ANNUAL REPORT

**Centre for the Study
of Learning and Performance**

**Centre d'études
sur l'apprentissage et la performance**

2012-2013

Table
of Contents

Director's Message

Phil Abrami

A library is an organized collection of information resources made accessible to a defined community for reference or borrowing. The first libraries consisted of archives of the earliest form of writing—the clay tablets in cuneiform script discovered in Sumer, some dating back to 2600 BC. These written archives mark the end of prehistory and the start of history.

The three largest libraries are the British Library with 170 million items, the Library of Congress with 150 million items, and the New York Public Library with 53.1 million items. [1] Canada's national library in Ottawa is fairly large by international standards with 20 million items in the collection.

But all of this pales in comparison to the vast stores of information available on the Internet. According to www.worldwidewebsize.com, on October 25, 2013 there were 3.44 **billion** web pages indexed on the world wide web and that figure changes by the minute.

Unfortunately, the Internet is neither organized like a library nor are its contents vetted for credibility, accuracy, reliability, scope and other criteria that publishers and professional librarians use when they decide whether to publish the material or include it in a library collection. Chaos reigns. So there is a lot of material that exists on the Internet, but how does one find the needle in the haystack and how does one make judgments about its quality, among other things?

"All research begins and ends in the library" is a phrase I have used since I began my career as a professor to emphasize how new knowledge needs to build on what is already known. It is one mark of poor scholarship if a new investigation does not reflect what is already known and does not acknowledge studies previously completed. Furthermore, the expression also means that new knowledge must be known by others so that it too can be built on. That is the important reason for conference papers and publications.

The systematic review team at the CSLP, which understands the importance of accumulating prior knowledge, has taken the idea of the literature review further by completing knowledge syntheses and research integrations that comprehensively and objectively summarize all the available evidence collected to date on a topic. Such reviews serve not only important purposes for scholars and researchers but should serve to inform educators and policy-makers interested in evidence-based practice.

Another team at the CSLP is interested in educating students and teachers in the inquiry process in order to enhance their information literacy skills. These skills include the ability to identify, evaluate, and synthesize information on a particular topic and they are not often taught in school. With the explosive growth of the Internet and increasing dependence on it for information, the need to do so becomes more evident with each passing day. How does one articulate an appropriate research question and then efficiently and effectively locate relevant and credible information on that topic? What criteria should be applied to judging that information for inclusion and otherwise how should it be weighted for importance? And finally, what are ways to synthesize the best information to reach an informed, integrated decision about a topic of interest? Look for the redesigned ISIS-21 software to be released in the fall 2014.

[1] Stone lions sit majestically on either side of the main entrance of the New York Public Library and inspired the title of the popular children's educational television program "Between the Lions".

Message
du Directeur

Phil Abrami

Une bibliothèque est une collection organisée de ressources documentaires accessibles à une communauté donnée aux fins de référence ou d'emprunt. Les premières bibliothèques étaient composées d'archives de tablettes d'argile couvertes d'écriture cunéiforme, la plus ancienne forme d'écriture; des tablettes furent découvertes à Sumer, certaines datant de 2600 av. J. C. Ces archives écrites marquent la fin de la préhistoire et le début de l'histoire.

Les trois plus grandes bibliothèques sont la British Library, avec 170 millions de documents, la Library of Congress, avec 150 millions de documents, et la New York Public Library, avec 53,1 millions de documents [1]. Avec ses 20 millions de documents, la Bibliothèque nationale du Canada à Ottawa se classe parmi les collections d'assez grande envergure sur le plan international.

Mais ces bibliothèques ne se comparent en rien avec les vastes réserves d'informations accessibles sur le Web. Selon www.worldwidewebsize.com, le 25 octobre 2013, il y avait 3,44 **milliards** de pages Web indexées sur le World Wide Web et ce nombre évolue à chaque instant.

