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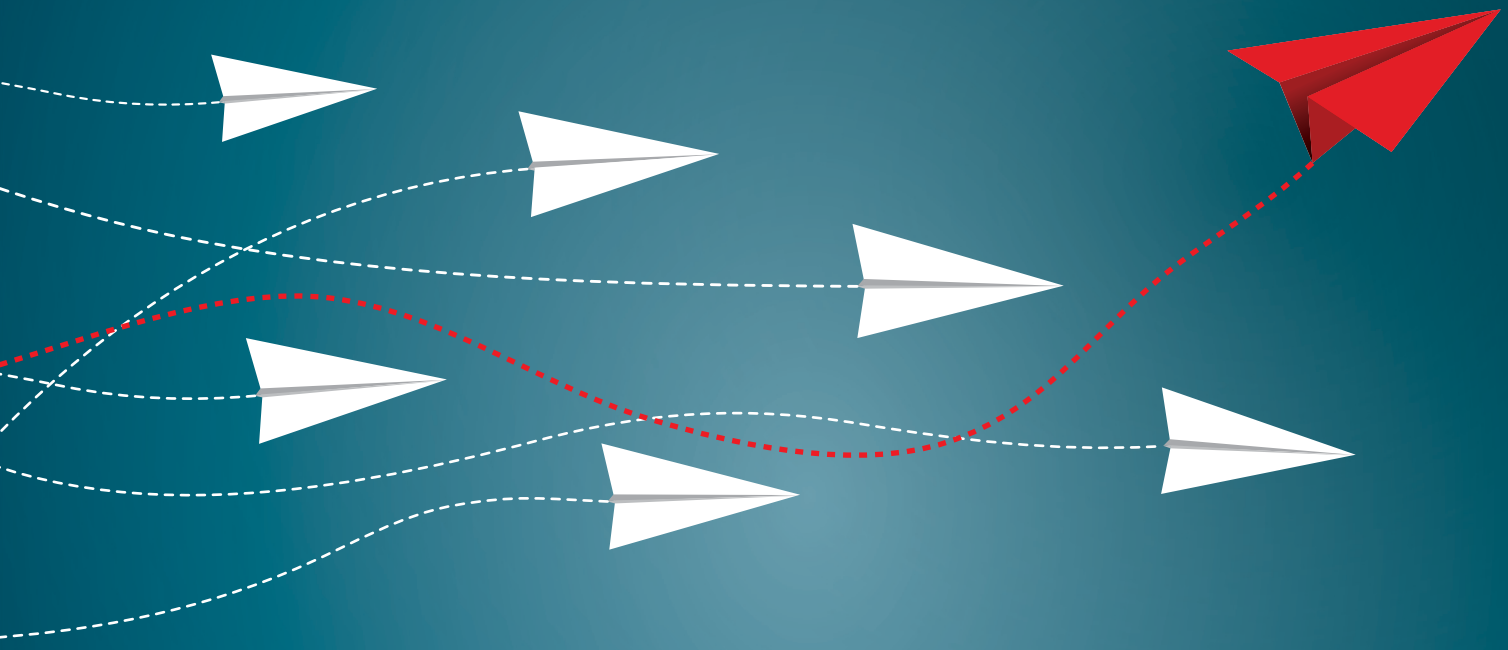
7E COLLOQUE ANNUEL DE

