

Annual Report 2014-15



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Our Director's Message: Philip Abrami

Ye been away this past year on sabbatical, more or less. For the uninitiated in the ways of academia, sabbatical, the etiology of which is closely aligned with Sabbath and the ceasing or stopping of work, is actually a break from the usual teaching and administrative chores of faculty so that one can concentrate fully on research. So when I say I've been away more or less, I mean I did less teaching and administration and more research. I also mean I was not completely absent from the office as many research chores are best done at the office.

During my absence, Dr. **Vivek Venkatesh** served as the Acting Director. Thank you, Vivek! Vivek had a good taste of what it takes to administer a large and active centre. No wonder he is now on sabbatical himself!

In June of 2015, the Centre for the Study of Learning and Performance will be moving lock, stock, and barrel to a new location at 1211 St. Mathieu in a heritage building called the Maison des Hommes or Men's House behind the Sisters of Charity (Grey Nuns') property, now owned by Concordia University. The CSLP staff has been working hard to make the transition a smooth one. Thanks to **Anne Wade** for planning and organizing the move, ably assisted by **Patricia Yetman**; both will continue to serve the centre well during the transition period at our new home. Thank you, Anne and Pat!

Marguerite Dufrost de Lajemmerais, the widow of François Youville, founded the Grey Nuns.

Marguerite Youville, who was beatified by the Catholic Church as a Saint in 1959, and the three ladies who were helping her with her charitable work among the poor decided to dedicate themselves completely to this task by welcoming anyone in need. According to the testimonies of the first sisters, this decision was made in secret on December 31, 1737. "So that this union may be firm and lasting, ... we have promised to live together for the rest of our lives ... unreservedly to consecrate our time, our industry, and even our lives to labour, the product thereof to be put in common to provide subsistence for the poor and for ourselves..."

I've traveled extensively this past year including Europe, Africa, Latin America, Asia, and Australia. What struck me about these distant locations is how similar they are, reminding me that we are truly living in the age of globalization. Education is becoming a global concern as well. There are general problems throughout the world, like low levels of literacy and numeracy skills, and general solutions, like applications of the educational sciences.

I'm pleased to say that the CSLP is playing its part in solving global educational challenges through cutting-edge research and cutting-edge applications of research to educational practice. In this regard, I like to think that the CSLP honours the memories of Marguerite Youville and the Grey Nuns by helping teachers teach and children learn. But we are not keeping it a secret. J'étais en congé sabbatique pour plus or moins un an. Pour les non initiés dans les us et coutumes universitaires, le congé sabbatique, dont l'origine se trouve dans le mot sabbat ou la cessation de tout travail, est en fait un congé des tâches d'enseignement et d'administration pour les professeurs afin qu'ils puissent se consacrer entièrement à la recherche. Donc, quand je dis avoir été en congé, je veux dire que j'ai fait moins d'enseignement et d'administration, et davantage de recherche. Je n'étais pas complètement absent du bureau puisque bien des tâches de recherche s'y accomplissent mieux.

Pendant mon congé, Dr. **Vivek Venkatesh** a servi comme Directeur par intérim. Merci, Vivek! Vivek a pu se faire une bonne idée de ce que c'est d'administrer un grand centre actif. Il ne faut donc pas s'étonner qu'il soit maintenant lui-même en congé sabbatique.

En juin 2015 le Centre d'études sur l'apprentissage et la performance déménagera intégralement dans de nouveaux locaux au 1211, rue St-Mathieu, dans un bâtiment patrimonial, appelé la Maison des hommes, derrière la propriété des Sœurs de la charité (Sœurs grises), dont l'Université Concordia est maintenant propriétaire. Le personnel du CEAP a travaillé fort pour permettre une transition en douceur. Merci à **Anne Wade** pour la planification et l'organisation du déménagement, efficacement secondée par **Patricia Yetman**; toutes deux continueront de bien servir le Centre durant la période de transition à notre nouvelle demeure. Merci, Anne et Pat !

Marguerite Dufrost de Lajemmerais, la veuve de François Youville, a fondé les Sœurs grises.