Malheureusement, le Web n'est pas organisé comme une bibliothèque et son contenu n'est pas passé au crible afin d'en déterminer la crédibilité, la précision, la fiabilité, l'exhaustivité ainsi que d'autres critères que les éditeurs et bibliothécaires professionnels utilisent lorsqu'ils décident de publier un document ou de l'inclure dans une collection. Le chaos règne. En résumé, le Web contient énormément d'informations, mais comment arriver à trouver l'aiguille dans la botte de foin et juger de la qualité de l'information dénichée, entre autres?

« Toute recherche commence et se termine à la bibliothèque » est une phrase que j'utilise depuis le début de ma carrière de professeur afin de mettre l'accent sur le fait que les nouvelles connaissances doivent se fonder ce que nous savons déjà. C'est la marque d'une recherche de mauvaise qualité lorsqu'un nouveau questionnement ne reflète pas les connaissances actuelles et ne tient aucunement compte des études précédemment réalisées. En outre, cette maxime signifie également que les nouvelles connaissances doivent être connues par d'autres personnes afin de pouvoir servir de fondement à leur tour. C'est d'ailleurs pour cette raison que les actes de colloques et les publications sont importants.

L'équipe d'examen systématique du CEAP comprend bien l'importance d'accumuler des connaissances sur lesquelles en asseoir de nouvelles et elle a poussé un peu plus loin l'idée de revue de la littérature en effectuant des synthèse des connaissances et des intégrations de la recherche qui résument de manière approfondie et objective toutes les données disponibles recueillies à ce jour sur un même sujet. De telles revues ne répondent pas uniquement à des objectifs importants pour les universitaires et les chercheurs, mais devraient également informer les éducateurs et les décideurs politiques intéressés par la pratique fondée sur des données probantes.

Une autre équipe du CEAP s'intéresse à l'éducation des élèves et du personnel enseignant relativement à la méthode des enquêtes, et ce, en vue d'améliorer leurs compétences informationnelles. Ces compétences, qui ne sont pas souvent enseignées à l'école, comprennent la capacité d'identifier, d'évaluer et de synthétiser les informations sur un sujet particulier. Avec la croissance exponentielle du Web et notre dépendance accrue à ce médium pour trouver des informations, la nécessité d'enseigner ces compétences devient de plus en plus évidente chaque jour. Comment formuler une question de recherche appropriée et repérer de manière efficiente et efficace les informations pertinentes et crédibles sur ce sujet donné? Quels critères appliquer pour déterminer si ces informations doivent être conservées et comment pondérer leur importance relative? Enfin, quels moyens employer pour synthétiser les meilleures informations et parvenir à prendre une décision éclairée et intégrée sur le sujet considéré? Ne manquez pas la nouvelle mise à jour remaniée de notre logiciel ISIS 21 qui sortira à l'automne 2014.

1 Des lions de pierre assis trônent majestueusement de chaque côté de l'entrée principale de la New York Public Library, ce qui a inspiré le titre de la populaire émission télévisée éducative pour enfants « Between the Lions » (littéralement : « Entre les lions »).

Profile of longstanding CSLP member
Norman Segalowitz
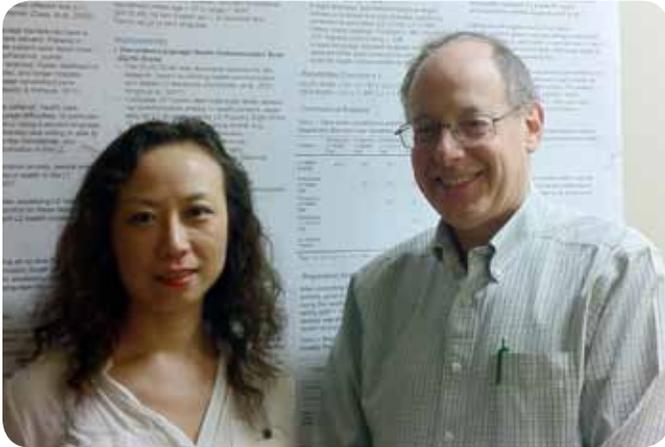
This past year Norman Segalowitz's principal research activities were in the following three areas: (1) cognitive studies of second language (L2) vocabulary and fluency in adults, (2) studies of linguistic barriers to healthcare services for linguistic minorities, and (3) development of an Inuttitut (Labrador Inuktitut) language revitalization program.

