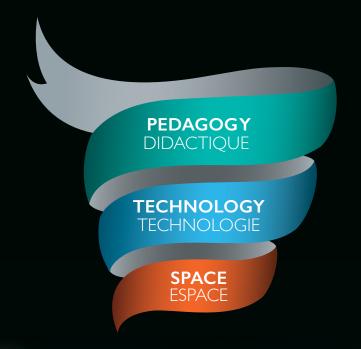
# Designing instruction for learning: blending PEDAGOGY, TECHNOLOGY and SPACE

Design pédagogique pour favoriser l'apprentissage: un heureux mélange de DIDACTIQUE, de TECHNOLOGIE et d'ESPACE



5<sup>th</sup> ANNUAL SALTISE CONFERENCE

5° CONFÉRENCE **ANNUELLE SALTISE** 

06.03.2016

03.06.2016





FOR COMPLETE DETAILS POUR PLUS D'INFORMATIONS ww.saltise.ca | info@saltise.ca

Supporting Active Learning & Technological Innovation in Studies of Education

En collaboration avec

UQÀM Département de didactique

FACULTÉ DES SCIENCES DE L'ÉDUCATION Université du Québec à Montréal

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# **UQAM Internet Access**

USERNAME: saltise1

PASSWORD: K787W2Rv

Please be sure to use the "**Visiteurs UQAM**" internet network and follow directions on the connection page.

# **Accès Internet**

NOM D'USAGER: saltisel

MOT DE PASSE: K787W2Rv

Assurez-vous d'utiliser le réseau Internet "**Visiteurs UQAM**" et suivre les directions sur la page de connexion.

Join the discussion on Twitter #SALTISE



Partagez avec nous sur Twitter #SALTISE











# Welcome

On behalf of the Faculty of Education, I welcome you to l'Université du Québec à Montréal. UQAM is proud to host the 5th annual SALTISE Conference "Designing Instruction for Learning: Blending Pedagogy, Technology and Space". I warmly thank the entire SALTISE team as well as professors in our Faculty of

Education, who are a part of the organizing committee: Diane Leduc, Anastassis Kozanitis and Alain Stockless.

The twenty-first century's ever-changing technological environment calls upon us to consistently revise and update our teaching approaches. Such advances have inspired SALTISE members to move forward in their research of active learning pedagogy and innovations in education. The conference presentations and workshops will highlight such cutting edge work and are sure to enrich our practices.

Our campus is in the heart of the city. Make the most of your visit to UQAM. Discover the cultural expansiveness of our university community and explore the surrounding Latin Quarter and Quartier des spectacles.

# **Enjoy the conference!**

Monique Brodeur

Dean

Faculty of Education

# Mot de la doyenne

Au nom des membres de la Faculté des sciences de l'éducation, je vous souhaite la bienvenue à l'Université du Québec à Montréal. L'UQAM est fière d'accueillir cette année le 5° colloque annuel de SALTISE, qui a pour thème « Design pédagogique pour favoriser l'apprentissage : un heureux mélange de didactique, de technologie et d'espace ». Je remercie chaleureusement toute l'équipe de SALTISE, ainsi que les professeurs de la Faculté, Diane Leduc, Anastassis Kozanitis et Alain Stockless, qui ont conjointement organisé l'évènement.

L'univers technologique du XXI<sup>e</sup> siècle invite à revoir nos approches pédagogiques, ce qui mobilise les membres de SALTISE. Stimulées par les recherches plus larges portant sur la psychologie et le développement cognitif, en passant par l'enseignement des sciences et de la technologie ou l'éducation adaptée, les présentations et les discussions qui se dérouleront dans le cadre de ce colloque seront inspirantes pour l'enrichissement de nos pratiques.

Notre campus est au cœur de la cité. Profitez de votre passage à l'UQAM pour découvrir le foisonnement culturel qui rythme notre vie universitaire, que ce soit dans le Quartier latin ou le Quartier des spectacles.

# Bon colloque!

Monique Brodeur

Doyenne

Faculté des sciences de l'éducation







# Information about SALTISE

SALTISE - SUPPORTING ACTIVE LEARNING & TECHNOLOGICAL INNOVATION IN STUDIES OF EDUCATION is a community of instructors and professional development staff from English and French educational institutions within the Greater Montreal region, as well as other regions of Quebec. This *learning community* is brought together because of the shared goals of supporting pedagogical change involving innovations in instruction and leveraging the use of educational technology to promote learning.

SALTISE owes its creation to a consortium composed of science faculty and educational researchers from Montreal area educational institutions: Dawson College, John Abbott College, Vanier College and McGill University; and was funded by a Chantier 3 institutional grant from Quebec's Ministry of Education (Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie). It acknowledges and owes its continuation to the financial support of the Entente Canada Québec funded grant ALPIC, held by Dawson College. SALTISE also acknowledges the many colleagues who have contributed and continue to contribute to its growth.

Currently, SALTISE has over 300 members from the different levels of education (primarily colleges and universities), from both English and French institutions. SALTISE organizes events and workshops designed to inform and share research results and emerging practices. Through its Mini-Grants Program, it supports educational practitioners who wish to develop methods and technologies to increase students' learning. Its redesigned website is intended as both a repository of information, and includes tools and inspirational ways to implement instructional innovations. Importantly, the SALTISE website aims to provide a venue for our community to make connections and engage in conversations around topics of educational research and practice. Finally, SALTISE hosts international and national scholars, and provides opportunities for local experts to share best practices in the area of active learning pedagogy and the use of technology through the annual conference.

### SALTISE FOUNDING MEMBERS:

- Roger Azevedo (now at North Carolina State University)
- Marielle Beauchemin (Vanier College)
- Robert Bracewell (McGill University)
- Murray Bronet (John Abbott College)
- Elizabeth Charles (Dawson College)
- Silvia d'Apollonia (Dawson College)
- Nathaniel Lasry (John Abbott College)
- Kevin Lenton (Vanier College)
- Ken Ragan (McGill University)
- Gale Seiler (now at Iowa State University)
- Chris Whittaker (Dawson College)

### SALTISE EXTERNAL ADVISORY BOARD

- Thérèse Laferrière (Laval University)
- Jim Slotta (OISE at the University of Toronto)

# A propos de SALTISE

SALTISE: SOUTIENT L'APPRENTISSAGE ACTIF PAR LA TECHNOLOGIE ET L'INNOVATION DE LA L'ENSEIGNEMENT est une communauté de pratique comprenant enseignants et professionnels œuvrant dans le domaine du développement professionnel. Nos membres sont des intervenant dans les établissements post-secondaires francophones et anglophones dans la région du grand Montréal, ainsi que d'autres région du Québec. Cette communauté a pour objectif de promouvoir l'apprentissage grâce aux innovations pédagogiques et à l'optimisation de l'utilisation des technologies éducatives.

SALTISE doit sa création à un consortium composé d'enseignants en sciences et des chercheurs en éducation provenant du: Collège Dawson, Collège John Abbott, Collège Vanier et de l'Université McGill. L'existence de SALTISE provient aussi d'une subvention institutionnelle Chantier 3 du MELS. Présentement, SALTISE est soutenu en partie grâce à l'appui financier d'ALPIC – un regroupement au Collège Dawson financé par l'Entente Canada Québec. SALTISE reconnaît aussi les nombreux collègues qui ont contribué et continuent de contribuer à sa croissance.

SALTISE compte présentement plus de 300 membres provenant de différents niveaux d'enseignement. Principalement centré aux niveaux collégial et universitaire, SALTISE comprend des institutions anglophone et francophone. SALTISE organise des événements et des ateliers visant à informer et partager les résultats de la recherche et les pratiques émergentes. Grâce à son programme de mini-subventions, il soutient des praticiens de l'éducation qui souhaitent innover, construire de nouvelles méthodes pédagogiques ou une utilisation novatrice de technologies pour accroître l'apprentissage des élèves. Son nouveau site web est destiné à la fois comme un référentiel d'informations, et comprend des outils et des moyens d'inspiration pour mettre en œuvre les innovations pédagogiques. Le site web de SALTISE vise à fournir un lieu pour notre communauté pour établir des connexions et engager des conversations autour de thèmes de recherche et de la pratique éducative. Par le biais de la conférence annuelle, SALTISE accueille des chercheurs nationaux et internationaux, et offre des possibilités pour les experts locaux de partager les meilleures pratiques dans le domaine de la pédagogie, de l'apprentissage actif et de l'utilisation de la technologie.