Message du Directeur :

Marguerite Youville, béatifiée sainte en 1959 par l'Église catholique, et trois collaboratrices qui l'aidaient dans ses œuvres charitables parmi les pauvres ont décidé de se dédier totalement à cette tâche en accueillant quiconque en avait besoin. Selon les témoignages des premières sœurs, cette décision s'est prise en secret le 31 décembre 1737. « Et afin que ladite union soit solide et permanente, ... avons promis ... de vivre ensemble le reste de nos jours... de consacrer sans réserve notre temps, nos jours, notre industrie, notre vie même au travail et, le produit mis en commun, pour fournir à la subsistance et entretien des pauvres et de nous... »

J'ai voyagé beaucoup cette dernière année, y compris en Europe, Afrique, Amérique latine, Asie, et Australie. Ce qui m'a frappé dans ces lieux lointains, c'est à quel point ils se ressemblent, me rappelant que nous vivons en vérité dans l'ère de la mondialisation. L'éducation aussi est une préoccupation d'une portée mondiale. Il y a des problèmes généraux partout dans le monde, comme les bas niveaux d'alphabétisation et de compétences en numératie, et il y a des solutions générales, comme des applications issues des sciences de l'éducation.

Je suis heureux de dire que le CEAP joue sa part dans la solution aux défis mondiaux de l'éducation grâce à une recherche de pointe, ainsi que des applications de la recherche à la pratique pédagogique de très haut niveau. À cet égard, j'aime penser que le CEAP honore la mémoire de Marguerite Youville et des Sœurs grises en aidant des enseignants à enseigner et des enfants à apprendre. Mais nous n'en gardons pas le secret.



Our Associate Director's Message: David Waddington

This past year has been another excellent year for the CSLP, with all kinds of innovation happening. We're all very excited about the upcoming release of the *Learning Toolkit Plus* in August, and the expansion of the international literacy projects. One of the most exciting developments, however, is the inauguration of a new **seed grants** program designed to build research partnerships between the four major research strands of the centre. Last year, the CSLP Executive awarded two grants to facilitate these partnerships, and it is anticipated that more awards will be made to centre members this year.

These cross-strand research awards are already bearing fruit. One project that received funding was a joint venture between myself, a member of the *Emerging Educational Technologies* strand and **Walcir Cardoso**, a member of the *Language and Literacy* strand. We applied for funding to conduct research around *Spaceteam ESL*, a pioneering multiplayer English language learning game for iOS/Android based on Henry Smith's hit game (more than 3.5 million downloads) *Spaceteam*. The funding will be used to develop curriculum materials for the game and to conduct research on the game's effectiveness in promoting fluency and improving pronunciation and listening skills.

Another exciting project that was funded through this program was co-led by **Julien Mercier** and **Vivek Venkatesh**, and concerned using educational neuroscience to analyze learning in a virtual reality (VR) environment. Using a virtual museum application developed by a CSLP collaborator in Greece, Mercier and Venkatesh's team are using the cutting-edge technology in Mercier's CFI-funded Neurolab to better understand the cognitive and affective processes that unfold in this unique environment. This research represents a fruitful partnership between the *Basic Processes of Learning* strand and the *Emergent Educational Technologies* strand, and we are hopeful that it will serve as a seedbed for larger funded projects in the future.

Further information about these two projects may be found later on in this report. A new Call for Proposals for this interdisciplinary seed granting program will be released in October, and I am looking forward to a fresh crop of exciting projects that will make our centre even more interdisciplinary.

Message de notre Directeur associé : Julien Mercier



près une année de fonctionnement de l'antenne du CEAP à l'UQAM, nous pouvons remarquer plusieurs choses. Tout d'abord, les interactions entre les membres à l'UQAM se sont intensifiées à travers des groupes de discussion thématique. Ce réseautage est un maillon important de nouvelles collaborations avec les membres du CEAP appartenant à d'autres institutions. D'ailleurs, les projets interinstitutionnels se font plus nombreux. Aussi, plusieurs étudiants sont membres du Centre; ainsi ils ont pu profiter de l'animation scientifique et de bourses. Plusieurs ont pu enrichir leur bagage d'expériences par de l'assistanat de recherche à une université différente de leur université d'attache. Enfin, la visibilité du CEAP à l'UQAM est renforcée par des conférences invitées qui suscitent beaucoup d'intérêt. Un des résultats les plus attendus de cette belle collaboration : le très prochain lancement **d'ABRACADABRA en français** qui aura lieu en septembre. Our Theme Areas: Some milestones

Academic Self Regulation (Leader: Vivek Venkatesh)

The research conducted within this theme will improve our understanding of cognitive, metacognitive and affective mechanisms that underlie interactions in learning. Our work will contribute significantly to improving academic self-regulation and learning by specifying clearer guidelines for interactions in learning (in classrooms or remotely). Thus, learning activities can be better designed as a response to the new information about learners' emotional and cognitive processes during these activities (e.g., involvement and cognitive load).