In the cognitive domain, Segalowitz, along with his graduate student **Joy Williams** collected data validating a novel technique for estimating the size of a person's second language (L2) *active* or *productive* vocabulary (for speaking and writing as opposed to listening and reading). The new technique involves a data collection strategy borrowed from population ecology. The results were encouraging, indicating that it is possible to use a specially designed free association task to estimate the size of one's L2 vocabulary relative to one's native language (L1) in a valid and statistically reliable manner. This work has been accepted for publication by the journal *Mental Lexicon*. Follow-up research will look at the possibilities and limits of the methodology through simulation models and at applications targeting specific populations (e.g., bilingual healthcare workers). They are also continuing to develop measures of a person's mental efficiency in linking L2 words to their meanings, using reaction time tasks, as an underpinning of L2 oral fluency, in collaboration with Profs. **Leif French** (Linguistique et langues modernes, Université du Québec à Chicoutimi) and **Elizabeth Gatbonton** (Education, Concordia).

In the healthcare domain, in collaboration our Ph.D. student **Yue Zhao** and Prof. Andrew Ryder (Psychology, Concordia), Segalowitz has developed a new questionnaire that assesses L2 communication anxiety in healthcare contexts that innovatively controls for L1 communication anxiety about health, general second language communication anxiety, self-rated ability in the L2 and experience using the healthcare system. Results to date have indicated that the questionnaire is both valid and reliable. Of special interest, it appears that there may be an anxiety component specific to L2 communication about health after controlling for all the other factors mentioned above. The results were recently presented at the International Conference on Communication in Healthcare. Other ongoing studies during this period include one on L2 communication anxiety in nurses, one on the semantics issues in L2 communication in health contexts, and one communication between nurses and patients where the nurse has to use his or her own L2 (collaboration with Prof. Elizabeth Gatbonton). Part of this research involves collaboration with Prof. Andrew Ryder, and with colleagues in Australia, supported by a grant we obtained there.

Lastly, Segaolowitz collaborated with CSLP members Elizabeth Gatbonton and **Vivek Venkatesh** in a research program that is developing technological applications to assist pedagogical efforts to revitalize the Inuttitut language in Labrador.

Some Research and Development Projects

DEVELOPING INQUIRY STRATEGIES

The aim of our broad *Inquiry Strategies for the Information Society in the Twenty-First Century (ISIS-21)* project is to ensure that all Canadians are adequately prepared for the knowledge society by providing them with a solid foundation in information literacy skills. Such skills are considered fundamental 21st century learning skills (Partnership for 21st Century Skills, 2013) and are embedded within the Learning and Innovation Skills, and the Information, Media and Technology Skills (see http://www.p21.org/overview). Offered within the Learning Toolkit suite of tools, ISIS-21 will provide a comprehensive web-based, interactive environment geared to the entire educational community (e.g., teachers, parents, school librarians, learners) that is designed to develop information literacy skills as the inquiry process unfolds.