### LE COMITÉ FONDATEURS:

- Roger Azevedo (maintenant à North Carolina State University)
- Marielle Beauchemin (Collège Vanier)
- Robert Bracewell (Université McGill)
- Murray Bronet (Collège John Abbott)
- Elizabeth Charles (Collège Dawson)Silvia d'Apollonia (Collège Dawson)
- Nathaniel Lasry (Collège John Abbott)
- Kevin Lenton (Collège Vanier)
- Ken Ragan (Université McGill)
- Gale Seiler (maintenant à Iowa State University)
- Chris Whittaker (Collège Dawson)

### **CONSULTANTS EXTERNES**

- Thérèse Laferrière (Université Laval)
- Jim Slotta (OISE, Université de Toronto)



# Exploiter le numérique en enseignement supérieur

Programme court de 3e cycle en pédagogie universitaire et environnement numérique d'apprentissage

- >> Programme unique au Québec
- > Cheminements à distance ou hybride à temps partiel sur trois trimestres
- >> Programme conçu par une équipe de professeurs spécialisés

## **INFORMATION**

pcpun@uqam.ca | etudier.uqam.ca/pcpun

**UQÀM** | Faculté des sciences de l'éducation

Université du Québec à Montréal

Join the movement! SHARE your KNOWLEDGE

and **PRACTICES** in Higher

Education **PEDAGOGY** 



info@aqpc.qc.ca | aqpc.qc.ca/en

# Welcome from the 2016 SALTISE Conference Committee

The SALTISE Conference Committee welcomes you to the 5th Annual Conference, "Designing Instruction for Learning: Blending Pedagogy, Technology and Space".

We express our sincere appreciation to our host, UQAM, and the many individuals who have worked to make this year's conference possible. We acknowledge the financial contributions from the Entente Canada Québec funded grant ALPIC, held by Dawson College. We would also like to thank the following partners for their donations: McGill's Teaching and Learning Services (TLS), Tomlinson Project in University-Level Science Education (T-PULSE), and Engineering Faculty; at Concordia, Centre for Teaching and Learning; at UQAM, Faculté des sciences de l'éducation, département de didactique; and the Academic Dean's Offices at John Abbott College, Vanier College and Dawson College. Importantly, SALTISE acknowledges the support from our many colleagues who have contributed both in kind and financially to allow us to once again hold this annual event. We thank you all!

The committee has put together an exciting program with distinguished speakers, reports of principled, practical solutions and interactive sessions. We wish you a productive day of thinking about your practice and its relationship to educational research, and the sharing of this specialized growing expertise. Above all, we hope you will enjoy this fifth opportunity to come together, to learn from each other and to strengthen our network.

Sincerely, Elizabeth (Liz) Charles

# **Enjoy the Conference!**

### 2016 Conference Coordinators

Cathy Giulietti, Anastassis Kozanitis, Diane Leduc, Isabelle Lepage & Alain Stockless

### 2016 Conference Assistants

Devin Abrahami, Adamo Petosa, Emma Whitehall & Chao Zhang

### 2016 Conference Planning Committee

John Bentley (Concordia University), Michael Dugdale (John Abbott College), Alexandre Enkerli (VTÉ), Anastassis Kozanitis (UQAM), Brenda Lamb (John Abbott College), Maria Orjuela-Laverde (McGill University – TLS), Jim Sparks (Champlain College) & SALTISE executive

### SALTISE Executive

Co-Directors: Elizabeth (Liz) Charles (Dawson College) & Nathaniel Lasry (John Abbott College)

Members: Marielle Beauchemin (Vanier College), Murray Bronet (John Abbott College), Kevin Lenton (Vanier College), Ken Regan (McGill University)

# Mot de bienvenue du comité de la Conférence SALTISE 2016

Le comité de la conférence SALTISE vous accueille à la 5e conférence annuelle « Design pédagogique pour favoriser l'apprentissage : un heureux mélange de didactique, de technologie et d'espace »

Nous exprimons notre sincère gratitude à notre hôte, UQAM, et les nombreuses personnes qui ont travaillé à faire la conférence de cette année possible. Nous reconnaissons les contributions financières de « ALPIC » une subvention financée Entente Canada Québec, organisé par le Collège Dawson. Nous tenons également à remercier les partenaires suivants pour leurs dons: McGill's Teaching and Learning Services (TLS), Tomlinson Project in University-Level Science Education T-PULSE, and Engineering Faculty; Concordia's Centre for Teaching and learning; Faculté des sciences de l'éducation, département de didactique à l'UQAM et les bureaux du doyen académique au Collège John Abbott, le Collège Vanier et le Collège Dawson. Il est aussi important que SALTISE reconnaît le soutien de nos nombreux collègues qui ont contribué à la fois en nature et financièrement pour nous permettre de tenir une fois de plus cet événement annuel. Nous vous remercions tous!

Le comité a mis sur pied un programme passionnant avec des conférenciers distingués, des rapports de solutions pratiques fondées sur des principes et des sessions interactives. Nous vous souhaitons une journée productive de la réflexion sur votre pratique et sa relation avec la recherche en éducation, et le partage de cette expertise croissante spécialisée. Par-dessus tout, nous espérons que vous apprécierez cette cinquième occasion de se réunir, d'apprendre les uns des autres et de renforcer notre réseau.

# Profitez de la Conférence!

### Associate Members

Dawson ALC - Active Learning Community (Chris Whittaker - Co-Coordinator, Leigh Barnett-Shapiro, Melanie Doyle, Marie-Pierre Gosselin & Selma Hamdani)

CLAAC project - CLasses d'Apprentissage Actif: Bruno Poellhuber, Principal (Université de Montréal), Samuel Fournier St-Laurent (Collège Ahunstic), Louis Normand (Cégep Rosemont)

### **Technical and Logistics Support**

Graphic Designer (Program): Isabelle Kalekas Graphic Designer (Conference logo and poster): Éliza Lefebvre-Breton (UQAM) Web support at Dawson College: Elizabeth Roy & Jonathan Pearlman Communications and Support Staff at UQAM: Anik Veilleux and Magali Billard-Blanco

### Awards Committee

Kaila Folinsbee (Dawson College), Éric Francoeur (ETS) & Jim Sparks (Champlain College)

### **Proposals Selection Committee**

Marielle Beauchemin (Vanier College), Michael Dugdale (John Abbott College) & Kevin Lenton (Vanier College)



# **Location of Events**

### **EVENTS WILL BE HELD AT:**

Université de Québec à Montréal (UQAM) 405 St. Catherine St. East H2L 2C4

Tel: 514-987-3000

### PARKING:

There will be no parking available on campus.

UQAM is located in the heart of downtown Montreal and is accessible by public transit – Metro Station "Berri-UQAM"

### NAME TAGS & REGISTRATION:

Available on the day of the Conference in front of salle Marie-Gérin-Lajoie in the Pavillon Judith Jasmin (J) (see campus map)

DIRECTIONS TO UQAM: see website: http://carte.uqam.ca/

KEYNOTES (MORNING AND AFTERNOON): will be held in salle Marie-Gérin-Lajoie in the Pavillon Judith Jasmin (J)

AWARDS: same as above

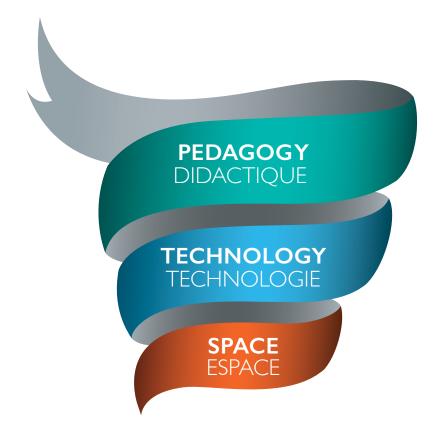
CONFERENCE SESSIONS: will be held in the Pavillon des Sciences de la gestion (R) (see schedule for room assignments)

POSTER SESSIONS: Atrium of Pavillon Hubert-Aquin (A) - Metro level

HEALTH BREAKS: lounge area of Pavillon des Sciences de la gestion (R) – Metro level