# SALTISE

7TH ANNUAL CONFERENCE



## INNOVATIONS PERCUTANTES

ENVIRONNEMENTS ÉDUCATIFS CHANGEANTS

## DISRUPTIVE INNOVATIONS

CHANGING EDUCATIONAL LANDSCAPES

**31 MAI 2018**

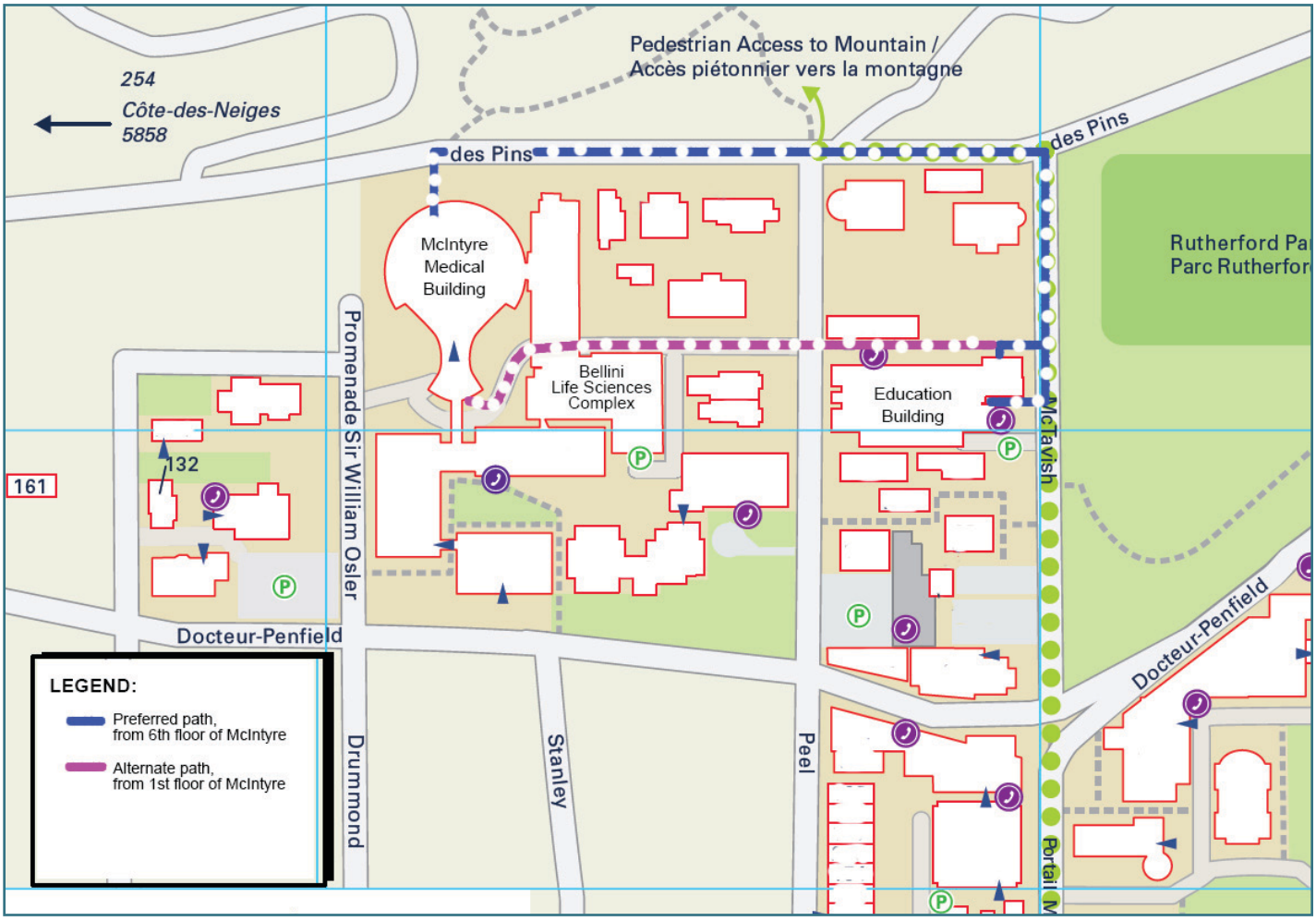
McGILL UNIVERSITY

McINTYRE MEDICAL BUILDING, MARTIN THEATRE

6TH FLOOR, 1200 AVENUE DES PINS OUEST

EDUCATION BUILDING - 3700 McTAVISH STREET

# Map of McGill




# Wifi Account Information

| | | | |
|---|---|---|---|
| Username: | guest.XXXXXXX@mcgill.ca (sample) | Created For: | SALTISE 2018 |
| Password: | XXXXXXXX | McGill Unit: | Teaching And Learning Services |

Wireless Network SSID: mcgill.ca or wpa.mcgill.ca

Ask for your unique password, to be distributed at the registration desk

Those with access to <eduroam> do not need to follow this process to use the wifi

Note: Each account can be used for wireless access only. Your Guest account starts on first use and expires at midnight 1 day later.

HOW TO ACCESS MCGILL'S WIRELESS SERVICE WITH YOUR GUEST NETWORK ACCOUNT

1. Click on the Network icon in the System tray (Windows) or Airport card (Mac).
2. From the menu of available networks, select the SSID above and then click on Connect.
3. You will be prompted to log in. Use the guest username and password that will be provided to you at the Registration desk.

For more information on McGill's wireless service go to http://kb.mcgill.ca/it/wireless.
For help connecting to the wireless network, contact ICS Service Desk at (514) 398-3398.

Use of this guest account is subject to the McGill Computing Facilities Code of Conduct
(http://www.mcgill.ca/files/secretariat/conduct-computing-amendedcurrent.pdf).

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# Location of Events

**EVENTS WILL BE HELD AT:**

MCGILL UNIVERSITY

*McIntyre Medical Building*
3655 Promenade Sir William Osler
Montreal, Qc H3G 1Y6

*Education Building*
3700 McTavish Street
Montreal, Qc H3A 1Y2

**McINTYRE GARAGE - VISITOR PARKING**

3649 Promenade Sir William Osler,
Montreal, Qc

**Visitor parking rates:**
http://www.mcgill.ca/transport/parking/downtown/visitors

Space is limited.

**PUBLIC TRANSPORTATION:**

McGill is accessible by public transit – Metro Station "McGill (Union / De Maisonneuve)"

NAME TAGS & REGISTRATION:

6th floor lobby of McIntyre building from 8:00 - 10:00
1st floor lobby of Education building from 10:00 - 15:00

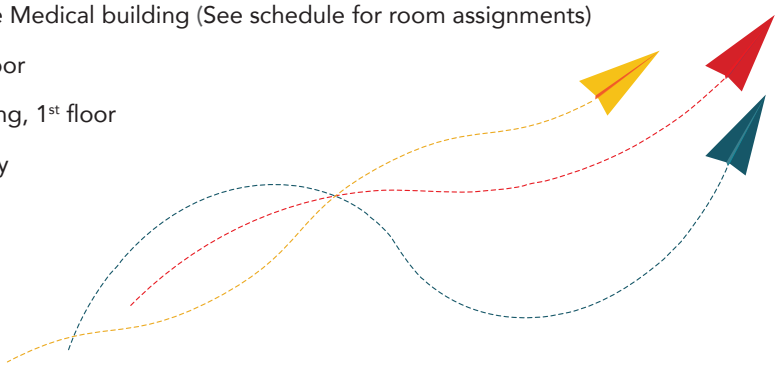
KEYNOTES (MORNING AND AFTERNOON) & AWARDS CEREMONY: McIntyre Palmer amphitheater – 6th floor

CONFERENCE SESSIONS: Education building and McIntyre Medical building (See schedule for room assignments)