The pilot work being conducted by the Neurolab under the leadership of **Julien Mercier** at UQAM represents an important milestone of this theme. Using stateof-the-art equipment for measurement and analysis on the behavioural (audiovisual recording, eye tracking, facial expression recognition) and neurophysiologic (encephalograph, pupillometer, breathing, heat beat, electrodermal conductance) levels, the Neurolab infrastructure will eventually allow the study of two participants (two learners or an instructor and a learner) who interact relatively normally in authentic contexts.

Another milestone achieved this past year was that **Vivek Venkatesh**, **Phil Abrami** and **Julien Mercier** received a four year SSHRC Insight Grant valued at over \$311,000. This funding will enable us to investigate self-regulatory and metacognitive processes in elementary school learners using the *ISIS-21* software to develop their information literacy competencies. Using *ISIS-21*, students are scaffolded as they complete twelve steps within the inquiry process, culminating in the design of a creative product designed to convey their understanding of a complex topic. For a snapshot of some of these products, see our student-centred video on the Produce step: https://youtu.be/2Yp_pd2Q0bY.

Language and Literacy Group (Leader: Laura Collins)

The development and upcoming launch of *Spaceteam ESL*, developed by **David Waddington** and **Walcir Cardoso** is one milestone that this theme achieved this past year. *Spaceteam ESL* is a free, interactive team-building "shouting" game in which players interact orally with team members to communicate and/or carry out instructions in a limited amount of time to pilot a spaceship. To play the game successfully, players must be both intelligible and efficient (fast) in speaking, reading and listening so that they and their teammates can successfully interpret the instructions within a specified timeframe. The game incorporates text-to-speech and audio recording capabilities for pedagogical purposes, and its vocabulary repertoire was selected so that each proficiency level constitutes a different frequency band (e.g., 1,000, 2,000, etc. most frequent words in English). As game levels increase, so does the complexity of the vocabulary and related pronunciation.



A group of ESL learners playing Spaceteam ESL

Other milestones include: the design of a set of pedagogical materials (for pre-game practice) that have been made available on the *Spaceteam ESL's* website (spaceteamesl.ca), and the publication of a pilot study led by Walcir Cardoso, Jennica Grimshaw and David Waddington on learners' and teachers' perceptions of *Spaceteam ESL*. The authors conclude the game has the potential to increase learners' motivation, to create a comfortable learning environment, and to foster teamwork and consequently peer-teaching (including peer-feedback). The study was published in the peerreviewed *Proceedings of the European Association for Computer Assisted Language Learning* (EUROCALL).

Learning Toolkit

(Leader: Philip C. Abrami)

n exciting milestone for the *LTK* theme will be the release of the *Learning Toolkit Plus* in August. This enhanced version of the *LTK* will contain the following new additions and revisions: Redesign of the *LTK* Lobby and Login pages (French and English); launch of the French adaptation of *ABRACADABRA*; launch of the bilingual *ELM/ORME* (Emerging Literacy in Mathematics) software; and additions to *READS* our Repository of EBooks and Digital Stories. Also with this release, all tools within the *LTK+* will be available in French and English.





The two new tools in the LTK+ will be:

ABRACADABRA en français est bien plus qu'une simple traduction de la version en anglais, développée en 2002 par le professeur **Phil Abrami** et son équipe de l'Université Concordia. Dirigée par **Monique Brodeur** et son équipe à l'UQAM, il s'agit d'une adaptation, incluant de nouveaux développements, qui tient compte des caractéristiques de la langue française. Cette ressource peut être utile aux enfants qui commencent à apprendre à lire et à écrire, que ceux-ci aient ou non le français pour langue maternelle.

Emerging Literacy in Numeracy is an interactive tool that supports the development of foundational skills in mathematics for children in the early elementary years. Using an engaging and flexible design, *ELM* will help young students increase their numeracy skills while also decrease their anxiety towards mathematics.

For more information on the *Learning Toolkit Plus*, please visit: http://www.concordia.ca/ltk

Other milestones in this theme include the publication of the results of using **ABRACADBRA** in Kenya (Abrami, P.C., Wade, A., Lysenko, L., Marsh, J., & Gioko, A. (2014). Using educational technology to develop early literacy skills in sub-Saharan Africa. *Education and Information Technologies*. Doi No. 10.1007/s10639-014-9362-4), and the submission of a manuscript on the results of using **ABRACADABRA** in Hong Kong (Cheung, A., Mak, B. Abrami, P.C., Wade, A. & Lysenko, L. (under review). The effectiveness of the **ABRACADABRA** web-based literacy program on primary school students in Hong Kong. *Journal of Interactive Learning Research*).