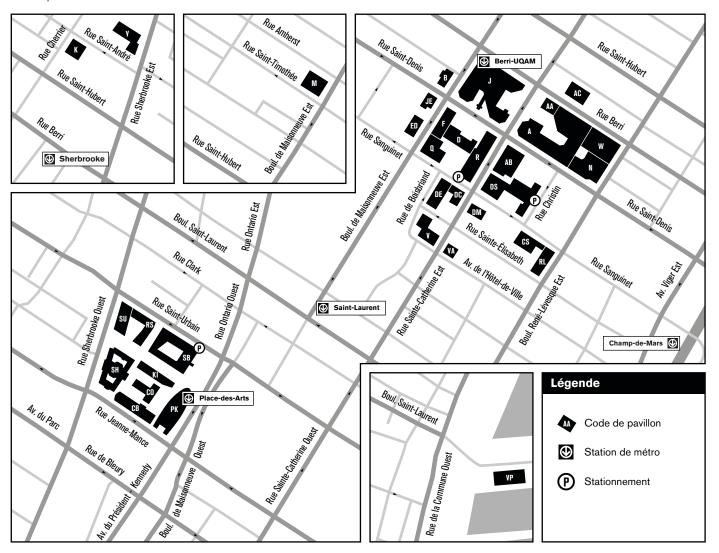
LUNCH: Pavillon Hubert-Aquin (A) – Metro level, room A-M640

WINE AND CHEESE RECEPTION: Pavillon Hubert-Aquin (A) - Metro level, room A-M640



### L'UQAM au centre-ville

www.uqam.ca



# Legend

# A Hubert-Aquin

400, rue Sainte-Catherine Est

- Poster Session
- Lunch
- Wine and Cheese (outdoors weather permitting)

## J JUDITH-JASMIN

405, rue Sainte-Catherine Est

- Registration Table
- Keynote
- Award Ceremony

# R Sciences de la gestion

315, rue Sainte-Catherine Est

- Conference Sessions (various classrooms)
- Health Breaks
- Kiosks

# P Stationnement - Parking

- paid parking available (limited spaces)



# Special Award



SALTISE IS PROUD TO ANNOUNCE THIS YEAR'S RECIPIENT OF OUR SPECIAL AWARD FOR EXCEPTIONAL CONTRIBUTIONS TOWARD OUR COMMUNITY OF PRACTICE.

The 2016 Pedagogical Innovation and Lifetime of Contribution Award is presented to PROFESSOR KENNETH J. RAGAN.

Kenneth J. Ragan is a Professor at McGill University's Physics Department where he holds the William C.

Macdonald Chair in Physics. His physics research centers on gamma-ray astrophysics and includes collaborations with the Fred Lawrence Whipple Observatory of the SAO (Smithsonian Astrophysical Observatory) and the VERITAS (Very Energetic Radiation Imaging Telescope Array System) project. Professor Ragan's interest also extends to the development of pedagogical approaches for his undergraduate physics courses, notably: PHYS 101 (An Introduction to Mechanics for the Life Sciences) and; PHYS 131 (Mechanics and Waves). Enrollment for the Mechanics course often reaches over 600 students. Professor Ragan has been engaged in making large enrolment courses more successful by adopting active learning strategies such as peer-instruction. He has been the recipient of several prestigious teaching awards: In 2007 he was awarded the J.D.

Jackson Award of Excellence in Teaching (McGill's Department of Physics); in 2011 the Faculty of Science's Leo Yaffe Award for Excellence in Teaching; and in 2013 the Principal's Prize for Excellence in Teaching. In addition, Professor Ragan gave the keynote address at the 2009 McGill Workshop on "Learning to Teach", hosted by the Faculty of Graduate and Postdoctoral Studies (GPS) and Teaching and Learning Services (TLS).

Professor Ragan's contribution to the SALTISE community predates the creation of a formal community. His participation on the Chantier 3\* grant that launched SALTISE in 2011 was an essential element to its successful start, and he has been an active member on the SALTISE Executive Committee since. His openness to work collaboratively with the Education faculty and Learning Sciences researchers from the college-level has been critical in helping our Community gain credibility among university faculty. Professor Ragan has been a role model exemplifying how university and college faculty can work towards the common goal of improved pedagogical implementations.

Ken's keen intellect, open-mindedness and strategic planning are important talents which he has brought to SALTISE community. It has been a true pleasure to work with him over the last five years and we greatly value his continued enthusiasm and participation. Ken's colleagues, former students and members of McGill's Teaching and Learning Services have sent messages in support of our selection. We are pleased to showcase some quotes:

Peter Grutter, Chair of the Physics Department, McGill

Ken Ragan brings a scholarly, evidence-based scientific approach to teaching by systematically implementing and critically analyzing classroom innovations. As an excellent teacher of many different courses he is able to validate and transform these scholarly insights into practice, thereby exiting and deeply influencing thousands of students, from undergraduates to graduate students.

Laura Winer, Director Teaching & Learning Services (TLS), McGill

Ken brings to all he does the skepticism of a scientist and the energy of a hockey player. He is always actively looking for new approaches to teach his 600+ first year courses, and is committed to finding ways to engage and interact with all his students... As this award recognizes, Ken contributes to the broader teaching community; he is unfailingly generous in sharing his experiences with colleagues across disciplines and across institutions.

Jonathan Guillimette, former student and TA, currently instructor in Physics at John Abbott College

As his TA, Ken always gave me plenty of room to experiment with new activities or teaching methods during the tutorials or labs of his very large classes. His open attitude towards grad students testing out what they thought might work better for the students made being his TA a truly instructive experience... I also got to know Ken much better through T-PULSE (Tomlison Project in University Level Science Education) and it is with this collaboration that I felt his desire to help change things and answer questions about students transpired the most.

<sup>\*</sup> Program: Projet Interordre – Programme de collaboration universités – collèges (Chantier 3) Project Title: L'appel à la technologie et à l'innovation pour parfaire l'enseignement des sciences

# **Keynote Speakers**

STEPHEN DOWNES

"The Final Frontier: Space"

Location and time: Salle Marie-Gérin-Lajoie

@ 8h45 - 9h25



### **BIOGRAPHY**

STEPHEN DOWNES is a specialist in online learning technology and new media. Through a 25-year career in the field, Downes has developed and deployed a series of progressively more innovative technologies, beginning with multi-user domains (MUDs) in the 1990s, open online communities in the 2000s, and personal learning environments in the 2010s. Downes is perhaps best known for his daily newsletter, OLDaily, which is distributed by web, email and RSS to thousands of subscribers around the world, and as the originator of the Massive Open Online Course (MOOC). He is a leading voice in online and networked learning and has authored learning management and content syndication software. He is known as a leading proponent of connectivism, a theory describing how people know and learn using network processes. Hence he has also published in the areas of logic and reasoning, 21st century skills, and critical literacies.

Downes is also recognized as a leading voice in the open education movement, having developed early work in learning objects to a world-leading advocacy of open educational resources and free learning. Downes is widely recognized for his deep, passionate and articulate exposition of a range of insights melding theories of education and philosophy, new media and computer technology. He has published hundreds of articles online and in print and has presented around the world to academic conferences in dozens of countries on five continents.

Home page: http://www.downes.ca

# KATERINE BIELACZYC, PH.D. CLARK UNIVERSITY

"Learning from our own designs: Generating knowledge from practical implementations"

Location and time: Salle Marie-Gérin-Lajoie

@ 13h35 - 14h30



### **BIOGRAPHY**

DR. BIELACZYC is an Associate Professor of Education and the Director of the Jacob Hiatt Center for Urban Education at Clark University. She received a B.Sc. Honours in computer science from the University of Edinburgh in Scotland, and a Master's and Ph.D. in education from the University of California at Berkeley. Dr. Bielaczyc's research involves collaborating with students, teachers, and school communities to investigate new approaches to teaching and learning. Her work focuses on developing means for supporting participants in working together as a knowledge building community to create knowledge regarding personal, pedagogical, and systemic transformation. Before joining Clark, she was Deputy Head of the Learning Sciences Lab at the National Institute of Education in Singapore, Assistant Professor at Harvard University jointly in Teacher Education and Technology in Education, a Senior Scientist at Bolt, Beranek, and Newman, and Director of the Learning Communities Research Group at Boston College. Dr. Bielaczyc has also collaborated on educational projects in Europe and South America.

http://www2.clarku.edu/education/hiatt-center-urban-education/



# Program at a Glance

# Program at a Glance

12h15-13h45 Lunch (Atrium of Pavillion Hubert-Aquin, Metro Level)