POSTER SESSIONS: Library of the Education building, 1st floor

HEALTH BREAKS & LUNCH: Library of the Education building, 1st floor

WINE AND CHEESE RECEPTION: Education Building, lobby



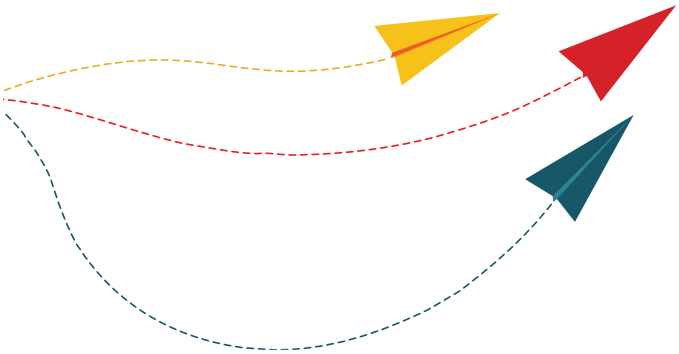
SALTISE

# Information about SALTISE

SALTISE - SUPPORTING ACTIVE LEARNING & TECHNOLOGICAL INNOVATION IN STUDIES OF EDUCATION is a community of instructors, researchers 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 efforts to implement pedagogical change involving evidence-based innovations in instruction and leveraging the use of educational technology to promote learning.

SALTISE was created as a consortium composed of science faculty and educational researchers from five 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 Téchnologie). It acknowledges and owes its continuation to the financial support of the Entente Canada Québec, the 3-year grant, ALPIC, held by Dawson College; with a special grant for this year's SALTISE Conference, held by John Abbott College. SALTISE also acknowledges its members, from the post-secondary institutions on the island of Montreal, who have contributed and continue to contribute to its growth.

Currently, SALTISE extends its knowledge mobilization innovations and community-based efforts to over 1300 educators, primarily from Quebec colleges and universities, including English and French institutions. It 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.



# À propos de SALTISE

SALTISE (SOUTENIR L'APPRENTISSAGE ACTIF ET L'INNOVATION TECHNOPÉDAGOGIQUE PAR LA RECHERCHE EN ÉDUCAT ION) est une communauté composée d'enseignants, de chercheurs et de professionnels en éducation provenant d'établissements d'enseignement supérieurs francophones et anglophones de la grande région de Montréal ainsi que d'autres régions du Québec. Cette communauté de pratique a pour objectif d'accompagner les changements pédagogiques en soutenant les innovations dans l'enseignement grâce aux données probantes et en tirant partie de la technologie éducative pour faciliter l'apprentissage.

SALTISE a été créé en tant que consortium composé de professeurs de sciences et de chercheurs en éducation provenant de quatre établissements d'enseignement de la région de Montréal : le Collège Dawson, le Collège John Abbott, le Collège Vanier et l'Université McGill. À ses débuts, SALTISE a été financé par une subvention institutionnelle « Chantier 3 » du Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie (MESRS). Il a pu ensuite poursuivre son existence grâce à la subvention de 3 ans (ALPIC) que le Ministère a accordé au Collège Dawson dans le cadre de l'Entente Canada- Québec et grâce à une subvention spéciale pour la tenue de la conférence annuelle, reçue cette année par le Collège John Abbott. SALTISE tient à remercier ses membres des institutions d'enseignement postsecondaire de l'île de Montréal, dont le travail a contribué et contribue toujours à la croissance de la communauté.

À l'heure actuelle, les innovations de SALTISE en matière de mobilisation et de partage des connaissances rejoignent plus de 1300 éducateurs provenant principalement d'universités et de collèges québécois anglophones et francophones. SALTISE organise des activités et des ateliers conçus pour informer et partager les résultats de la recherche sur les pratiques pédagogiques émergentes. Grâce à son programme de mini-subventions, il soutient les praticiens de l'éducation qui souhaitent développer des méthodes et des technologies pour faciliter l'apprentissage des élèves. Son nouveau site Web constitue une source de nombreuses informations éducatives et propose des outils et des méthodes inspirantes pour implanter des innovations pédagogiques. Le site web de SALTISE a pour objectif d'être un lieu de partage de notre communauté, qui lui permet d'établir des liens et d'échanger sur des pratiques et des recherches en éducation. Enfin, dans le cadre de sa conférence annuelle, SALTISE accueille des chercheurs internationaux et nationaux et offre ainsi aux experts locaux l'occasion de discuter des meilleures utilisations des pratiques pédagogiques en apprentissage actif et des technologies éducatives.

# 2018 SALTISE Conference Committee

### *2018 Conference Coordinators*

Myriam Dimanche (SALTISE), Maria Orjuela-Laverde (McGill, eLATE)

### *2018 Conference Assistants*

Suéli Bonafim (SALTISE), Meganne Hirsch (McGill, TLS),

Erin McDonagh (McGill, TLS)

### *2018 Conference Planning Committee*

AWARDS SUB-COMMITTEE
Azra Khan (Chair, Dawson College), Sarah Anthony (McGill University), Brenda Lamb (John Abbott College)

LOGISTICS SUB-COMMITTEE
Myriam Dimanche (Chair, SALTISE), Suéli Bonafim (SALTISE), Cathy Giulietti (Dawson College), Meganne Hirsch (McGill University, TLS), Erin McDonagh (McGill University, TLS), Maria Orjuela-Laverde (McGill University, eLATE)

PROGRAM SUB-COMMITTEE
Michael Dugdale (Chair, John Abbott College), Elizabeth Charles (SALTISE), Ken Ragan (McGill University)