Three years of funding from the Max Bell Foundation will result in; a) enhanced Student and Teacher modules in ISIS-21, including both print-based and embedded multimedia support for educators and students, along with linkages to the electronic portfolio tool, *Electronic Portfolio Encouraging Active Reflective Learning (ePEARL)*; and b) the collection and analysis of formative assessment data measuring the feasibility of using ISIS-21, and pilot data measuring the positive impacts of ISIS-21 on self-regulation, critical thinking, and information literacy skills.
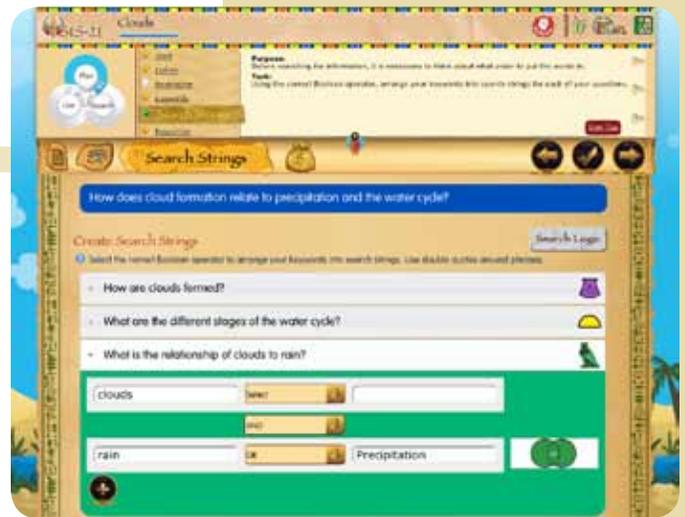
As part of this project, and supported by the Quebec Ministère de l'Éducation, du Loisir et du Sport's Information Literacy Team (see http://www.theinquiryprocess.ca/home/), a series of student-centred videos were produced. Twelve brief videos—each outlining a specific step in the inquiry process—will be embedded within the software's in-context help. A five-minute video that provides an overview of the inquiry process was also produced (see http://grover.concordia.ca/isis).

The ISIS-21 Project team is especially appreciative of the efforts of **Lesley Farmer** (California State University Long Beach), **Bev White** (LEARN), **Maureen Baron** (EMSB) and **Raphaella Dixon** (LBPSB), along with pilot teachers from these two school boards, as their involvement has significantly contributed to the success of this project.

PROMOTING
EFFECTIVE LITERACY
INSTRUCTION IN KENYA

At the end of this year, Phil Abrami was very pleased to learn that the "Promoting Effective Literacy Instruction in Kenya" project had been funded by the Social Science and Humanities Research Council of Canada (SSHRC) under their Partnership Development program. The roots of this initiative go back to a pilot study jointly supported by Concordia University and the Aga Khan Academies Unit, where the effectiveness of ABRACADABRA for English language instruction was tested with grade-two students and their teachers from primary schools. Twelve English teachers and their 354 students were randomly split into an experimental (using ABRA) and a control group (not using ABRA). After 13 weeks of instruction, students in the ABRA classes significantly outperformed students in control classes on the standardized measures of reading and listening comprehension as well as on the end-of-year core subject exams including English, Mathematics, Science and Social Studies.

The SSHRC funding enabled the expansion of the project to Nairobi, resulting in additional partnerships joining the project. These include the Shanzu Teachers' Training College, Camara, a non-profit organization that provides refurbished computers and training in ICT, additional primary schools in Mombasa, and new primary schools in Nairobi. The purpose of this partnership development project is to confirm the feasibility of scaling up use of the software and to measure the effectiveness of using ABRA with emerging readers and their teachers in Kenya where the need to improve children's literacy is great. Over two years 60 teachers and their students will progressively engage in the four phases of the project.

The expected benefits of the project focus on:

•   Enhancing the curriculum in the developing countries where ABRA and associated pedagogical techniques can impact positively the essential competencies of students from a broad range of backgrounds and dispositions, especially during the early school years when they learn to read and write;

•   Improving professional practice where Kenyan teachers and consultants will be trained not only in the use of ABRA but in the skills necessary to integrate educational technology into classroom routines in ways that substantially enhance student learning and motivation; and

•   Increasing the awareness of educational administrators and policy makers in Kenya about a) ABRA and its impact on improving the essential competencies of students; b) effective uses of technology to enhance learning; and c) the importance of the links between high-quality educational research and effective educational practice.