Issues 3.5 (R-R150) Issues 3.5 (R-R150)  mmunity Views of Science": An ructional System for Science appears to rections we classrooms, easy and fast bruno Poellhuber (U. Montréal) Samuel Fournier St-Laurent (Ahuntsic) (A. Moderating the appei à un je dagogique appei à un je dagogique onte le la	appe portc L) fracti
Issues Issues Issues mmunity V ructional S cation Samue Samue	RAC Community of Practice Orzu Kamolova (Champlain SL) Chair: TBA
(Salle Marie-Gérin-La, (Salle Marie-Gérin-La, 3.4 (R-R130) 3.4 (R-R130) 4.4 (R-R130) 4.5 (Marianopolis) 7 Tools: Part of a morics courses Fatholahzadeh et al. (Warianopolis) 7 Tools: Part of a morics courses 8 Tools: Part of a morics courses 9	8
or Pavillion Hubert-Aquin, Met  1.4h30  PEDAGOGY: PRACTICAL TOO  Session 3.4 (R-R130)  Session 3.4 (R-R130)  Use of Flashcards and proble sorting activities in our flippe first year mechanics courses Baharak Fatholahzadeh (Mariann Active Reading Tools: Part of Teacher's Took Kit Judy Ingerman, Kim N Using Smartpens to Promote Deeper Learning: Can the cognitive processes involved writing be leveraged with the of new tools Johnathan Pascale Wa	vera;
AFTERNOON KEYNOTE SPEAKER: Katherine Bielaczyc (Salle Marie-Gérin-Lajoie)  AFTERNOON KEYNOTE SPEAKER: Katherine Bielaczyc (Salle Marie-Gérin-Lajoie)  TECHNO-PEDAGOGY: HOW-TO- PROMOTE COLLABORATION Session 3.3 (R-M150) Session 3.3 (R-M150) Session 3.4 (R-R130) Session 3.7 (R-M150) Session 3.7 (R-M150) Session 3.7 (R-R130) S	engineering courses  Fmily Sheepy (Concordia)  Jeremy Cooperstock, Maria Orjuela  (McGill)  Chair: TBA
SPACES: MOOCS Session 3.2 (R-M140) Transforming face-to-face on- campus courses into MOOCs: Challenges and apportunities Claire Walker, Adam Finklestein (McGIII) Promoting Active and Engaged online learning in a Blended course Allicia Cundell (Concordia) Sameer Bhatnagar et al. (Dawson)	DALITE: Dawson to EdX Sameer Bhatnagar et al. (Dawson) Chair: TBA
CHALLENGES: HOW TO SUPPORT CHANGING PRACTICE (Symposium) Session 3.1 (R-M160) When the going gets tough: Resilience in the face of failure Tom Haffie (Western) Brian Seivewright (Dawson) Rob Cassidy (Dawson)	Discussant: TBA
S noissa2 14h45—15h50	

16h00–16h45 Award Presentations (Salle Marie-Gérin-Lajoie)
16h45 – 18h00 Wine & Cheese (Atrium of Pavillion Hubert-Aquin, Metro Level)

# Posters:

- Feasibility of 3-D Printing an Inguinal-Canal Model for Learning Anatomy Geoffroy Noel, (McGill)
- 2. How the use of Design Thinking and Active Learning can lead to finding solutions to contemporary issues, Tim Miller (Dawson)
  - 3. Biology Education Research (BER) Across Canada: 2000 to 2015
- Omer Yusuf, Linda K. Dunn, Tom Haffie (Western)
  4. How do you create e-feedback on the iPad and what apps should you use?
- Stéphanie Facchin, Simon Brien, Evelyne Abran (Cégep à distance)
  5. Problem-Solving Pedagogy in an Interactive Learning Space, Deborah A. Davis (BSU)
  6. The Tomlinson Engagement Award for Mentoring at McGill University results in better
- engagement from students, David Noble Harpp, Faygie Covens (McGill)
  7. When Free and Inexpensive Doesn't Mean "Cheap": Adaptech Research Network's
- 8. Debate-Induced Active Learning Kit, Jean-Michel Sotiron (JAC) 9. Incorporating Google for Education and Google Expedition Pioneer, Matt Hill (JAC)

Free and/or Inexpensive Technology Database, Jillian Budd (Dawson)

# Legend:

Ahuntsic = Collège Ahuntsic Bishops = Bishops University BSU = Ball State University

NRC = National Research Council of Canada

Marianopolis = Marianopolis College

McGill = McGill University

Sherbrooke = Université de Sherbrooke

Cégep AL = Cégep André-Laurendeau

Champlain SL = Champlain College Saint-Lambert Concordia = Concordia University

GIM = Cégep de la Gaspésie et des Îles JAC = John Abbott College

Lasalle = Lasalle College

U. Laval = Université de Laval U. Mass. = University of Massachusetts Boston

s U. Montréal = Université de Montréal UQAM = Université du Québec à Montréal Vanier = Vanier College



# **SALTISE PROGRAM**

# **MORNING KEYNOTE (8h45 – 9h25)**

### STEPHEN DOWNES - The Final Frontier: Space

The concept of learning design is typically represented as a form of pedagogical design, to the effect that learning technology is devoted to the selection and presentation of a series or sequence of resources to support the development of a learner toward a predefined learning outcome. But while the learning design based approach is characteristic of formal learning, the bulk of learning online is informal, and rather than enter into a predefined pedagogical space, learners are seeking means to accelerate their own learning path or accomplish immediate and pressing tasks. In such cases, the learning design metaphor is inappropriate, as it is typically not timely or responsive. In the case of personal or informal learning, the learning environment is a better metaphor. But this idea of a learning space, as opposed to a learning design, is largely unexplored in instructional technology. How can we create an environment that supports the learner who needs immediate and short-term learning solutions as well as longer-term, but unpredictable, learning needs? The development of the personal learning environment is a response to this problem, and Stephen Downes explores the major issues and concepts underlying the field.

# MORNING SESSIONS SESSION 1: 9h30 – 10h35

# 1.1 Challenges: How to Use Peer-Feedback (Symposium)

LAWRENCE CHEN, MARIA ORJUELA-LAVERDE, CLAIRE TROTTIER (McGill University), SYLVIE DORE (ÉTS) - Using Peer-Feedback as a Teaching and Learning Tool

Peer-to-peer learning has been considered as one of five trends that will transform education by 2025 (Forbes Magazine, 2015). Peer feedback, on writing tasks, is a teaching and learning strategy used to develop students' critical thinking skills and writing competence, to engage students as active agents in their learning process, and to help them acquire important lifelong skills (Falchikov, 2005; Nilson, 2010; Topping, 1998). This instructional strategy allows students to anonymously provide feedback on their peers' work and to assess the helpfulness of their peers' reviews. This panel will discuss different experiences using peerfeedback as an instructional tool in three very different contexts/ courses. They will also present analysis of students' perceptions of the strategy as well as instructors' reflections on their personal experiences. The symposium will engage the audience in a discussion of how we might best take advantage of this active learning method.

# 1.2 Pedagogy: Supporting teachers (Bilingual Session)

EVA BURES (Bishop's University) - Using electronic portfolio software to support the development of teaching competencies

Portfolios can be used to support student teachers to synthesize their learning from courses and from practice teaching (Darling-Hammond & Snyder, 2000; Darling-Hammond, 2006; Reeves, 2006), improving their professional competencies overall as well as specifically supporting their skills in reflective practice including goal-setting, self-assessment and critical analysis. The positive impact of portfolios on reflective practice has been reported in an ever-growing number of studies (e.g., Strudler & Wetzel, 2008; Yao, Aldrich, Foster & Pecina, 2009). Not only did these studies find increases in teachers' reflective activity and the perceived value of reflection, but also improved understanding of teaching standards and conceptions of subject matter teaching and learning.

# LOUISE MÉNARD (UQÀM) - La formation et l'accompagnement pédagogiques des nouveaux professeurs produisent-ils les effets escomptés?

Les universités offrent souvent aux nouveaux professeurs de suivre une formation pédagogique d'une quinzaine d'heures. Mais quels sont les effets de cette formation sur les pratiques enseignantes des professeurs? Qu'advient-il si un accompagnement pédagogique est prodigué régulièrement? Cette communication présente les résultats de deux années de recherche réalisée par observation et par entrevue auprès d'une trentaine de nouveaux professeurs provenant de trois universités canadiennes.

# SARAH MARSHALL (McGill University) - Active Learning for Active Physical Therapists

This research project centres on the teaching of physical therapy (PT) at McGill, with specific interest in what link there might be between attitudes, beliefs and characteristics of faculty members, with the use (or not) of active learning strategies in teaching. Results will feasibly be applied contextually to work in the educational setting of the PT Program.

# 1.3 Spaces: Collaborative Platforms

NADIA NAFFI, ANN-LOUISE DAVIDSON (Concordia University) - Exploiting Facebook and Google Docs in Online Higher Education and Unleashing the Power of Asynchronous Work in a Problem-Based Learning Approach

Ensuring interactions between the teacher and the students and between students is both a challenge and a strength of online learning, especially in courses where the instructors and the students never meet in person. In this presentation, we discuss the power of Facebook and Google Docs to enhance communication, sharing ideas and collaborative work in an online course about digital technologies and advanced teaching methods designed using a problem-based learning (PBL) approach.