PROPOSAL SELECTION SUB-COMMITTEE
Kevin Lenton (Chair, Vanier College), Rhys Adams (Vanier College), Marielle Beauchemin (Vanier College), Michael Dugdale (John Abbott College), Eric Francoeur (ÉTS), Chris Gregg (Vanier College), Vanessa Vandegrift (Vanier College), Chris Whittaker (Dawson College)

PUBLIC RELATIONS & SPONSORSHIP SUB-COMMITTEE
Victoria Pickering (Chair, McGill University), Sarah Anthony (McGill University), Shehrazade Bakarally (Concordia University), Maria Orjuela-Laverde (McGill University, eLATE)

ADDITIONAL MEMBERS
John Bentley (Concordia University CTL), Pascale Blanc (VTÉ), Murray Bronet (John Abbott), Carol Hawthorne (Concordia University), Anastassis Kozanitis (UQAM), Claude Zananiri (community member)

### *Technical and Logistics Support*

Graphic Design (Program): Isabelle Kalekas
Graphic Design (Conference poster): Littlebox, Inc.
Web support at Dawson College: Jonathan Pearlman
Communications and Support Staff at McGill: [are there names for this]
Translation: Pascale Blanc (VTÉ)

### *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 Ragan (McGill University), Rob Cassidy (Concordia University, CTL), Maria Orjuela-Laverde (McGill University, eLATE)

### *SALTISE Advisory Board Members*

Roya Abouzia, Heritage College
Pierre Bourque, ÉTS;
Rob Cassidy, Concordia University
Diane Gauvin, Dawson College
Kevin Lenton, Vanier College
Hélène Meunier, UQAM
Bruno Poellhuber, Université de Montréal
Erich Schmedt, John Abbott College
Laura Winer, McGill University

### *Associate Members*

DAWSON ALC - ACTIVE LEARNING COMMUNITY
Chris Whittaker (Co-Coordinator), Catherine Braithwaite, Jeffrey Gandell, Magdalena Mlek, Catherine Payne, Andreea Mihaela Stanciu-Panait

PÉRISCOPE - Thérèse Laferrière (Université de Laval)

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

### *SALTISE Founding Members: Le comité fondateurs :*

Roger Azevedo (now at North Carolina State University), Marielle Beauchemin (Vanier College), Robert Bracewell (McGill University), Murray Bronet (John Abbott College), Elizabeth S. 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 Consultants externes*

Thérèse Laferrière (Laval University), Jim Slotta (Boston College)

# Message from the Minister of Education

Dear education professionals:

I am pleased to welcome you to the 7th annual SALTISE conference.

Access to education is a mainstay of society and is fundamental to ensuring individuals are able to harness their full potential. The lightning-fast evolution of digital technologies has permitted them to take pride of place in the modern educational landscape. By mastering these technologies, teachers will be able to play an active part in the digital age, developing stimulating approaches to education that will benefit thousands of Québec students.

SALTISE consists of over 1300 teachers, who share a single key objective: to support the efforts of post-secondary instructors to integrate technologies into their teaching strategies in innovative and original ways. Your presence at this conference is a testament to your commitment to furthering your exploration of this topic.

I hope this event will provide you with numerous opportunities for discovery, dialogue, fun and socializing.

## *Enjoy the conference!*

***Hèlène David***
*Minister responsible for Higher Education and for the Status of Women*

# Message de la Ministre de l'Enseignement supérieur

Chers professionnels et professionnelles de l'éducation,

Je vous souhaite la bienvenue à cette 7e édition du colloque annuel de SALTISE.

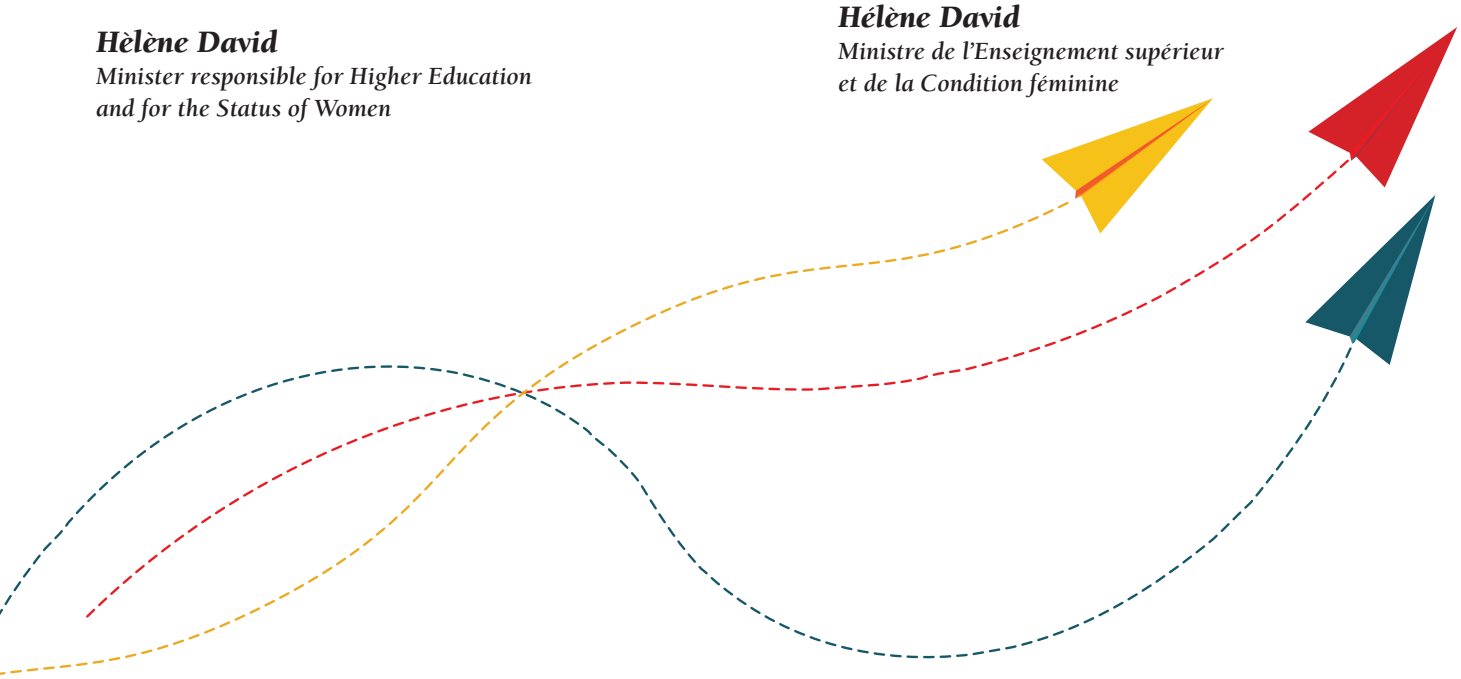
Pilier d'une société, l'accès à l'éducation est indissociable de la capacité des individus à exploiter leur plein potentiel. L'évolution fulgurante des technologies numériques leur permet désormais d'occuper une vitrine de choix dans l'espace pédagogique moderne. C'est en se les appropriant que les enseignants et enseignantes pourront prendre part au virage numérique, et ce, tout en proposant des approches éducatives stimulantes au bénéfice de milliers d'étudiants québécois.