Exploratory Work on Emergent Technologies (Leader: Ann-Louise Davidson)

The development of problem-based learning objects (PBLOs) co-designed by Ann-Louise Davidson, her co-researchers in Ecuador and her research assistants, was a significant milestone within this theme. Ann-Louise received \$73,511 from the SSHRC Insight Development Grant program. Ann-Louise has equipped the Ecuadorian team with iPads to ensure a successful integration of technology in their classrooms. The co-development of PBLOs, along with the use of iPads, have been instrumental in making the role of the learner more active and changing the role of the teacher in that of a facilitator rather than a transmitter of knowledge and information. The PBLOs, in the format of open-ended video case studies are available to view on the following YouTube channel: https://www.youtube.com/channel/UCX1mdkmJPOAw3EtTij5BQXg

Other milestones are:

- The creation of a professional learning community (PLC) of pedagogical leaders at Riverside School Board, by Ann-Louise Davidson who holds a Chantier 7 funding (\$100,000) with Carole Raby from UQAM. In this last year of her grant, she is expanding the PLC into various schools and is tackling the challenge of developing a culture of online communication to ensure the perennity of the PLC.
- The establishment of the *SOMEONE project* by **Vivek Venkatesh** who received \$187,000 from Public Safety Canada. This project intends to sensitize Canadian youth, educators and the broader public to patterns of online hate speech with the goal of building resilience. See under *Student Fellowships* for more information on this project.



- The launch of *Spaceteam ESL* by Walcir Cardoso and David Waddington, which is more fully described under the *Language and Literacy* theme.
- The co-creation of self-advocacy videos with people with intellectual disabilities, for *Project Capabilities* conducted by **Ann-Louise Davidson**. The objective of Project Capabilities is to help people with ID to create videos where they talk about capabilities they have or capabilities they wish to develop to become fully-fledged members of society. The videos are available on the following YouTube channel: https://www.youtube.com/channel/UCLb47ALpQNvfGbr1YBS0c9A
- The publication of survey results on uses of ICT in CEGEPs produced by **Catherine Fichten** and the *Adaptech* team at Dawson College. The online survey was completed by over 300 students from two CEGEPs (one English language, one French language). The findings showed that 94% of students like courses in which their professors use technology. In general, students liked the availability and interactive functions of a CMS. Not surprisingly, the results also showed that students prefer that all of their professors only use one type of CMS and that they do not like professors using social media to communicate with them. Lastly, the team interviewed over 110 CEGEP professors on their use of ICTs and they are currently preparing their data for analysis.

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| The Adaptech Research Network conducts research on obstacles and facilitators of academic success and on the us and communication technologies by Canadian college and university students with disabilities. | e of informa | tion |
| Ongoing Projects | | |
| Student and faculty perspectives on excellence in ICT and e-learning use in college (2014) Follow-up of Canadian college and university students with disabilities: 4 years later (2013) Database of Free & Inexpensive Computer Technologies (1999) | | |

• A number of publications produced by the Systematic Review team, starting with a landmark meta-analysis of the experimental literature of technology integration in higher education in *Computers & Education* led by **Richard Schmid**. Subsequently, the team published three additional publications related to the original meta-analysis: *A Meta-Analysis of Blended Learning and Technology Use in Higher Education: From the General to the Applied* (Robert Bernard, Eugene Borokhovski, Richard Schmid, Rana Tamim and Philip Abrami); *An Exploration of Bias in Meta-Analysis: The Case of Technology Integration Research in Higher Education* (Robert Bernard, Eugene Borokhovski, Richard Schmid, Rana Tamim) and *Technology-Supported Student Interaction in Post-Secondary Education: A Meta-analysis of Designed Versus Contextual Treatments* (Eugene Borokhovski, Robert Bernard, Rana Tamim, Richard Schmid and Anna Sokolovskaya). In 2015, the Systematic Review Team published a major meta-analysis of the experimental literature of critical thinking in education in *Review of Educational Research* led by Philip Abrami.