# RHYS ADAMS, KEVIN LENTON (Vanier College) - Co-designing and implementing smart and visual physics activities

We present active learning based physics activities used within the Smart Amp and Visual Classrooms platforms. Students work in collaborative team spaces, done in- and out-of-class, where they can upload material, comment on each other's contributions and modify their contributions. We report on how the activities were co-designed by a team of teachers, taking into consideration the constraints and affordances of the different platforms, and how they promoted student engagement.

# GARY PAVLECHKO, ANGELA NICKOLI (Ball State University), LESLIE SCHNEIDER (Visual Classrooms) - Strengthening Parallel Learning Though Pedagogy, Learning Space Design, Technology & People

Ball State University established the Interactive Learning Space Initiative to challenge the culture of teaching and learning in higher education. The presenters will discuss this work and pilot programs of active learning technologies, such as Visual Classrooms, that support connections between people and content through technology.

# 1.4 Pedagogy: Bringing Real World Issues

# JOEL TRUDEAU (Dawson College) - Passion, Process, and the Well-Posed Problem: Experiments in STEAM Education

A core concern for the advancement of science is the well-posed problem which if properly formulated can be guaranteed a solution at some definite future time. In standard textbook treatments of STEM fundamentals, students are presented with the definiteness of well-posed problems and their outcomes. This partial view tends to undervalue reformulations and discarded hypotheses as important precursors to resolvable propositions, and as critical process elements needed to tackle open-ended problems. This talk explores this aspect of creative problem solving in a STEAM and learning community context with examples from SPACE, a Dawson College initiative which seeks to expand academic discussion and collaboration beyond the classroom and across the disciplines. Lessons from frontier science, engineering, design-thinking and maker culture are blended with those of inquiry and passion-based learning to demonstrate how student learning and engagement is enhanced in this framework.

# DREW BUSH, RENEE SIEBER (McGill University) -Technology-enabled Inquiry Climate Change Learning: Examining Group Work with Realistic Scientific Tools

We examine how the use of a National Aeronautics and Space Administration (NASA) global climate model (GCM) shaped the learning of 79 students in two six-week science courses taught in Montreal, Quebec. Students working with Columbia University's Educational Global Climate Model (EdGCM) significantly increased diagnostic exam scores pre to post and results concluded a deeper conceptual understanding. Our analysis of classroom work speaks to the best pedagogical practices for using realistic scientific technology.

# CHRISTOPHER GREGG (Vanier College) - Training Students to do Research: The Challenges and Benefits of offering Research Stages for Cégep Science Students

The research opportunities available to students at the CEGEP level is often limited and not a good representation of what they will be doing if they pursue careers in science. The Research Methods in the Sciences course being offered at Vanier College includes a lab component where students work in the lab of a university professor and a theory component wherein students are trained to navigate scientific literature.

# 1.5 Special Topics: Important Concerns in Education (Bilingual session)

# ANILA ASGHAR, YING-SYUAN (ELAINE) HUANG, KEN ELLIOTT, JAN NOVAK, PHIL RICHIE (McGill University) - Assessing Secondary Students' Conceptual Understanding of Technology

In this presentation, we will share a set of diagnostic items related to specific technological concepts. Science teachers can use this method to probe their students' initial understandings of principles of engineering and technical design to plan their instruction in response to students' understanding. The diaganostic items on the technology side were administered to local Francophone and Anglophone secondary students to ascertain their intuitive or alternative ideas about key technology principles and concepts. The data obtained through these diagnostic items will be discussed in this presentation.

# THÉRÈSE LAFERRIÈRE (Université Laval) - Farther reaches of digital equity: The case of post-secondary education

In 2003, the World Summit on the Information Society (UNESCO) declared, "[the] common desire and commitment to build a people-centered, inclusive and development-oriented Information Society where everyone can create, access, utilize and share information and knowledge." Have undergraduate students contributed to the creation of knowledge in Quebec



postsecondary educational institutions? What have been the facilitating conditions? What have been the hindering conditions? What's next?

LAURA KING, ALEX LUSSIER (Cégep André-Laurendeau) - Joindre l'utile à l'agréable: l'utilisation des résultats de recherche afin d'enrichir l'enseignement au collégial

En 2014, Adaptech a effectué un sondage auprès de 311 cégépiens au sujet de l'utilisation des technologies par leurs enseignants. Leurs réponses nous indiquent que l'utilisation des technologies en enseignement est souvent un grand avantage. Ces résultats peuvent être interprétés selon les principes de la conception universelle de l'apprentissage et instiguent une réflexion au sujet des approches pédagogiques que sont l'apprentissage actif et la classe inversée.

# 1.6. Mentorship: Peer2Peer Learning

ARMIN YAZDANI, KELLY PERLMAN, SONIA ISRAEL (McGill University) - Mentorship of Undergraduate Students by Graduate Students in Neuroscience

Undergraduate neuroscience programs establish the building blocks of a strong scientific foundation for students. Traditionally, theoretical and practical knowledge are acquired by means of lectures as well as hands-on laboratory work. Mentorship can be a powerful tool that assists students in overcoming barriers and reaching their academic goals. Here we present a practical mentorship approach focused on eight core components yet personalized to meet the individual students' needs.

# ALICE CHERESTES, DAVID TITLEY-PELOQUIN, FERNANDO ALTAMURA (McGill University) - Peer Instruction in the Science Classroom: A Different Perspective

By understanding the direct impact of the Tomlinson Engagement Award for Mentoring (TEAM) program--a different method of peer instruction--on the peer facilitators, we are hoping to make any changes necessary to our program so the first year undergraduates can continue to benefit from strong support strategies.

# MARIE-PIERRE GOSSELIN, MELANIE DOYLE, SELMA HAMDANI (Dawson College) - Active Learning: A How-to Guide in Department Collaboration

This presentation will discuss the experiences of psychology colleagues who decided to make active learning (AL) more accessible for their department. They will explain their journey, beginning with the creation of a low-tech AL classroom, and the process by which they gain knowledge and experience on AL pedagogy. These insights can be useful for teaching departments who want to take the first steps towards implementing AL, but are not sure where to start.

10h35 – 10h50 Break & Refreshments

SESSION 2: 10h50 – 12h15

# 2.1 Challenges: How to Design Blended Learning Programs (symposium)

SAWSEN LAKHAL (Sherbrooke University), DIANNE BATEMAN (Champlain College), WILMA BROWN (Vanier College), SUSAN AJERSCH (John Abbott College) - Blended Format in the Master Teacher Program

The Master Teacher Program (MTP) of the Université de Sherbrooke is a graduate program designed for teachers in Anglophone colleges in the province of Quebec. The Blended format that was adopted as the course delivery mode of this program will be described and discussed, along with its advantages and its challenges. That format, however, also presents limitations in the pedagogical approaches that can be used and offers teachers challenges when integrating online students and face-to-face students during synchronous learning classes. In order to address these issues, the graduate program committee has developed some innovative strategies. The intent of this symposium is to present the MTP program, the Blended format of the MTP, and the strategies developed to support this format. The participants will also be invited to describe the context of their own programs, identify the difficulties and challenges they face in blended and online learning, and consider the strategies put forward by the graduate program committee that might help them expand and enhance their own teaching practices.

# 2.2 Technology: Videos to Enhance Learning (Bilingual Session)

CAROLINE CORMIER, VÉRONIQUE TURCOTTE (Cégep André-Laurendeau) - Pratique partagée d'un modèle d'implantation de la classe inversée utilisant des vidéos éducatives en chimie

La classe inversée est utilisée par les enseignants pour libérer du temps de classe et rendre les étudiants actifs dans leur apprentissage. Dans cette présentation, nous discuterons d'un modèle de mise en œuvre de la classe inversée que nous employons dans plusieurs cours de chimie. Nous présenterons des recommandations sur le tournage des vidéos utilisées pour la classe inversée et sur la façon dont nous occupons le temps de classe.

# EDWARD W. AWAD (Vanier College) - *Interactive Videos in Biology Flipped Instruction*

In flipped instruction, video is the most prevalent method of conveying content to students. However, the use of videos as instructional tools has its limitations (eg, passive experience and lack of analytics). Emerging tools promise to convert passive

video watching into an active learning experience through the integration of assessment tools and analytics capabilities. The usability and usefulness of such interactive video tools in flipped biology courses will be presented.

YANN BROUILLETTE (Dawson College) - Video as a tool for student engagement.

