1. Background and Mandate

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 (CSCE), 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 maintain an active program to disseminate findings of its projects, its activities, and developments in the field to educators and 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 began to address these issues and develop a six year plan at a members retreat in September 2005.

2. 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). Professor Renate Wickens (Fine Arts) was Acting Associate Director in 2004-2005 in place of Professor Mary Leigh Morbey (Education) who was on sabbatical.

Herb Wideman is employed full time on annual contract as Senior Researcher, while Kathryn Cook works part time as Research Assistant.

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. In 2004-05, Professor Avi Cohen (Arts), Richard Jarrell (Science & Engineering), and Jane Kennedy (Education graduate student) filled the latter three positions. The Executive is responsible for setting strategic priorities and policies for IRLT.

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. A listing of this past year’s reports is below in the Activities section.

3. York University Faculty Affiliated with the Centre

IRTL has members from all Faculties at York as well as Glendon College. The Institute has one honorary member, William Mitchell, retired education officer of the Ontario Ministry of Education. York faculty membership for 2004-05 was as follows:
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Alex Pomson</td>
<td>Faculty of Education</td>
</tr>
<tr>
<td>Alison Griffith</td>
<td>Faculty of Education</td>
</tr>
<tr>
<td>Ananya Mukherjee-Reed</td>
<td>Department of Political Science, Faculty of Arts</td>
</tr>
<tr>
<td>Avi Cohen</td>
<td>Department of Economics, Faculty of Arts</td>
</tr>
<tr>
<td>Bill Found</td>
<td>Faculty of Environmental Studies</td>
</tr>
<tr>
<td>Dalton Kehoe</td>
<td>Division of Social Science, Faculty of Arts</td>
</tr>
<tr>
<td>Evelyne Corcos</td>
<td>Counselling &amp; Career Development, Glendon College</td>
</tr>
<tr>
<td>Francoise Mougeon</td>
<td>Department of French Studies, Glendon College</td>
</tr>
<tr>
<td>Gail Lindsay</td>
<td>School of Nursing, Atkinson Faculty of Liberal and Professional Studies</td>
</tr>
<tr>
<td>Gareth Morgan</td>
<td>Schulich School of Business</td>
</tr>
<tr>
<td>Graham Orpwood</td>
<td>Faculty of Education; York/Seneca Institute for Science, Mathematics, Technology, and Education</td>
</tr>
<tr>
<td>Heather Lotherington</td>
<td>Faculty of Education</td>
</tr>
<tr>
<td>Ilo Katryn Maimets</td>
<td>Steacie Science Library</td>
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<tr>
<td>Mary Leigh Morbey</td>
<td>Faculty of Education; Associate Director, IRLT</td>
</tr>
<tr>
<td>Janet Murphy</td>
<td>ABEL Program</td>
</tr>
<tr>
<td>Jennifer Jenson</td>
<td>Faculty of Education</td>
</tr>
<tr>
<td>Caitlin Fisher</td>
<td>Department of Film, Faculty of Fine Arts</td>
</tr>
<tr>
<td>Leslie Korrick</td>
<td>Fine Arts Cultural Studies, Faculty of Fine Arts</td>
</tr>
<tr>
<td>Margaret Sinclair</td>
<td>Faculty of Education</td>
</tr>
<tr>
<td>Mary Louise Craven</td>
<td>Communication Studies, Faculty of Arts</td>
</tr>
<tr>
<td>Monique Adriaen</td>
<td>Dept of French Studies, Faculty of Arts</td>
</tr>
<tr>
<td>Niamh Hennessey</td>
<td>School of Social Sciences, Atkinson</td>
</tr>
<tr>
<td>Peggy Warren</td>
<td>Reference, Scott Library</td>
</tr>
<tr>
<td>Peter Roosen-Runге</td>
<td>Department of Computer Science, Faculty of Science &amp; Engineering</td>
</tr>
<tr>
<td>Poonam Puri</td>
<td>Osgood Hall Law School</td>
</tr>
<tr>
<td>Radu Campeanu</td>
<td>School of Analytic Studies &amp; Information Technology, Atkinson</td>
</tr>
<tr>
<td>Razika Sanaoui</td>
<td>Faculty of Education</td>
</tr>
<tr>
<td>Renate Wickens</td>
<td>Fine Arts Cultural Studies, Faculty of Fine Arts</td>
</tr>
<tr>
<td>Richard Jarrell</td>
<td>Division of Natural Science, Faculty of Science &amp; Engineering</td>
</tr>
<tr>
<td>Richard Saunders</td>
<td>Department of Political Science, Faculty of Arts</td>
</tr>
<tr>
<td>Roberta Sinyor</td>
<td>Department of Languages, Literatures &amp; Linguistics, Faculty of Arts</td>
</tr>
<tr>
<td>Ron Owston</td>
<td>Faculty of Education and Director, IRLT</td>
</tr>
<tr>
<td>Ron Sheese</td>
<td>Department of Psychology, Faculty of Arts</td>
</tr>
<tr>
<td>Ros Woodhouse</td>
<td>Centre for the Support of Teaching (CST)</td>
</tr>
<tr>
<td>Ross Rudolph</td>
<td>Department of Policial Science, Faculty of Arts</td>
</tr>
<tr>
<td>Sam Lanfranco</td>
<td>School of Analytic Studies &amp; Information Technology, Atkinson</td>
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</tbody>
</table>
Additionally, several Seneca College faculty are affiliated with IRLT.