A Collaborative 'Shouting' Game Seed Grant

ed by David Waddington and Walcir Cardosa, this team (with members from the Language and Literacy and Emergent Technologies themes) is working on *Spaceteam ESL* or the "collaborative shouting game", as its creator Henry Smith dubs it. Designed for mobile devices (Android and iOS), the game requires cooperation and communication in order to resolve a situation in which there is incomplete information. Each player has, on his/ her mobile device, a set of control panels with labeled controls. In a two-player game of **Spaceteam ESL**, as a timer counts down, Player 1 will be presented with an absurd instruction, e.g.: "Pull animal!" The hitch, however, is that the "Pull animal" control panel is located on Player 2's screen. Therefore, Player 1 must shout out to Player 2, "Pull animal!" so that Player 2 can quickly execute the action on her screen before Player 1's timer runs out. Meanwhile, as all of this is taking place, Player 2 is receiving timed instructions ("Switch off book!") that must be executed by Player 1. If all of the participants (the game supports up to four simultaneous players) embrace the game, a fun dynamic quickly develops in which the players desperately shout instructions to one another as their timer runs out. If they miss too many instructions, their spaceship blows up. If they manage to execute a sufficient number of instructions, they are allowed to proceed to the next level.



Spaceteam ESL – The control panel

Spaceteam ESL has several useful language learning features. First and foremost, the language used is strictly controlled to accommodate the players' language proficiency and to allow for a more challenging game playing. Each of the five levels draws from a language frequency band (e.g. Level 1 draws from the 1000 most common English words). Additional modifications in the ESL version include the ability for teachers and learners to control the speed of the game, as well as a pronunciation practice tool that allows players to listen to how words are spoken and to practice speaking the words themselves. These latter skills are critical to the players' success in the game, which depends, ultimately, upon speaking words intelligibly and listening to others with accuracy.

In addition to developing critical speaking and listening skills, one of the most promising applications of *Spaceteam ESL* may be in combatting anxiety in the second language (L2) classroom. As many people who have attempted to learn a second language know, anxiety about speaking seems debilitating, and research has validated this intuition by demonstrating that anxiety has a significant impact on students' willingness to communicate (WTC) orally. Computer-media communication and computer-based gaming have also shown promise as tools for addressing L2 communication anxiety. For some students, the use of computer-mediated interactions (including gaming) has been shown to decrease L2 communication anxiety, thus increasing the participants' willingness to communicate.

By virtue of the fact that it is a multiplayer, cooperative game, *Spaceteam ESL* combines both teamwork and computer-mediated communication, two of the most valuable, proven tools for addressing language anxiety. We therefore hypothesize that *Spaceteam ESL* has the potential to create the kind of comfortable and encouraging learner-centred environment in which students are more likely to produce language.

With the help of graduate student **Jennica Grimshaw**, the team is currently undertaking a study that will investigate this hypothesis and put **Spaceteam ESL** to the test. To investigate the participants' anxiety and WTC, the team intends to adopt a set of open-ended interview questions about the participants' experience and perceptions, focusing on the two target themes, and quantitative measures. The results of this study will shed light on the effects of team-oriented games, such as **Spaceteam ESL**, on anxiety and WTC in the L2 classroom. Based on the results of testing so far, we are optimistic that the game will generate some very positive results.

Website and Videos

Spaceteam ESL website: www.spaceteamesl.ca

Spaceteam ESL trailer: https://www.youtube.com/watch?v=r6iFMmDWeZk

Apple iTunes store: https://itunes.apple.com/ca/app/spaceteam-esl/id999546790?mt=8

Google Play store:

https://play.google.com/store/apps/details?id=com.sleepingbeastgames.spaceteamXESL&hl=en

A Virtual Reality Lab Seed Grant

ed by Julien Mercier and Vivek Venkatesh, with members from the Academic Self Regulation and Emergent Technologies themes, this project is using a virtual reality environment within a novel program of research in educational neuroscience, geared to the improvement of social modes of learning. The advantage of this approach, which involves an innovative superimposition of psychophysiological and behavioural data, is the derivation of a rich recording of affective and cognitive processes involved in learning, with an enhanced temporal grain-size, which includes information that cannot be easily verbalized or which interrupts the natural unfolding of events if obtained otherwise (for example using self-report measures). The objectives of the proposed study are twofold: To examine intra-individual and inter-individual affective and cognitive processes and their relation with learning in dyads of undergraduate learners as they solve problems in physics; and to examine the impact of agency (active or bystander) on dyads' functioning and learning.



The overarching principle is the notion of contingency, the dynamic matching of the learning environment and the learner's state. This project can illuminate new facets of contingency, which have remained intractable until now because of a lack of appropriate research tools. Four main questions will be investigated: (1) what are the intra-individual relationships between affect and cognition?; (2) what are the inter-individual affect-affect, cognition-cognition and affect-cognition relationships?; (3) how are the previous processes modulated by agency?; (4) among the previous processes and considering agency, what are those that best predict learning gains?