With the help of this year's SALTISE Mini-Grant, two collections of short chemical experiment videos have been produced to illustrate a series of exhilarating chemical processes. Each CHEM CURIOUS video is free, accessible online (and on smartphone devices), and focuses on chemical reagents, reactions and macroscopic observations. Every new Chem Curious YouTube clip shows a popular scene from a movie, TV show or comic book. The scene is subsequently mimicked in the lab and explained using chemistry. In attempting to discern the science within the magic, any student can become a chemistry enthusiast!

PATRICK CHARLAND, YANNICK SKELLING (UQÀM) - Apprendre réactivement ou passivement à l'aide d'un jeu vidéo sérieux?

La présente étude a pour but d'investiguer, à l'aide de données psychophysiologiques, la pertinence de la mise en action d'apprenants placés devant un jeu vidéo sérieux en physique mécanique.

# 2.3 Pedagogy: Designing for Learning

BRUNO POELLHUBER (Université de Montréal) - Designing active learning activities with the support of a pedagogical scenario tool/Scénarisez une activité d'apprentissage actif avec l'outil d'aide à la scénarisation pédagogique

For some time now the authors of this presentation have been developing a tool for screenwriting active learning activities using ICT (Information Communication Technologies) as part of the Mathema-ICT project. Recently, a free web version, produced in collaboration with the CCDMD is available (http://oas.ccdmd.qc.ca). This tool guides users step by step through the creation of an active learning scenario (i.e., an active learning activity). This tool provides users with the theoretical and practical support at every step, and includes a review stage. Participants of this interactive session will have the opportunity to initiate the preparation of a scenario thereby have a tangible take-away to continue building an active learning experience for their students.

Depuis plusieurs années, nous travaillons au développement d'un outil d'aide à la scénarisation d'activités d'apprentissage actif recourant aux TIC dans le cadre du projet Mathéma-TIC. Depuis peu, une version Web gratuite, réalisée en collaboration avec le CCDMD, est disponible (http://oas.ccdmd.qc.ca).

Cet outil guide les utilisateurs pas à pas dans la création d'un scénario d'apprentissage actif, en donnant de l'assistance pratique et théorique à chacune des étapes et en offrant une étape de révision. Les participants pourront amorcer la préparation d'un scénario.

# 2.4 Pedagogy: Implementing Active Learning

JUNKO SHIMOYAMA (McGill University), CHRISTOPHER FUHRMAN (ÉTS) - How to get "Psyched" over 'Would you publish it?' – Using debates to develop critical thinking

During this session we will introduce two different experiences on the use of debates as a teaching strategy. Professor Junko Shimoyama, from the Department of Linguistics at McGill, will share her experience on the use of debates in an upper-level undergraduate course in linguistics (syntax). Professor Christopher Fuhrman, from the Department of Software and IT Engineering, at ETS adapted Professor Shimoyama's strategy to be used in a graduate engineering course. This presentation will introduce lessons learned from both instructors, students' feedback, and advice on do's and don'ts to professors interested in using this strategy in their courses.

IRENE YUKHANANOV (University of Massachusetts), LESLIE SCHNEIDER (Visual Classrooms) - Success by Design: Active Learning Approaches in Large Enrollment Classrooms

Research suggests that audience attention in lectures starts to wane every 10-20 minutes. Incorporating active learning techniques will increase student motivation and encourage participation. The eLearning and Instructional Design (eLIS) Team at UMass Boston has been exploring technologies and pedagogies to address this challenging issue by teaming up with Visual Classrooms learning specialists to pilot the tool in a real classroom. This workshop is ideal for faculty interested in seeking information and practical approaches to implement active learning to engage students in large lecture classrooms.

GENEVIEVE ABOUD, KORY GOLDBERG (Champlain College) - Implementing active learning principles in Environmental Education

Based on the Action Research (AR) model, and in concert with students from Colleges Lafleche and Merici, this project involved the active participation of Champlain College students in the conceptualization, planning and implementation of sustainability projects on campus and/or in their communities. Examples included the design of a *Green Wall* in the college library, a *Champlain Carpool* Facebook page, the *Distribution of Spider Plants* to participating teachers across campus, the creation of seasonal cookbooks, among other interesting projects.



# 2.5 Special Topics: UDL as Alternative Pedagogy

CATHERINE LOISELLE (CRISPESH), ROBERTA THOMSON (McGill University) - Designing Active Learning with a UDL Mindset

Models of designing Active Learning spaces and instructional practices, have been gaining momentum in post-secondary settings across Quebec. Simultaneously, the Universal Design for Learning framework has been acquiring followers. These two pedagogical practices can enhance each other but often they are perceived to be the same or a similar concept. This talk will explore how they can co-exist to further enhance learning outcomes for students.

MARY JORGENSEN, ALICE HAVEL (Dawson College) - Doing Ordinary Things Extraordinarily Well: Faculty Perspectives on Excellence in ICT and E-Learning Use in Colleges

Adaptech Research Network conducted a study examining faculty perspectives on excellence in ICT use and E-Learning in colleges. 114 instructors from two colleges completed a checklist and were interviewed regarding the technology they used in their teaching and the challenges they faced. Instructors were not always found to be using technology that students indicated work well for them, and the most prominent challenges cited by instructors fell under categories of technical and institutional problems.

ROBERTA THOMSON (McGill University), SUSIE WILEMAN (Dawson College) - UDL Support for Faculty: An Emerging Toolkit

Through a Quebec funded college-university collaboration, faculty across 5 English Montreal post-secondary institutions (Colleges – Centennial, Dawson, Marianopolis, John Abbott and McGill University) were interviewed on their perceptions and use of the Universal Design for Learning (UDL) framework. The final stage of this project is an emerging website (toolkit) to support faculty in their use of UDL in their pedagogy.

EVELYNE MARCIL, CATHERINE FICHTEN (Dawson College), LAURA KING (Cegep André-Laurendeau) – *Adaptech Research Network* 

PowerPoint presentations can be exiting and riveting. Regrettably, they can also be difficult for students to navigate. Using the principles of universal design, we offer a set of simple suggestions about creating PowerPoints which are accessible to the largest number of students. From font to background, images to animations, we cover the do's and don'ts of PowerPoint

presentations for any type of setting: classroom, online access, department meetings, conferences, etc.

# 2.6 Techno-Pedagogy: AL Tools

DOUGLAS SEEFELDT (Ball State University) - The Effectiveness of an iBook Textbook Surrogate in a Flipped Introductory History Course

An analysis of collaboration with a digital resources designer to experiment with flipping a U.S. History survey course from a typical instructor-centered, lecture-based, textbook-oriented course to one that is student-centered, discussion-based, and digital media-oriented will be presented. iBooks Author multi-media content modules were developed that enabled the delivery of interactive content via iPads—video and audio clips, image galleries, and timelines— to enhance the assigned textbook readings that had been traditionally included in static lectures and slides.

# JOSEPH DENT, ALANNA WATT (McGill University) - Application of online simulations to teach neurophysiology

Neurophysiology is fundamental to numerous disciplines at the undergraduate level. Learning neurophysiology typically requires that students master complex and dynamical biophysical concepts without the benefit of hands on experience of the relevant phenomena. A number of online neurophysiology simulations are now available, making it possible evaluate the value of incorporating in silico experiments into introductory neurophysiology classes. We report the ability of online simulations to improve learning outcomes.

MURRAY BRONET (John Abbott College), PETRA TURKEWITSCH (Cégep de la Gaspésie et des Îles) - Mining for Iron in our Diet

As part of Entente Canada–Quebec grant, students from John Abbott College and the Cégep de la Gaspésie et des Îles formed collaborative teams to solve real-life problems in a laboratory environment. Teams comprising two members from each college used a Wiki to create a formal lab report using chat, forum, and Google Drive tools. Participating students perceived the exercises as instructive and beneficial, and valued this unique learning opportunity.

ADAMO PETOSA (Dawson College), GIANCARLO BROTTO, LAURA-LEE MANLEY (SMART Technologies) -SMART Amp

SMART amp is a web-based learning environment created by SMART Technologies. It offers a large virtual space or canvas, built on a Google platform, which allows students to quickly

construct knowledge and assemble information, individually, in groups, or as a class. Transitioning seamlessly between these different types of groupings means students can work both at home and in class, in low-tech and high-tech classrooms, and in different modes of collaboration.