PERCEPTIONS
OF CANADIAN
ESL TEACHERS

Panorama
CASLT Research Series

Perceptions from ESL Teachers Across Canada:
A National Survey of the English Second Language (ESL) Teaching Profession

June 2011

Principal Investigators:
Leif French, PhD and Laura Collins, PhD

Canadian Association of
Second Language Teachers
L'Association canadienne des
professeurs de langues secondes
CASLT/ACPLS
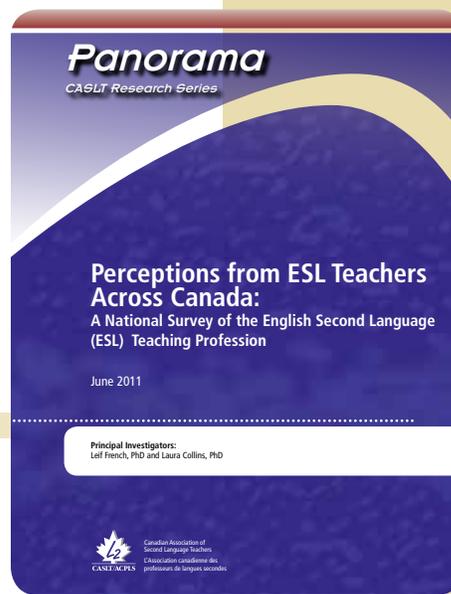
Through funding from the Canadian Association of Second Language Teachers (CASLT) and Heritage Canada, CSLP/CEAP researchers **Leif French** and **Laura Collins** conducted a national online survey that investigated the diverse challenges faced by ESL teachers working in provincially-recognized ESL programs in K-12 private and public schools across Canada. Teachers were asked to provide their perceptions and opinions about the following key areas of their profession: support from key stakeholders, major challenges, teaching resources, job satisfaction and professional development.

In all, five hundred and twelve (512) teachers, representing 93 different school boards across Canada, completed the survey. The sample of 512 teachers was divided into three distinct survey groups: 1) teachers from a *predominantly weak ESL context* (Quebec: QC; N =326); 2) teachers from a *mixed ESL context* (New Brunswick: NB; N = 65); and 3) teachers from a *predominantly strong ESL context* (English-speaking provinces/territories: EP; N = 121).

In terms of **teaching conditions**, managing multi-level groups and special education classes were cited as the top challenges associated with ESL teaching throughout the country. In QC and NB, the majority of teachers (54%) reported that the number one issue affecting teaching conditions was students' overall lack of interest and motivation for learning ESL and the inability to recognize the importance of English for their future. This issue also encompassed the attitudinal aspect of learning English, where, according to teachers, English was often viewed negatively by students.

Teachers across Canada felt that their **school administration** was quite supportive of both their work and ESL teaching; they also reported in open-ended questions holding a positive view of the leadership in their respective schools and school boards.

ESL teachers from across the country generally indicated the need for additional **resources**, particularly, more teaching materials, more training and more collaboration with ESL colleagues in their school boards and respective provinces.

A variety of recommendations were put forth, including the need to provide in-service teachers with additional resources for diverse learners and, more importantly, adequate on-going training in differentiation models of L2 education; and the need for research into and more support for local initiatives that lead to greater collaboration among language and other subject teachers of the same students.

The full report is available at: http://doe.concordia.ca/cslp/cslp_cms/sites/all/themes/jframe/downloads/PDF/perceptions_from_esl_teachers_en.pdf

THE
LEARNING TOOLKIT
MENTORSHIP PROJECT

This past year members of the CSLP/CEAP and LEARN were privileged to support our research veteran teachers, **Mary-Ellen Lynch** (RSB), **Tanya Bell Beccat** (EMSB) and **Irene Tsimiklis** (SWLSB), in their new capacity of Learning Toolkit (LTK) mentors. In the fall of 2012 they were awarded a Professional Development and Innovation Grant (PDIG) entitled *"Yes We Can: Facilitating the Use of Evidence-based Tools to Increase Cycle-One Student Literacy"*.

The central part of the grant is the mentorship model by means of which the three mentors teamed up with ten other cycle-one teachers in their school or board. The mentors were able to share the experience and expertise they gained over time in the use of Learning Toolkit tools, ABRA and ePEARL, to support the development of self-regulation and literacy. Over the span of this school year, the team met as a large multi-board group at Concordia and board- or school-based groups. Mentee-teachers also visited the classrooms of their mentors to learn how to integrate ABRA and ePEARL software wisely into their literacy practice. They also enjoyed classroom visits of their mentors themselves to share their emerging expertise with the tools and to receive contextualized feedback, support and advice.