Le regroupement SALTISE, c'est plus de 1 300 enseignants qui partagent un objectif commun important : soutenir les enseignants du réseau postsecondaire dans l'intégration des technologies aux stratégies d'enseignement de façon originale et novatrice. Votre présence à ce colloque démontre la volonté qui vous habite de pousser encore plus loin votre réflexion sur ce sujet.

Je souhaite donc que cet événement soit pour vous source de découvertes, d'échanges, de plaisir et d'agréables rencontres.

## *Bon colloque!*

***Hélène David***
*Ministre de l'Enseignement supérieur et de la Condition féminine*



# Welcome to McGill!

The month of May is a remarkable time of year. To see our campus come alive during graduation with students, faculty, friends, and family after the long winter months gives us all at McGill renewed enthusiasm.

Even while we are celebrating the past year, there is a great deal of great work being done at the University. Dedicated researchers, professionals, and educators – like our welcomed participants in this year's SALTISE conference – continue to work diligently to ensure that students across Quebec benefit from new active learning approaches and best practices in teaching. Throughout the conference, there will be ample opportunities for researchers and practitioners to share ideas and forge innovative collaborations in support of the improvement of the learning experience for our students. The annual SALTISE Conference reminds us of the importance of our vocation.

I hope you enjoy this outstanding conference, the remarkable keynote speakers, and the networking opportunities. I hope that you leave the conference feeling inspired to continue your work in making a difference in the lives of students.

Between sessions, I encourage you to take a walk around our downtown campus – the positive energy is palpable, and it is the result of the vital work you do as educators.

Thank you for joining us and welcome to the 7th Annual SALTISE Conference!

***Christopher P. Manfredi***
*Provost and Vice-Principal (Academic)*
*McGill University*

# Bienvenue à McGill !

Après les longs mois d'hiver, le mois de mai est un incroyable moment de l'année où nous avons l'occasion de célébrer avec grand enthousiasme, les différentes collations de grades des étudiantes et étudiants, en présence du corps professoral, de leurs familles et de leurs proches.

Alors même que nous nous réjouissons des efforts de l'année écoulée, un incommensurable et excellent travail se déploie au sein de l'Université. Des chercheurs, des professionnels, des éducateurs, les uns aussi dévoués que les autres — comme nos hôtes qui participent cette année à la conférence SALTISE — poursuivent leur travail avec ardeur afin d'offrir aux étudiantes et étudiants de tout le Québec de nouvelles méthodes d'apprentissage interactif et de meilleures pédagogies d'enseignement. Pendant cette conférence, les chercheuses et chercheurs ainsi que les praticiennes et praticiens auront de nombreuses occasions d'échanger leurs idées et d'établir de nouvelles collaborations innovantes en vue de soutenir l'expérience enrichie d'apprentissage dont les premiers bénéficiaires sont nos étudiants. La conférence annuelle SALTISE nous rappelle l'importance de notre vocation.

J'espère que vous tirerez le meilleur parti de cette conférence exceptionnelle, de la qualité notoire des conférencières et conférenciers ainsi que des opportunités de réseautage. Je souhaite qu'à la fin de cet événement, vous repartiez avec toute l'inspiration nécessaire afin de continuer à œuvrer pour améliorer la vie de nos étudiantes et étudiants.

Entre les présentations, je vous invite à explorer les environs de notre campus du centre-ville et à palper l'énergie positive, fruit du travail prépondérant que vous faites en éducation.

Merci de votre présence et bienvenue à cette septième conférence annuelle SALTISE !