**Student Activities**

Below is a list representative of IRLT members’ projects that employed students during 2004-2005:

- *The Ontario Science Centre* project led by Ron Owston was aimed at providing students with the opportunity to work with OSC staff to develop multimedia exhibitions as part of the new *Agents of Change program* at OSC. Four students worked on the project: Adrian Maszko and Radley Dioso from Seneca College, and York University graduate students Lewis Kaye (Communications and Culture) and Dustin Garnet (Education).

- *Simulation and Advanced Gaming Environments (SAGE) for Learning* project. This SSHRC-INE project focuses on developing and studying the use of serious games and simulations in education. Ron Owston employed Christine Brown (PhD programme in Education) and Francis Ho, a non-York student studying in an online graduate programme at the University of Bath. Jennifer Jenson hired Nick Taylor (PhD programme in Education) and Rita Kasab (Seneca).

- Renate Wickens hired three undergraduate work-study students to assist her with TEL-based research: Dmitri Kokoshkyn (FACS) and Sidra Laldin (FILM) and Wei Ren (Computer Science).

- For the ABEL program, Janet Murphy employed a total of eight students drawn from various York graduate and undergraduate and Seneca College co-op programs.

- Shelley Hornstein employed for Project Mosaica: Jennifer Brown and Rebecca Roberts, graduate students in Communications and Culture; Steve Jankowski and Kristina Rostorotskaia, work/study Design undergraduates; and Marieke Treilhard, a graduate student art history.
Faculty Activities
Listed below are selected (a full list would be too extensive) articles, chapters, and books of members, as well as conference papers, reports, awards, and technology development activities of members during 2004-2005.

Selected Articles, Chapters, Conference Proceedings, and Books (IRLT members indicated in bold)


**Selected Conference Papers/Talks/Invited Addresses**


Brown, C. Simulation and Gaming Environments (SAGE) for Learning Conference, 2005 - Virtual Usability Lab, June 2005


Selected Member Reports


IRLT Technical Reports (all available at website)

2005 Technical Reports
  - 2005-1 The Final Report on the Evaluation of the Science and Technology Program of the Teacher eLearning Project

2004 Technical Reports
  - 2004-1 The ABEL Project Final Report
- 2004-2 Evaluation of the Mathematics Program of the Teacher eLearning Project
- 2004-3 Health Canada's Skills Enhancement for Health Surveillance
- 2004-4 Tablet PC use at Northern Lights Public School
- 2004-5 Blended Learning Practices at COHERE Universities

Other Selected Activities: Projects/Initiatives/Course Development/Grants

- **Stephen Chen.** SSHRC Small Grant with George Frempong for "Understanding Mathematical Relations through Learning Objects" was awarded $3500. This grant was used to attend the UWO symposium and support Chris Cudmore to develop a learning object. In 2005-06, the continuation of the project will support Haiying Zhu (with Margaret Sinclair and George Frempong) to develop lesson plans, and apply for a SSHRC RDI.

- **Avi Cohen** was Dean’s Advisor on TEL Initiatives, Faculty of Arts. He was responsible for the development and delivery of recommendations of Faculty of Arts TEL Roundtable: *do TEL*, a 10 week Faculty Development Course for instructors interested in transforming an existing face-to-face course to take advantage of learning and accessibility possibilities afforded by the web; and for the *Student Technology Assistant (STA) Program*, to provide technical support for faculty members with TEL projects, and to improve the training and educational experiences of participating students.

- Project Mosaica ([www.mosaica.ca](http://www.mosaica.ca)) led by *Shelley Hornstein* presents contemporary Jewish culture in its current form on the Web. The project examines Jewish culture in the arts, and uses the Web in particular as an interactive cultural environment.

- **Richard Jarrell** of the Faculty of Science & Engineering is refining his recently-developed blended learning Natural Science course (*Science: Past, Present and Future*) and is now preparing a new, large, blended course on *Food, Science and Technology*.

- **Jennifer Jenson.** Co-Operative Learning Object Exchange, Learning Object Development Grant. Inukshuk Fund and University of Waterloo. $20,000.

- **Gail Lindsay** (2004-2005) developed a course for online the MScN Program and now is teaching the course: AK/NURS 5110 3.0 *Research-based nursing education praxis*.

- Singh, M., Lindsay, G., Jeffrey, J., Woodhouse, R., & Owston, R. (2005). Received a grant for the Masters of Science in Nursing Program Evaluation. Funded by Atkinson Faculty of Liberal and Professional Studies, $50,000.00, June 2005.
Heather Lotherington made three appearances this past year on Tech TV (Omni): *The Xbox vs. the EQAO: Where literacy and gaming meet; NetSpeak: How communicating online is changing language; NetSpeak: Nu wayz of using language.*


Ananya Mukherjee Reed developed a multilingual website for the Human Development Resource Network (HDRNet). It is a specialised multilingual information gateway and electronic library on human development and international co-operation. The site, which can be accessed at http://www.yorku.ca/hdrnet/, contains some 680 articles and has 462 subscribers to the monthly newsletter from 75 countries.