The main outcome of this study will be to foster learning gains by empowering learners and instructors during learning activities with respect to how they can react appropriately, in a timely fashion, to suboptimal affective and cognitive dispositions. Moreover, learning environments, both natural and computer-based, can be better designed with respect to the highly dynamic needs of the learners. Results should inform how agency influences affective and cognitive functioning of learners and learning outcomes at the individual, inter-individual, and dyad levels and contribute answers regarding how participation in a cooperative learning activity should be structured, in terms of agency, to be beneficial for learning.

This seed grant will be used for data collection, student training, and some data analysis, which will lead to a joint publication by the team of researchers. The team hopes to apply for internal and external funding to continue exploring the rich dataset that will be created. This dataset should help recruiting masters and doctoral students from participating universities as students can take advantage of this dataset to conduct their own research within the larger project.

Awarding of Student Merit Fellowships

For the very first time, the CSLP was able to offer graduate student merit fellowships. Many thanks to Concordia's School of Graduate Studies who provided us with two awards, of \$10,000 each.

Sarmista (Sharm) Das is a PhD student at Concordia whose research focuses on the prevention of extremism and hate speech. Das is a member of SOMEONE Project, a project for sharing strategies to prevent the spread of online hatred, and is a co-investigator in the project "Development of Curricula to Combat and Prevent Hate Speech Leading to Violence and Violent Extremism: Using Social Media to Build Resilience in Canadian Youth." Her contribution, entitled the "Literary Peace Project," is a collection of college-level English lesson plans designed to address extremism and



hate speech through the study, creation, and performance of poetry. Das has used this curricula in the literature courses she teaches at Champlain College Saint-Lambert, where she also trains the college's Learning Centre tutors. Das has previously taught at Concordia University's Simone de Beauvoir Institute and has worked for the Canadian Broadcasting Corporation as a researcher. Sharm will be using her fellowship award to help pay for tuition and books.



Laura Broley is a Vanier Scholar in the unique Individualized Studies Program at Concordia. Laura's research seeks to understand how to better align undergraduate math students' experiences with the richness and diversity of today's professional mathematics practice. Undergraduate math students often spend their time receiving polished definitions, theorems and proofs that were carefully developed over the last hundreds of years or memorizing how to perform a series of algorithms by hand; they rarely use the computer as anything beyond a "big calculator". Many mathematicians in academia and industry, on the other hand, use computer programming in powerful ways to undertake many different types of tasks (e.g., modelling complex phenomena to solve real-world problems, performing calculations

and simulations not possible by hand, creating and testing conjectures, constructing proofs, developing advanced technological tools). By exploring this gap and the possible ways of bridging it, Laura's research may provide insight into the development of more relevant, dynamic, and engaging undergraduate math curricula in Canada. Laura's fellowship award will support her pursuit of an intensive academic and research plan, including the dissemination of her work at conferences around the world.



Lorie-Marlène Brault Foisy, membre étudiante du CEAP-UQAM, s'est vu octroyer une bourse du CEAP pour stage avec collaboration à l'étranger d'une valeur de 1 500 \$. D'avril à juillet 2015, Lorie-Marlène réalisera son deuxième stage doctoral au Laboratoire de Psychologie du Développement et de l'Éducation de l'enfant (LaPsyDÉ), à l'Université Paris-Sorbonne, sous la direction d'Olivier Houdé et de Grégoire Borst. Ces derniers sont des spécialistes reconnus en ce qui a trait au développement de l'enfant et aux processus cognitifs liés à l'apprentissage. Dans le cadre de ce stage, Lorie-Marlène construira une tâche expérimentale afin de vérifier si le mécanisme d'inhibition est impliqué dans la lecture de mots contenant des lettres miroir (d/b, p/q). Cette tâche s'appuiera sur le paradigme expérimental d'amorçage négatif ainsi que sur la mesure des temps de réaction. La collecte des données sera réalisée auprès d'élèves de niveaux CM1 et CM2.

Marie-Pier Godin effectuera un stage de recherche à l'Université de Californie à San Diego (UCSD) dans le laboratoire en oculométrie, le *Rayner Eyetracking Lab*, sous la direction de Nathalie Bélanger (Ph.D). Grâce au soutien financier du CEAP-UQAM, l'étudiante au doctorat en éducation de l'UQAM développera ses connaissances en recherche sur le mouvement des yeux et sur la lecture. L'obtention de deux bourses, l'une d'excellence et l'autre pour un stage à l'étranger, lui permettra de profiter pleinement de cette expérience stimulante et de côtoyer des chercheurs de renom dans ce domaine de recherche.