***Christopher P. Manfredi***
*Vice-principal exécutif et vice-principal aux études*
*McGill University*

# Welcome to SALTISE 2018 Conference

## from the Deans of Engineering & Science, McGill University

The Faculties of Engineering and Science warmly welcome you to McGill University for the 7th Annual SALTISE Conference "Disruptive Innovations: Changing Educational Landscapes". As a research-intensive university that embraces the teacher-scholar model to provide a stimulating education for our students, we are proud to host colleagues who share our interest in and dedication to pedagogical excellence.

This year's theme alludes to both the challenges and opportunities inherent in change. As educators, we not only must keep pace with new scientific and technological knowledge, but also grapple with the rapid evolution of the technologies and philosophies that underpin our teaching efforts. The demands made of our graduates are changing, too. They must be equipped with the knowledge to meet current challenges while also being innovative, flexible and adaptable in order to succeed in the future.

In our view, changing our approach to education, collaborating with colleagues both within and beyond our own disciplines, and sharing the goal of learning with our students are all key to making the most of change and maintaining teaching excellence. The Faculties of Engineering and Science at McGill are committed to participating in joint initiatives with each other and across the university in collaboration with McGill's Teaching and Learning Services. Most recently, this collaborative approach to undergraduate STEM education was recognized by a mini-grant from the AAU-STEM Network.

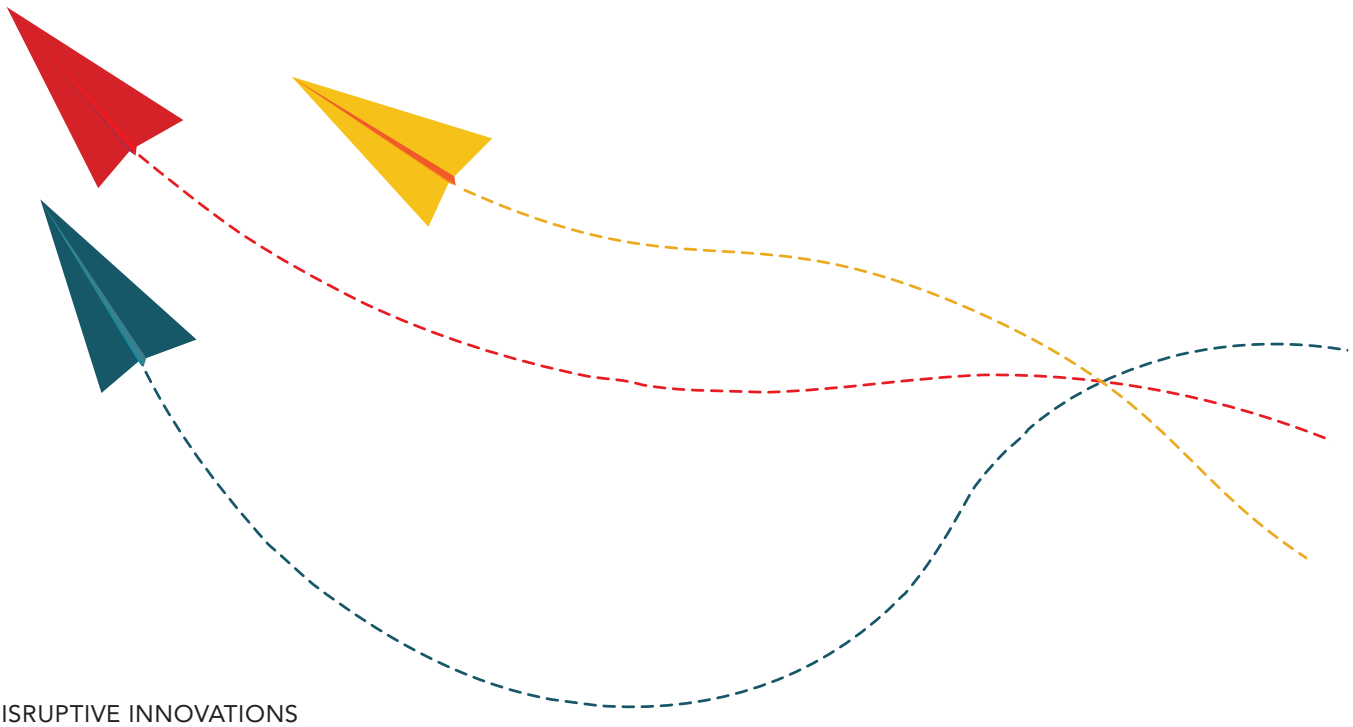
We are also aware of the need to look beyond our own institution for experience, aid and innovation. This is the power of SALTISE as a Montreal- and Quebec-based learning community that enables educators across multiple levels, fields and institutions to share with each other and collaborate in innovative and effective pedagogical practices.

Our deep thanks to the conference organizers: the team from SALTISE, McGill Teaching and Learning Services, and the Enhanced Learning & Teaching in Engineering (eLATE) project. Once again, they have put together an engaging program that includes the opportunity to share with our local colleagues as well as an exciting set of keynote speakers and inspiring post-conference workshops.

*Enjoy!*

***Jim Nicell***
*Dean of Engineering*

***R. Bruce Lennox***
*Dean of Science*



# Mot de bienvenue à la conférence SALTISE 2018

## de la part des doyens de génie et des sciences de l'Université McGill

Les Facultés de génie et des sciences vous accueillent chaleureusement à l'Université McGill pour cette septième conférence annuelle SALTISE « Innovations percutantes : Environnements éducatifs changeants ». En tant qu'université axée sur la recherche qui adhère au modèle enseignement-recherche afin d'offrir une éducation stimulante à notre clientèle étudiante, nous sommes fiers d'accueillir nos collègues qui partagent le même intérêt et enthousiasme que nous en matière d'excellence pédagogique.

