we need to focus our energies towards accomplishing three inter-related goals: advancing research excellence; developing a strong international reputation; and maintaining financial security. These goals will be described next.

### *Advancing Research Excellence*

IRLT's mandate gives us a broader scope of research activities than what one would traditionally expect of a research centre in the social sciences such as the authoring of refereed articles, conference papers, books, and chapters. Beyond this, IRLT is committed to publishing technical reports on projects that it undertakes as a way of providing a more rapid way of disseminating findings of research projects than the normal publishing route. Our mandate also enjoins us to engage in the development of projects that make innovative uses

of new technologies in teaching and learning. These projects may involve the actual development of software tools or technologies, or they may consist of making use of existing technologies in innovative ways. At least several IRLT members have already achieved research excellence at the international level in the field of learning technology research, but more work still needs to be done. We need to provide further support to those members so that they can continue to grow and excel by providing an adequate and secure infrastructure in which members can work. This can be accomplished by taking several actions:

- *Obtain permanent research assistance* IRLT has a senior researcher who has been employed on annual contract since 1987. Initially his salary was covered by the Faculty of Education, although they phased this out. Now IRLT has to raise 100% of his salary. If this position became permanent, a portion of the researcher's time can be available to collaborate with other members in grant writing and publication as he now can only work on projects that have specific funding for him.
- *Obtain permanent clerical/secretarial assistance* As IRLT continues to grow the demands on the clerical assistance will increase. We need to seek funding sources that will make this a full time permanent position.
- *Increase faculty office space* As attractive as the IRLT facilities are in the TEL Building, there is insufficient office space for faculty. Currently we have only four offices. Originally, IRLT was slated to have eight faculty offices, however the additional four offices were lost when it was decided to move all of the Centre for the Support of Teaching into the TEL space, rather than just the technology support component. IRLT does have claim to TEL2001 where the ABEL program is located, but the intention is to make this an ongoing program so occupying that area does not seem likely. The lack of contiguous office space for core IRLT faculty lessens the opportunities for collegial interaction and cohesiveness. Therefore, we must press our case for additional office space.

#### *Developing a strong international reputation*

The reputation of IRLT ultimately rests on the collective contributions of members. To achieve a strong international reputation, IRLT members must identify themselves as such in their CVs, publications, and presentations as suggested in the previous section. Moreover, IRLT needs to establish prominence through actions such as:

- Increasing total research productivity and grants of IRLT members
- Hosting of national and international conferences

- Encouraging members to make joint presentations at international conferences
- Securing major collaborative funding
- Strengthening our web presence by making our site a destination for researchers in the field

Additionally, IRLT would receive a significant boost in reputation if York University were to have a Learning Technologies research chair. Obtaining this chair is not an unreasonable goal, especially given that learning technology research is a component of the Arts and Entertainment strategic research area for York University. The main obstacle, again, is that academic appointments have to be made through academic units, and getting them to make this a priority for any federal or provincial chairs program will likely be difficult. Therefore, our best strategy will be to seek endowment funds from external sources.

#### *Maintaining financial security*

The need for financial security for IRLT has been mentioned several times in this plan thus far. Indeed, this must be a priority for 2008 – 2011 as we cannot reach our long term goals of advancing academic excellence and developing a strong international reputation without a solid financial base. We will work with the York Foundation to realize this goal. This will entail preparing appropriate briefing materials for prospective donors and developing a strategic plan in collaboration with the Foundation.

## **6. How Will We Know When We Get There**

Our plan will require continuous monitoring, especially the first three years, to ensure that we achieve our strategic goals. To monitor our progress during the period 2005 – 2008, we have set the following indicators of success in implementing our goals.

<b>STRATEGIC GOAL</b>	<b>ACADEMIC YEAR 2005-06</b>	<b>ACADEMIC YEAR 2006-07</b>	<b>ACADEMIC YEAR 2007-2008</b>
Form Special Interest Groups in Focus Areas	<ul style="list-style-type: none"> <li>▪ Form two SIGS</li> </ul>	<ul style="list-style-type: none"> <li>▪ Form two additional SIGS</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review success of SIG model</li> </ul>
Increase Our External Profile	<ul style="list-style-type: none"> <li>▪ Host one major guest speaker</li> <li>▪ Encourage members to list IRLT as their academic affiliation in addition to their department</li> <li>▪ Develop graphics plan with York Communications office</li> </ul>	<ul style="list-style-type: none"> <li>▪ Host one major guest speaker</li> <li>▪ Review progress</li> </ul>	<ul style="list-style-type: none"> <li>▪ Host one major guest speaker</li> <li>▪ Review progress</li> </ul>
Initiate a Visiting Scholars Program	<ul style="list-style-type: none"> <li>▪ Place advertisement in <i>University Affairs</i> and select candidate(s)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review and continue this action</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review and continue this action</li> </ul>
Influence the Hiring Process	<ul style="list-style-type: none"> <li>▪ Owston to join working group of Council of Research Directors (CRD) that is dealing with this issue</li> <li>▪ Make members aware of the issue</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review and continue this action</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review and continue this action</li> </ul>
Establish an External Advisory Committee	<ul style="list-style-type: none"> <li>▪ Form committee and have first meeting</li> </ul>	<ul style="list-style-type: none"> <li>▪ Have 2-3 meetings per year</li> </ul>	<ul style="list-style-type: none"> <li>▪ Have 2-3 meetings per year</li> </ul>
Restructure Executive Committee	<ul style="list-style-type: none"> <li>▪ Add members of the two new SIGs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Add members of the next two new SIGs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review and continue</li> </ul>
Raise Funding for Infrastructure	<ul style="list-style-type: none"> <li>▪ Develop funding raising plan with York Foundation and pursue funding leads</li> </ul>	<ul style="list-style-type: none"> <li>▪ Meet with at least two prospective donors</li> </ul>	<ul style="list-style-type: none"> <li>▪ Meet with at least two prospective donors</li> </ul>
Obtain Secure Support Services	<ul style="list-style-type: none"> <li>▪ Identify staff and seek support guarantee from VP (R&amp;I)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review and continue in absence of external funding</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review and continue in absence of external funding</li> </ul>

Before the end of the 2007-08 academic year we intend to make the 2008 – 2011 plan more concrete and develop criteria for measuring our success.

## **7. Summary and Conclusion**

IRLT represents an accomplished and productive community at York University that specializes in research on and development of technologies for teaching and learning. Our members have achieved national and international recognition in their fields. Yet we have more room to grow and greater contributions to make. We need to build on the individual successes of members and develop stronger recognition of IRLT as a leading research organization based at York University.

Our vision to become, within six years, one of the premier university-based research institutes in North America focusing on the study of teaching and learning with technology is realistic and within reach. To accomplish this we have set out strategies for the next six years. For 2005 – 2008, we aim to: organize around special interest groups; increase our external profile; initiate a visiting scholars program; seek new hires at the university who have learning technologies as their core research interest; re-organize the executive committee and create an external advisory committee; initiate a fund raising program; and obtain secure support services. Our efforts for 2008-2011 will be directed at developing a secure financial base for IRLT and taking additional steps to enhance our reputation internationally.