Technology enhanced the work of the team. Each mentee received a laptop to complement their classroom technology and used it to gain more expertise with the software, to follow their students' progress and provide feedback on their work. Virtual space (SkyDrive) was set-up to store and share materials and aids developed during the project among the team members.

The mentoring model produced a few major outcomes. First, it enabled literacy classroom practices to be instilled, in alignment with the philosophy of self-regulated learning that underlies the LTK software. Second, by encouraging ongoing within and between school and board interactions, it allowed for the creation of shared/communal knowledge and emergence of collegial/communal relationship between the team members. The report on the team's learning will be available by the beginning of June 2014. Finally, this year long experience has inspired other teachers to transfer the LTK mentoring model to their contexts. It is hoped that two more teams will be granted professional development funds to support scaling up LTK practices for 2013-2014 school year!

THE
LEARNING TOOLKIT
AWARD OF EXCELLENCE

The Learning Toolkit (LTK) Award of Excellence is intended to recognize a teacher, consultant, or administrator who has contributed substantially to sustained, comprehensive, and effective use of the LTK. **Mary Ellen Lynch**, a cycle 1 teacher from St-Johns elementary school (Riverside School Board, Quebec) will be the third recipient of the LTK Award of Excellence.

Mary Ellen Lynch

Dedication, perseverance and enthusiasm mark Mary Ellen's use of ABRA and ePEARL to teach her cycle-one students' literacy skills and to develop their capacity to be engaged and active learners. Being concerned with parental involvement as a defining factor in student success, Mary Ellen uses ePEARL as a venue to engage her students' parents into commenting on their children portfolio work. She also has a classroom blog (http://teacher102.edublogs.org/), where she posts what is happening in her class - which allows for parents to feel connected, and creates opportunities for reflection in her students as they can regularly see tangible artifacts from their work.

She is one of the three recipients of the Professional Development and Innovation Grant (PDIG) (see separate article) centred on professional mentorship. By virtue of this project Mary Ellen has evolved into an active participant of the emerging LTK master teacher community: she invited teachers in to her classroom, helped them set up their own LTK practices and provided support to them. This award gave Mary Ellen the well-deserved recognition and acknowledgment of her professionalism and dedication.

The award will be presented to Mary Ellen Lynch at the LTK Advisory Board meeting on September 10, 2013.

OTHER

Members of the CSLP/CEAP are busy preparing their large infrastructure application to FRQSC under the Regroupements Stratégiques program for provincial research centres in the social sciences. Submissions are due mid-November with a response expected in April 2014.

Some
Highlights from the Year

April, 2012: **Ann-Louise Davidson** présente "PERLE" au Programme du colloque scientifique international sur les TIC en éducation : bilan, enjeux actuels et perspectives futures. (See http://www.youtube.com/)

May 2012: Une capsule vidéo de la Ministre Mme. Beauchamp au Congrés AQETA 2012. Elle souligne l'importance d'**ABRACADABRA** qui favorise la réussite chez les élèves très tôt dans leur apprentissage. (See https://docs.google.com/file/d/0B-fYtDJ40gH6d2N6Wk5FeXo2UWc/edit?pli=1)

June 2012: Close to $2 million in SSHRC grant received jointly by Rena Upitis (PI-Queen's University), Angela Elster (The Royal Conservatory) and **Phil Abrami**, entitled "Transforming Music Instruction with a Web-based Portfolio Tool".

July, 2012: **David Waddington** received the "Person and Society Emerging Award" for his contributions to the advancement of knowledge. He will hold the title of Concordia University Research Fellow for one year. **Ann-Louise Davidson** received the "Petro Canada Young Innovator Award" for her innovative work as an emerging faculty researcher. **Vivek Venkatesh** named Concordia's first E-Learning Fellow with the Centre for Teaching and Learning Services.

August 2012: **Anne Wade** presented at the IFLA World Library and Information Congress/78th IFLA General Conference and Assembly (Helsinki) the paper entitled "An online information literacy course for undergraduates: early experiences", co-authored with Joanne Locke (Associate Dean, Arts and Science) and Patrick Devey (Chief Learning Office, eConcordia).