Some Highlights from 2014-15

April, 2014: *ABRACADABRA* was showcased in the article "Magic touch in class with '*Abracadabra*' cartoon software" in *The Daily Nation* (Kenya) <<u>http://www.nation.co.ke/lifestyle/DN2/Magic-touch-in-class-with-Abracadabra-cartoon-software/-/957860/2295724/-/eml45h/-/index.html></u>

May, 2014: Fichten and King are the only two college researchers awarded new FRQSC grants for the "Programme de recherche sur la persévérance et la réussite scolaires, un concours du programme Actions concertées." See http://www.concordia.ca/research/learning-performance/news-events/ research/learning-performance/news-events/notices/cunews/artsci/learningperformance/2014/05/02/congratulations-fichten-king.html

May, 2014: Venkatesh, Abrami, and **Mercier** awarded \$311,590 under the SSHRC Insight grant program for their project entitled; *Development of academic self regulation to support information literacy: A longitudinal multi-method investigation of the use of software promoting inquiry skills in grades 5-8 classrooms*.

July, 2014: "Harmonious CoExistence" video shows an international collaborative composition using iSCORE. Developed by a team at Queen's University, The Royal Conservatory, and the CSLP, iSCORE is an adaptation of the CSLP's ePEARL. See http://www.concordia.ca/research/learning-performance/news-events/ research/learning-performance/news-events/notices/cunews/artsci/learning-performance/2014/07/28/iscore-collaboration.html

July, 2014: Venkatesh, Robert McGray, Tieja Thomas, & Jihan Rabah awarded a \$187,340 grant from Public Safety and Emergency Preparedness Canada under their Kanishka program for the project entitled: "Development of Curricula to Combat and Prevent Hate Speech Leading to Violence and Violent Extremism: Using Social Media to Build Resilience in Canadian Youth". See http://news.gc.ca/web/article-en.do?mthd=index&crtr.page=1&nid=852589

September, 2014: Thomas Stenzel, a consultant from LEARN and former teacher and RECIT from the Riverside School Board is the fourth recipient of the **LTK Award of Excellence**. (See http://www.concordia.ca/research/learning-performance/news-events/research/learning-performance/news-events/notices/cunews/artsci/learning-performance/2014/09/01/ltk-award-excellence-2014.html)



November, 2014: Establishment of a satellite centre at UQAM.

December, 2014: Abrami awarded \$196,000 in ESRC funding for the project *Implementing cross-age peer tutoring in the teaching of reading in Kenya* led by Hardman, Hanley, and Chambers from the University of York.

February, 2015: Math teachers from four Kenyan pilot schools are trained on the *ELM prototype* during **Abrami** and **Wade**'s winter trip to Kenya.



March, 2015: Bernard chosen as an Outstanding Reviewer for 2014 by the American Educational Research Association (AERA) and the *Review of Educational Research*.

Forthcoming in April, 2015: Launch of the new CSLP website! Come explore our new site at: http://www.concordia.ca/cslp

Looking Ahead: Our New Home as of June 2015



In preparation for the move in June, members of the CSLP were busy weeding, recycling, throwing out and packing throughout the year! Indeed we have accumulated "stuff" since our move to the J.W. McConnell Building over 20 years ago. Faculty and staff rifled through stacks of articles, books, files, data, DVDs of software versions, and yes, even diskettes from past research and development projects. But we were highly motivated, as this move will combine our research space and the Systematic Review team (located in the EN and X annexes respectively) with the Learning Toolkit theme staff and Administrative offices. We look forward to sharing our beautiful heritage house – La Maison des hommes with all Centre members, as well as with the Department of Education's Observation Nursery and research space. A heartfelt thank you to the Department of Education, the Faculty of Arts and Science, the Office of the Vice President, Research and Graduate Studies and Facilities Planning and Development at Concordia University for making this move happen. We also send a huge thanks to Concordia libraries for their pressure to get onto the fifth floor of LB, as we are very pleased to help facilitate their spectacular transformation.