12h15 - 13h45

Lunch

13h – 13h45

**Poster Session** 

## AFTERNOON KEYNOTE (13h45 - 14h30)

# KATERINE BIELACZYC - Learning from our own designs: Generating knowledge from practical implementations

Powerful work can happen when practitioners carry out research on their own implementations of educational innovations. In my keynote, I will discuss methodologies that support practitioners in taking an inquiry stance toward their enactments of new educational approaches. I will also discuss tools, such as the Social Infrastructure Framework (Bielaczyc, 2006), that provide a means for analyzing the design of a classroom's social and technical infrastructures (including learning activities, collaborative practices, and the organization of physical spaces). Through a deeper understanding of how to learn from their own designs, practitioners can better identify implementation issues, address challenges, and generate knowledge of how to get one's classroom onto a successful trajectory of change.

### AFTERNOON SESSION

### SESSION 3: 14h45 – 15h50

# 3.1 Challenges: How to Support Changing Practice (symposium)

TOM HAFFIE (Western University), BRIAN SEIVEWRIGHT & ROB CASSIDY (Dawson College) AND OTHERS - When the going gets tough: Resilience in the face of failure

In spite of our best intentions and careful preparation, educational innovations sometimes fail. With the aid of technology, such misadventures can be spectacular, very public and potentially traumatic for students and instructors. However, personal reflection on, and open discussion of, bungled learning environments can reveal powerful insights that are not available following implementations that "work". This panel will open up the conversation to include the audience in trying to come up with ways to address these important side effects of attempting to implement active learning pedagogies. All are welcome to join this discussion.

# 3.2 Spaces: MOOCs

### CLAIRE WALKER, ADAM FINKELSTEIN (McGill

University) - Transforming face-to-face on-campus courses into MOOCs: Challenges and opportunities

Transforming a face-to-face on-campus course into an online offering presents a significant challenge for the adaptation of learning materials and instructional design. Furthermore, transforming it into a Massive Open Online Course (MOOC) can be a particularly unique challenge. MOOCs are online courses that are offered at no cost, open to the public and often have thousands of participants.

# ALICIA CUNDELL (Concordia University) - *Promoting Active* and Engaged online learning in a Blended course

This presentation will look at how online activities were structured to engage students in online activities in a blended graduate seminar. Specifically, the instructor will demonstrate how the LMS and other web-based tools were used to provide opportunities for active and deep learning.

# SAMEER BHATNAGAR (Dawson College), JONATHAN GUILLEMETTE (John Abbott College) - DALITE Dawson to EdX

This presentation will demonstrate features of the Distributed Active Learning Integrated Technology Environment (DALITE), a novel LTI compliant application which allows Learning Management Systems to include an asynchronous peer instruction component as a part of their course. It has been successfully used in three different MOOCs on the edX plat- form (HarvardX, MITx, McGillx), and can also be used as a standalone web application by teachers leading classrooms of all sizes. This tool is not only a new type of formative assessment based on student self- explanations, but also a rich source of peer-assessed natural language data for educational research.

# 3.3 Techno-Pedagogy: How to Promote Collaboration (symposium)

CHRIS WHITTAKER (Dawson College) - How to Use Interactive Whiteboards (SMARTboards) to Promote Collaborative Learning: Lessons of Success

New technologies can lend themselves to supporting learning but how to leverage these affordances to create better collaboration is still a question to be addressed. Interactive whiteboards (often called by one of the brand names, SMARTboards) have become a common feature of classrooms but often used exclusively by the instructor and often used merely as projector. In this session we will break this stereotype and demonstrate how this technology can be used to benefit collaborative learning.



NATHANIEL LASRY & MICHAEL DUGDALE (John Abbott

College) - How to support teachers manage collaborative learning: GRASP a new tool for orchestrating group work

GRASP (Group Response Ambient Student Attendance System)

GRASP (Group Response Ambient Student Attendance System) supports instructors' efforts to manage classroom collaborative work and helps to ensure students are given the best opportunities to learn with active learning pedagogy; and, it provides a way to keep the teacher apprised of student progress and needs. In this session, participants will have an opportunity to experiment with this prototype open source mobile application technology and contribute to its ongoing design.

EMILY SHEEPY (Concordia University), JEREMY COOPERSTOCK, MARIA ORJUELA-LAVERDE (McGill University) – Encouraging Active and Collaborative Learning in Two Engineering Courses

We will present lessons learned from a case study of the implementation of instructional strategies to encourage active and collaborative learning strategies in two senior undergraduate/graduate engineering courses at McGill University. These strategies included: flipping the classroom, implementing Mazur's method of Peer Instruction using a cloud-based student-response system, team-based learning, peer- and self-assessment of assignments, and eliminating final exams.

# 3.4 Pedagogy: Practical Tools

BAHARAK FATHOLAHZADEH, RACHEL FAUST, ANDREW LEFCOE, DOMINIQUE PARADIS, MARGARET LIVINGSTONE, PATRICK ROGERS (Marianopolis College) -Use of Flashcards and problem sorting activities in our flipped first year mechanics courses

During the Winter semester, all Mechanics courses at Marianopolis College were taught using the flipped classroom approach. This project was achieved through the collaboration of 6 teachers. All participating teachers were flipping their classrooms for the first time. We applied for a SALTISE mini grant in order to produce flashcards for multiple choice conceptual questions used in class. We also used this grant to create some problem sorting activities which we hoped would enhance students' conceptualization and organization of problems. In this presentation, we will report on the outcome of these projects and their effectiveness.

JUDY INGERMAN, KIM MUNCEY, (Vanier College) - Active Reading Tools: Part of a Teacher's Took Kit

Active Reading Tools: Part of a Teacher's Took Kit is a project that is looking at and for strategies for teachers to help students read for greater understanding while taking minimal time away from the content they deliver. We look forward to sharing our findings and would appreciate input from other teachers on the strategies they use to accomplish these goals.

JOHNATHAN MINA, PASCALE WARMOES (LaSalle College) - Using Smartpens to Promote Deeper Learning: Can the cognitive processes involved in writing be leveraged with the aid of new tools

If recent research is to be believed, handwritten notes lead to deeper student learning. As such, how do teachers motivate students to use pen and paper in a 21st-century classroom? One possible solution to this is the use of smartpens. Indeed, by pairing up smartpens with tablets you can create a classroom environment conducive to deeper learning and transform traditional classroom settings into collaborative ones.

# 3.5 Special Topics: Methodological Issues

KAMRAN SHAIKH (National Research Council) - "Community Views of Science": An Instructional System for Science Education

Situated within a larger qualitative study of pre-service elementary teacher (N=55) epistemological beliefs, this paper will elaborate upon a particular subset of this data exploring an empirically examined instructional system, coined as 'Community Views of Science' (CVOS). Concepts worth highlighting will be the use of complex space analysis as a cognitive tool and the nature and use of psychophysiological methodologies and data for the advancement of pedagogy.

MADONA MOUKHACHE, BRUNO POELLHUBER (Université de Montréal), SAMUEL FOURNIER ST-LAURENT (Collège Ahuntsic) - Analyzing video observations in active classrooms, easy and fast

Active classrooms are interesting learning environments where students can work in teams and interact among each other. Analyzing the students' behavior in such classrooms is not that simple though. This communication will highlight the analysis of video observations conducted in active classrooms. Student engagement and use of technology results will be presented.

ORZU KAMOLOVA (Champlain College) - Moodle Platform Moderating the CERAC Community of Practice

At the Sommet sur l'Enseignement supérieur, in February 2013, it was announced that four CERACs (Centre d'expertise en reconnaissance des acquis et des compétences) would be created within the college network. We have worked to design and develop a virtual space for communication and collaboration

between these centers using Moodle (LMS) with the goal of supporting an online community of practice. We will discuss the development of the platform, which creates a space that brings together hundreds of pedagogical advisors in Recognition of Acquired Competencies (RAC), as well as twenty employees of the four CERACs and representatives from MESRS (Ministère de l'Enseignement supérieur, de la Recherche et de la Science).

# 3.6 Technology: Gamification (Bilingual Session)

MIKE BARCOMB, WALCIR CARDOSO (Concordia University) - Developing L2 Willingness to Communicate and Self-Regulation in a Gamified Course: Young Japanese learners' perceptions

The anxiety associated with learning to speak a second language (L2) during graded assignments is associated with decreased willingness to communicate (Baran-Lucarz, 2014). As a result, extra emphasis should be placed on ensuring that a learner's first contact with the L2 is "a positive experience" (Dornyei, 2001) and one that increases self-regulation (Andrade & Bunker, 2009). This study presents findings from a gamified course designed to motivate EFL students to speak English.