Sept., 2012: Article in Concordia's NOW in which **Pavel Trofimovich** and his student Talia Isaacs describe how they are "listening beyond the accent" to show how effective communication is more about what is said than how it is said.

Nov. 2012: **Robert Bernard** et al. wins the First Place Award from Advancing Research from Information Age Publishing (IAP) and the Division of Distance Learning (DDL) of the Association for Educational Communications and Technology (AECT) for the article "A meta-analysis of three interaction treatments in distance education" was published in 2009 in the *Review of Educational Research*.

Dec. 2012: **Phil Abrami** was invited to speak at Max Bell's 40th Anniversary event.

Members
& Staff

FULL MEMBERS

- Philip C., Abrami, Director & Professor, Concordia University
- Robert M. Bernard, Professor, Concordia University
- Monique Brodeur, Doyenne, Faculté des Sciences de l'éducation, Université du Québec à Montréal
- Eva Bures, Assistant Professor, Bishop's University
- Walcir Cardoso, Associate Professor, Concordia University
- Laura Collins, Associate Professor, Concordia University
- Helena Dedic, Professor, Vanier College
- Catherine, Fichten, Co-Director Adaptech Research Network & Professor, Dawson College
- Leif French, Associate Professor, Université du Québec à Chicoutimi
- Elizabeth Gatbonton, Associate Professor, Concordia University
- Marlise Horst, Associate Professor, Concordia University
- Kim McDonough, Associate Professor, Concordia University
- Steven Rosenfield, Professor, Vanier College
- Annie Savard, Assistant Professor, McGill University
- Richard F. Schmid, Associate Director & Professor, Concordia University
- Norman Segalowitz, Associate Director & Professor, Concordia University
- Pavel Trofimovich, Associate Professor, Concordia University
- Vivek Venkatesh, Assistant Professor, Concordia University
- David Waddington, Associate Professor, Concordia University
- Joanna White, Graduate Program Director & Associate Professor, Concordia University
- Bev White, Director of Studies and Community Development, Leading English Education and Resource Network (LEARN)

STAFF

Administrative Team
- Evelyne Cypihot, Grants Officer
- Randall Halter, Research Associate
- David Pickup, Information Specialist
- Anne Wade, Manager
- Patricia Yetman, Administrative Assistant

Professional Team
- Evgueni Borokhovski, Systematic Review Project Manager
- Estel Grimard, Instructional Designer
- Jennifer Head, Instructional Designer
- Einat Idan, Lead Instructional Designer
- Larysa Lysenko, LTK Research Coordinator
- Nadia Naffi, Instructional Designer
- Vanitha Pillay, LTK Trainer
- Mike Surkes, Researcher

Development Team
- Jeong-Jea Hwang, Developer
- Steven Kanellopoulos, Developer
- Catherine LeBel, Creative Director
- Sebastien Rainville, Lead Programmer
- Neha Sultan, Developer
- Mimi Zhou, Developer

2012-2013
Productivity

For the period **April 1, 2012 to March 31, 2013**, the CSLP/CEAP had the following productivity:

Funding:

The total number of grants and contracts awarded to the CSLP's twenty-one full faculty members is 79.

The estimated total value held for the 2012-2013 period (i.e. one year of multi-year grants) is over $2,600,000.

Please refer to the ***CSLP/CEAP Annual Report 2012-13***, Part II for a complete listing of grants, publications, workshops and students. Available on the CSLP's website: http://education.concordia.ca/CSLP

PUBLICATIONS:	
Journal Articles & Manuscripts	100
Books/ Chapters/ Proceedings	45
Other	8
Total Publications	**153**

OTHER DISSEMINATION ACTIVITIES:	
Presentations and Seminars	114
Training and Instruction	22
Technology Based Tools and Other Transfer Activities	29
Total Dissemination	**165**

TRAINING OF STUDENTS:	
M.A. Theses and Internships	50
PhD supervision	26
Research Assistants	29
Total Students	**105**