Le thème de cette année porte sur les défis et les occasions inhérents aux changements. Dans le cadre de notre rôle d'enseignant, nous devons progresser au même rythme que les nouvelles connaissances scientifiques et technologiques, mais nous sommes également aux prises avec l'évolution rapide des technologies et des philosophies qui appuient nos efforts d'enseignement. Par ailleurs, les demandes formulées par nos étudiantes et étudiants diplômés changent. Ils doivent disposer des connaissances nécessaires pour répondre aux changements actuels tout en faisant preuve d'innovation, de flexibilité et de souplesse afin de réussir dans l'avenir.

De notre avis, les éléments clés pour tirer le meilleur parti possible du changement et pour préserver l'excellence de l'enseignement consistent à changer notre approche de l'éducation, à collaborer avec nos collègues à l'intérieur et à l'extérieur de nos propres disciplines et à avoir un objectif d'apprentissage commun avec nos étudiants et étudiantes. Les Facultés de génie et des sciences de McGill prennent part à des initiatives conjointes avec l'une et l'autre et aussi à l'échelle de l'Université en collaboration avec les Services de soutien pédagogique de McGill. Plus récemment, cette approche collaborative en enseignement de programme de STIM de premier cycle a été reconnue par une mini-subvention du AAU-STEM Network.

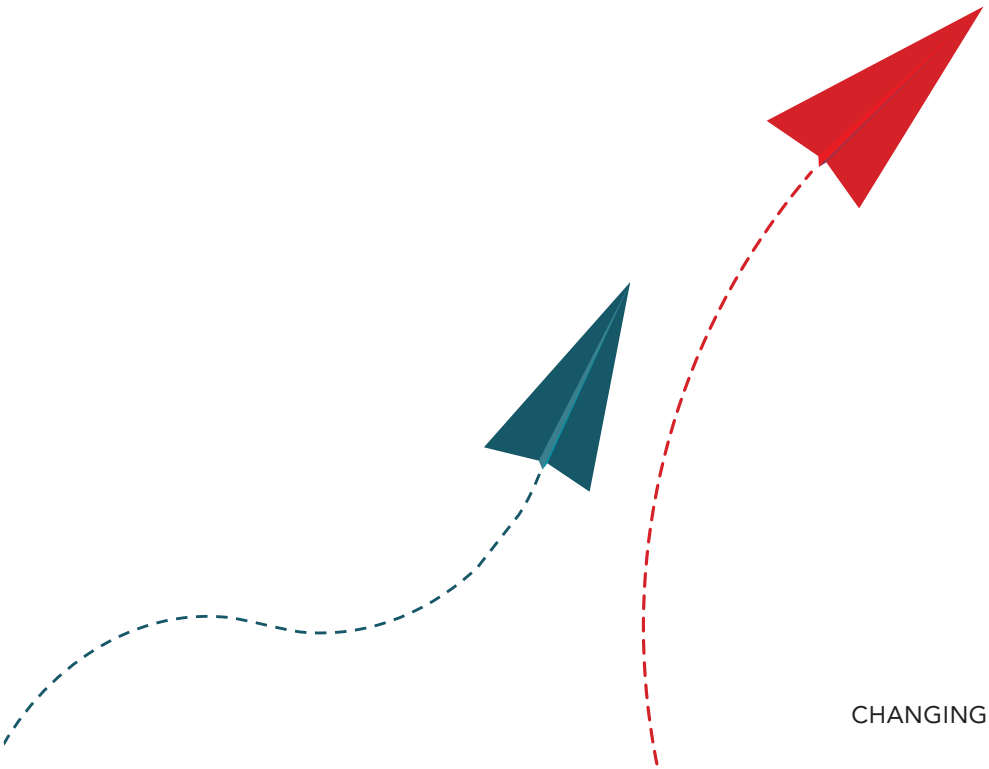
Nous sommes également conscients du besoin de regarder au-delà de notre propre établissement pour trouver de l'expérience, de l'aide et de l'innovation. C'est la force de SALTISE qui grâce à sa communauté d'apprentissage basée à Montréal et au Québec permet aux personnes en enseignement de tous les différents niveaux, domaines et établissements d'échanger sur des pratiques pédagogiques, novatrices et efficaces et d'établir des collaborations sur le sujet.

Nous tenons à adresser nos sincères remerciements aux organisateurs : l'équipe de SALTISE, les Services de soutien pédagogique et l'organisation eLATE (enhancing Learning and Teaching in Engineering — améliorer l'apprentissage et l'enseignement en génie). Encore une fois, ils nous ont préparé un programme intéressant comprenant des occasions d'échange avec nos collègues locaux, un ensemble intéressant de conférenciers et d'inspirants ateliers post-conférence.

*Bonne conférence tout le monde !*

***Jim Nicell***
*Doyen de la Faculté de génie*

***R. Bruce Lennox***
*Doyen de la Faculté des sciences*



# Welcome from TLS

Welcome! On behalf of Teaching and Learning Services (TLS), it is my great pleasure to welcome you to McGill University for the 7th Annual SALTISE Conference. Prepare to be excited, challenged, and inspired!

This year's theme, Disruptive Innovations: Changing Educational Landscapes, takes on new relevance in our rapidly changing times. As we adapt to the unprecedented challenges in teaching and learning in the 21st century, the SALTISE conference gives our community the space to take a fresh look at how we improve and support evidence based pedagogical innovations. The agenda for the conference boasts an impressive roster of keynote speakers and sessions with members of our community, and I am confident that the collective expertise and perspectives of all of our speakers will ignite new directions for future research and development in active learning.