AVERY RUEB (Vanier College), WALCIR CARDOSO (Concordia University) - Serious Games in the Classroom: Reducing Foreign Language Anxiety through Role-Play

Ready to Negotiate, a second language digital game in 300 Quebec schools, aims to reduce Foreign Language Anxiety through the power of role-playing. In this digital game, students role-play buyers and sellers and negotiate with one another out loud for items such as cars, cell phones and even trips to space. A research study, led by Dr. Walcir Cardoso (Concordia University), has shown that the game helps increase students' willingness to communicate over a 4-week longitudinal study.

PATRICK CHARLAND, STÉPHANE CYR, MARTIN RIOPEL (UQÀM) - Évaluation de l'efficacité pédagogique des scénarios faisant appel à un jeu vidéo éducatif portant sur l'apprentissage des fractions au primaire

La communication vise à présenter les résultats d'une étude liée à l'évaluation de l'impact d'un jeu vidéo éducatif portant sur les fractions sur les apprentissages mathématiques d'élèves du primaire.

16h00 – 16h45 Award Presentations 16h45 – 18h00 Wine & Cheese

# **Posters:**

- GEOFFROY NOEL, IVRY ZAGURY-ORLY, W. ROBERT J. FUNNELL (McGill University) - Feasibility of 3-D Printing an Inguinal-Canal Model for Learning Anatomy
- 2. TIM MILLER (Dawson College) How the use of Design Thinking and Active Learning can lead to finding solutions to contemporary issues
- OMER YUSUF, LINDA K. DUNN, TOM HAFFIE (Western University) - Biology Education Research (BER) Across Canada: 2000 to 2015
- 4. STÉPHANIE FACCHIN, SIMON BRIEN, EVELYNE ABRAN (Cégep à distance) How do you create e-feedback on the iPad and what apps should you use?
- 5. DEBORAH A. DAVIS (Ball State University) *Problem-Solving Pedagogy in an Interactive Learning Space*
- DAVID NOBLE HARPP, FAYGIE COVENS (McGill University)
   The Tomlinson Engagement Award for Mentoring at McGill University results in better engagement from students.
- 7. JILLIAN BUDD (Dawson College) When Free and Inexpensive Doesn't Mean "Cheap": Adaptech Research Network's Free and/ or Inexpensive Technology Database
- 8. JEAN-MICHEL SOTIRON (John Abbott College) Debate-Induced Active Learning Kit
- 9. MATT HILL (John Abbott College) Incorporating Google for Education and Google Expedition Pioneer



# **SALTISE Mini-Grants**

The SALTISE Mini-Grant Initiative provides funding for innovative active learning initiatives. We prioritize projects from groups that work to use and promote active learning. Ideal projects include the development of collaborative activities or technologies that enhance active learning.

The SALTISE Mini-Grant Initiative is dependent on funding received by SALTISE. This year Mini-Grants provided up to \$2,000 in support for each project. The recipients for 2016 are shown below.

# **SALTISE Mini-Grant Recipients for 2016:**

RECIPIENT	Institution	TITLE OF PROJECT
Genviève Aboud and Kory Goldberg	Champlain College	Implementing Active Learning Principles in Environmental Education
Edward Awad	Vanier College	Interactive Videos in Biology Flipped Instruction
Yann Brouillette	Dawson College	Chem Curious POP Culture Videos
Caroline Cormier & Véronique Turcotte	Cégep André-Laurendeau	Enrichment of a web-based educational video bank in chemistry for flipped classrooms
Stéphanie Facchin, Team Administrator Evelyne Abran & Simon Brien	Cégep à distance	Devoir+
Baharak Fatholahzadeh, Team Administrator Rachel Faust, Andrew Lefcoe, Dominique Paradis, Margaret Livingstone & Patrick Rogers	Marianopolis College	Flipped Classroom for Physics
Matt Hill	John Abbott College	Incorporating Google for Education and Google Expedition Pioneer
Maria Orjuela-Laverde and Rob Cassidy	McGill University and Dawson College	Promoting peer observation and self-reflection through 360° instructional videos
Jean-Michel Sotiron	John Abbott College	"Debate-Induced Active Learning (DIAL) Kit"
Pascale Warmoes and Johnathan Mina	LaSalle College	Integrating Smartpens in the Classroom: Cursive writing in the digital age

# Congratulations to this year's mini-grant holders!

Check the SALTISE website www.saltise.ca this November to find out about the next SALTISE Mini-Grant Initiative. We look forward to receiving your active learning initiative!

THE SALTISE 5TH ANNUAL CONFERENCE COMMITTEE wishes to thank: the Canada-Québec Agreement on Minority-Language Education and Second Language Instruction (ECQ), which is managed by Ministère de l'Enseignement supérieur, de la Recherche et de la Science (MESRS), for the funding of this year's conference.

Le comité de programmation de la quatrième édition de la conférence annuelle du SALTISE souhaite remercier pour son appui financier l'Entente Canada-Québec relative à l'enseignement de la langue de la minorité et à l'enseignement de la langue seconde, gérée par le Ministère de l'Enseignement supérieur, de la Recherche et de la Science (MESRS) du Québec.

Enseignement supérieur, Recherche et Science QUÉDEC

Finally, we thank our host, UQAM, for their warm welcome and commitment to ensuring the success of the SALTISE conference.

Enfin, nous remercions UQAM, l'hôte de cette conférence, pour leur chaleureux accueil et leur engagement à assurer le succès de la conférence de SALTISE

# SALTISE thanks the following for their generous support of this conference.



Faculté des sciences de l'éducation

Département de didactique



























# SALTISE 2016 5th Annual Conference

# wishes to thank its partner organizations for their support

# **UQÀM**

Faculté des sciences de l'éducation

Département de didactique

UQAM Faculté d'éducation, Département de didactique - Le Département de didactique s'intéresse aux situations d'apprentissage-enseignement ainsi qu'à la didactique générale. Faisant partie de la Faculté des sciences de l'éducation de l'UQAM, il contribue au développement et à la diffusion des connaissances nécessaires à la formation initiale et continue du personnel enseignant et d'autres professionnels de l'éducation, aux trois cycles d'études. https://didactique.uqam.ca/



Concordia Centre for Teaching and Learning - Our goal is to start conversations with faculty and graduate students about what makes great teaching & learning. We aim to build on and share these ideas through workshops, online resources and university-wide networks. <a href="http://www.concordia.ca/offices/ctl.html">http://www.concordia.ca/offices/ctl.html</a>



Teaching and Learning Services (TLS) promotes and supports the ongoing development and enhancement of teaching and learning at McGill University. http://www.mcgill.ca/tls/



L'ARC est un lieu de rencontres et d'échanges sur la recherche collégiale. Comme association, elle travaille au développement de la recherche dans les établissements d'enseignement collégial.

http://vega.cvm.qc.ca/arc/



The Quebec Association of Physics Teachers is a section of the American Association of Physics teachers (AAPT). Our association regroups over a hundred physics teachers from high schools, CEGEPS and Universities. For more information: <a href="http://www.qcapt.ca/">http://www.qcapt.ca/</a>



The mission of the AQPC is to promote, stimulate, and support the development and evolution of college pedagogy. The AQPC strives to be a reflection and a beacon for all who work in education at the college level so as to ensure the quality of learning for all students whether enrolled in regular courses or in continuing education. The AQPC contributes to the development and evolution of pedagogy in conjunction with diverse partners in the field of higher education. <a href="https://aqpc.qc.ca/">https://aqpc.qc.ca/</a>



Profweb supports IT integration in teaching and learning.

Profweb - the Quebec College Crossroad for IT integration: <a href="http://www.profweb.qc.ca/en">http://www.profweb.qc.ca/en</a>



APOP provides a platform for disseminating pedagogical materials and promotes new information technologies. <a href="http://apop.qc.ca/">http://apop.qc.ca/</a>



Cegep@distance develops distance education materials for college-level courses and provides on-line courses in many disciplines.
Cegep@distance: http://www.cegepadistance.ca



CCDMD provides digital and online materials for a number of college disciplines and programs.

CCDMD (Centre collégial de dévloppement de matériel didactique) <a href="http://www.ccdmd.qc.ca">http://www.ccdmd.qc.ca</a>



Vitrine technologie-éducation (VTÉ) is a non-profit organization with the mission to guide Quebec post-secondary education institutions in their educational technology choices. VTÉ provides free online laboratories on emerging technologies and new ways to teach, a catalog of teaching and learning resources as well as software group purchases for cégeps and universities. <a href="http://vteducation.org/en">http://vteducation.org/en</a>



Le réseau PÉRISCOPE vise le croisement des perspectives de recherche et d'intervention en matière de scolarité, persévérance et réussite scolaires (PRS) et veut encourager davantage de synergie entre les acteurs. <a href="http://periscope-r.quebec/en">http://periscope-r.quebec/en</a>