Our <u>Productivity</u>

With the support of host institution, Concordia University, along with seven affiliated Quebec-based academic institutions (see http://www.concordia.ca/research/learning-performance/about/members.html#partners), CSLP researchers have been very busy! For the period **April 1, 2014 to March 31, 2015**, the CSLP/CEAP had the following productivity:

Funding: The total number of grants and contracts awarded to the CSLP's **35** full faculty members is **62**. The estimated total value held for the 2014-2015 period (i.e. one year of multi-year grants) is **\$2,139,801.95**.

Publications: Journal Articles & Manuscripts = 138; Books/Chapters/Proceedings = 50; Other = 5; and Total = **193** publications.

Other Dissemination Activities: Presentations and Seminars = 143; Training and Instruction = 15; Technology Based Tools and Other Transfer Activities = 16; and Total = **174** activities.

Training of Students: M.A. Theses and Internships = 52; PhD supervision = 39; Post Doc = 2; Research Assistants = 31; and Total = **124** students.

Please refer to the CSLP/CEAP Annual Report 2014-15, Part II for a complete listing of grants, publications, workshops and students.

Our Members

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 Mary Bures, Assistant Professor, Bishop's University Walcir Cardoso, Associate Professor, Concordia University Nathalie Chapleau, Professeure, Faculté des Sciences de l'éducation, Université du Québec à Montréal Patrick Charland, Professeur. Département de didactique, Université du Québec à Montréal Laura Collins, Associate Professor, Associate Professor, Concordia University Ann-Louise Davidson, 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 Magda Fusaro, Professeure, École des sciences de la gestion (ESG UQAM) Andreanne Gagne, Professeure, Faculté des Sciences de l'éducation, Université du Québec à Montréal Elizabeth Gatbonton, Associate Professor, Concordia University Isabelle Gauvin, Professeure, Département de didactique des langues, Université du Québec à Montréal Marlise Horst, Associate Professor, Concordia University Sara Kennedy, Assistant Professor, Concordia University Laura King, Professor, Cégep André-Laurendeau Line Laplante, Professeure, Faculté des Sciences de l'éducation, Université du Québec à Montréal Kim McDonough, Associate Professor, Concordia University Julien Mercier, Associate Director & Professeur Faculté des Sciences de l'éducation, Université du Québec à Montréal Hélène Poissant, Professeure, Département d'éducation et pédagogie, Université du Québec à Montréal Patrice Potvin, Professeur, Département de didactique, Université du Québec à Montréal Martin Riopel, Professeur, Département de didactique, Université du Québec à Montréal Steven Rosenfield, Professor, Vanier College Annie Savard, Assistant Professor, McGill University Richard F. Schmid, Professor, Concordia University Norman Segalowitz, Professor, Concordia University Pavel Trofimovich, Associate Professor, Concordia University Catherine Turcotte, Professeure, Faculté des Sciences de l'éducation, Université du Québec à Montréal Vivek Venkatesh, Acting Director, Associate Dean, Academic Program Development, & Associate Professor, Concordia University Jacques Viens, Directeur & Professeur titulaire, Faculté des sciences de l'éducation - Département de psychopédagogie et d'andragogie, David Waddington, Associate Professor, Concordia University Joanna White, Associate Professor, Concordia University Michael Chechile, Director General, Lester B. Pearson School Board Roma Medwid, Deputy Director General, English Montreal School Board France Trudeau, Directrice générale adjointe à la réussite, Commission Scolaire de la rivière du nord

Bev White, Director of Special Projects, Leading English Education and Resource Network (LEARN)

Staff

Administrative Team

Evelyne Cypihot, Grants Officer Dominique Lagüe, UQAM 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 Vanitha Pillay, LTK Trainer

Development Team

Manuela Bertoni, Creative Director Andrew Gardener, Developer Sébastien Hotte, Developer Jeong-Jea Hwang, Developer Steven Kanellopoulos, Developer Nara Van Rossum, Developer Jonathan Wilansky, Developer Mimi Zhou, Developer

We'd like to thank all of our **partners** – our affiliate universities, Queen's University, CRIFPE, the Observatoire interdisciplinaire de création et recherche en musique (OICRM), as well as LEARN, the Quebec school boards, The Royal Conservatory, the Aga Khan Academies Unit, Evenko and *Decibel Magazine* to name a few.

Lastly, on behalf of all CSLP members, we extend a sincere thank you to all of our provincial and federal **funders**, along with our **donors** (for a complete list please refer to Part 2 of this Annual Report). Without their generous contributions, the CSLP's research and development projects would not be achievable.

Credits Design: Jonathan Wilansky Compilation and editing: Anne Wade, Pat Yetman, Dominique Lagüe, Manuela Bertoni



















http://www.concordia.ca/calp