Janet Murphy directed the Advanced Broadband Enabled Learning (ABEL) program (abelearn.ca) which makes use of CANet4 to provide school teachers and their students with videoconferencing and online learning resources. She conducted many videoconference mediated learning (curricular and professional development) events bringing in education experts and mentors i.e. Mock Trails involving Justice of the Peace Moran, faculty from U of Alberta and York U, professional acting troupes, Futurists, and Environmentalists.

Graham Orpwood directs the York/Seneca Institute for Mathematics, Science and Technology Education (YSIMSTE) (ysiste.com), which is a partnership of York University (Faculty of Education and Faculty of Science and Engineering) and Seneca College of Applied Arts and Technology (Faculty of Technology). Its mission is to create and undertake initiatives in teaching, curriculum, applied R&D, and outreach, with a view to improving the quantity and quality of education in mathematics, science, and technology at all levels of education.

Ron Owston and Katharine Janzen (Seneca) co-direct the Technology Enhanced Learning Institute (TELi) (teli.ca), which is a partnership of Seneca College of Applied Arts & Technology and York University. Its mission is to encourage and showcase innovative collaborative projects that build on multidisciplinary and complementary strengths of Seneca and York.

Ron Owston and Jennifer Jenson participate in the SSHRC New Economy project SAGE (Simulations and Game Environments) for Learning based at Simon Fraser University that is exploring the potential of games, simulations, and simulation games to support learning. Owston is leader of the Tools and Methodology domain where he and colleagues are developing a web-based
evaluation tool called the Virtual Usability Lab. Jenson, a principal investigator in the Learning with Simulations domain, is co-developing Contagion, a game meant to teach children about the transmission and prevention of contagious diseases.

- **Ron Owston, Herb Wideman, Razika Sanaoui, Margaret Sinclair, and Heather Lotherington** began the evaluation of Learning Connections, an online professional development pilot project for Junior level teachers of literacy and numeracy, which is being funded by the Ontario Secretariat.

- **Richard Saunders** is developing the online course POLS 4576 "Civil Society and the State in Africa", in collaboration with the Training and Research Support Centre (Harare, Zimbabwe) and the Centre for Civil Society, University of Kwazulu-Natal (Durban, South Africa). The course will be launched in Winter Term 2005/06, and will bring together York senior undergraduates with African-based university students and civil society organisation activists. The project is supported by a York Internationalization Grant. In Winter Term 2004/05 Saunders participated in the Arts doTEL course.

- **Margaret Sinclair, Herb Wideman, Ray Bowers, and Jane Kennedy** (graduate student) collaborated with Ron Owston on the final report for the evaluation of the Teacher eLearning Project sponsored by The Learning Partnership with at $75,000 grant. The project provided online and face-to-face professional development for elementary school mathematics and science teachers.

- **Roberta Sinyor** is developing the course IT 2030/IT3030 Bologna: A city at the Crossroads of Italy and Europe. It will become a blended learning course, the blended part happening in Toronto (the second half of the course is taught in Italy).

- **Zbigniew Stachniak** continues to curate the York University Computer Museum (YUCoM) which is a historical collection and a research center for the history of computing located in the Department of Computer Science. Its mission is to preserve, document, and interpret the history of the information age in Canada, with special emphasis on the creation and the development of the Canadian microcomputing industry.

- Microsoft and Intel have committed $20,000 to support Herb Wideman and Ron Owston’s research in York Region School Board examining teacher use of Tablet PCs in elementary school.

- **Renate Wickens** organized the now annual Scholarship of Technology Enhanced Learning (SoTEL) Exchange day for the Faculty of Fine Arts in
April 2005 to discuss the ideas and issues related to teaching and learning with technology.

**Member Awards**

- Janet Murphy was winner of the Learning Partnership Technology Innovation Award 2005.
- Bill Found received the York University-Wide Teaching Award for 2005.

**IRLT Speaker Series**

To fulfill its mandate of public dialogue and dissemination of research, IRLT sponsors a speaker series each year. In 2004-05, the events below were held.

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2004</td>
<td>Ron Owston and Kathryn Cook</td>
<td>Blended learning at Canadian Universities</td>
</tr>
<tr>
<td>November 2004</td>
<td>Heather Lotherington</td>
<td>Netspeak: How English is changing online</td>
</tr>
<tr>
<td>January 2005</td>
<td>Bill Muirhead, University of Ontario Institute of Technology</td>
<td>How has UOIT planned for information and communication technology to support enhanced learning outcomes?</td>
</tr>
<tr>
<td>February 2005</td>
<td>Evelyne Corcos and Peter Paolucci</td>
<td>Project Tracker—a software tool for academic researchers who do not have time to learn complex project management software</td>
</tr>
</tbody>
</table>

**Advisory Board**

As noted above under Governance, IRLT does not have a formal advisory board; however, we intend to establish one this year as recommended by the Senate interim reviewers.