McGill's Teaching and Learning Services is a proud partner of SALTISE and we are particularly pleased to be partnering with eLATE (enhancing Learning and Teaching in Engineering) for this year's conference. eLATE is a community of educators and students within McGill's Faculty of Engineering that is committed to promoting excellence in the teaching and learning of technical and professional 21st-century skills.

To put a conference of this magnitude together is no small undertaking. The 7th Annual SALTISE conference is jointly organized by a coalition of dedicated educators, researchers, and administrators. Thank you all for your hard work!

***Laura Winer***
*Director, Teaching and Learning Services*

# Mot de bienvenue du Service de soutien pédagogique

Bienvenue! Au nom du Service de soutien pédagogique, c'est avec grand plaisir que je vous accueille à l'Université McGill pour la septième conférence annuelle SALTISE. Nous espérons capter votre attention et la maintenir à son plus haut. Attendez-vous donc à relever des défis, à inspirer et à vous laisser inspirer!

Le thème de cette année, Innovations percutantes: Environnements éducatifs changeants, est d'une pertinence toute nouvelle à notre ère où les changements se succèdent rapidement. Alors que nous nous adaptons aux défis sans précédent de l'enseignement et de l'apprentissage au XXIe siècle, la conférence SALTISE offre à notre communauté l'opportunité de jeter un regard nouveau sur les moyens d'améliorer et d'appuyer l'innovation fondée sur des données probantes. Le programme de la conférence renferme une liste impressionnante de conférencières et conférenciers de renom ainsi que de présentations avec les membres de notre communauté. J'ai bonne confiance que l'expertise de chacun des conférencières et conférenciers ainsi que leurs perspectives collectives susciteront de nouvelles orientations pour l'avenir de la recherche et du développement dans le domaine de l'apprentissage interactif.

Le Service de soutien pédagogique est un fier partenaire de SALTISE et nous sommes particulièrement heureux de faire équipe avec eLATE (enhancing Learning and Teaching in Engineering — améliorer l'apprentissage et l'enseignement en génie) pour la conférence de cette année. eLATE est une communauté formée de personnes provenant des corps enseignant et étudiant de la Faculté de génie de McGill qui ont à cœur la promotion de l'excellence en matière d'enseignement et d'apprentissage des compétences techniques et professionnelles du XXIe siècle.

L'organisation d'une conférence de cette ampleur est une tâche de grande envergure. Cette septième conférence annuelle SALTISE a été organisée conjointement par une coalition de personnes dévouées issues des domaines de l'enseignement, de la recherche et de l'administration. À tous, j'adresse mes vifs remerciements pour votre effort acharné dans la réalisation de ce chef-d'œuvre

***Laura Winer***
*Directrice, Service de soutien pédagogique*

# Welcome from the 2018 SALTISE Conference committee

The SALTISE Conference Committee welcomes you to the 7th Annual Conference, **"Disruptive Innovations: Changing Educational Landscapes".**

We extend our sincere appreciation to our host, McGill University, and to the departments and services that have played a significant role in making this year's conference possible. In particular, we wish to thank the Teaching and Learning Services (TLS) and the Enhancing Learning and Teaching in Engineering (eLATE) program for their support throughout the process of planning and preparing for our annual event. SALTISE acknowledges the importance of the individuals who have played a leading role in helping us to navigate the institutional systems.

SALTISE also thanks our partner institutions for their generous financial contributions. In particular, we acknowledge the following Departments and Services: McGill's Faculty of Engineering, Faculty of Science, Teaching and Learning Services (TLS), Tomlinson Project in University-Level Science Education (T-PULSE), and the Office of Student Life and Learning; Offices of the Academic Dean at John Abbott College and at Dawson College; and Concordia University and the Centre for Teaching and Learning (CTL). Lastly, we acknowledge the funding from the Entente Canada Québec's SALTISE/S4 project, held by Dawson College. We deeply appreciate your continued support of the SALTISE community.

Once again this year the Conference Committee has put together an exciting program of speakers, local and international, including educational researchers and practitioners, reporting on principled practices and research results. In total, the program consists of over 50 thoughtful presentations, ranging from symposia, to individual talks, to interactive sessions and posters.

We wish you a productive day of thinking about your practice and its relationship to educational research; as well as discussing and sharing your thoughts on this growing field – its practices and theories. Above all, we hope you will enjoy this opportunity to come together again, to learn from each other, to celebrate our collective successes and strengthen our network.

***Sincerely,***

***Elizabeth (Liz) Charles***

## *Enjoy the Conference!*

# Mot de bienvenue du comité organisateur de la conférence SALTISE de 2018

Le comité organisateur de la conférence annuelle SALTISE vous souhaite la bienvenue à la 7e édition intitulée : **« Innovations percutantes : Environnements éducatifs changeants ».**

Nous souhaitons adresser nos plus sincères remerciements à notre hôte, l'Université McGill, et à tous les départements et services qui ont joué un rôle important dans l'organisation du colloque cette année. Nous tenons à remercier tout particulièrement le Service de soutien pédagogique (TLS) et le programme d'amélioration de l'apprentissage et de l'enseignement en ingénierie (eLATE) pour leur soutien constant durant la préparation de notre évènement annuel. SALTISE tient aussi à remercier chaleureusement toutes les personnes qui nous ont accompagnés dans la compréhension du fonctionnement des systèmes institutionnels.

SALTISE remercie également tous ses partenaires institutionnels pour leurs généreuses contributions fi nancières, notamment les départements et services suivants: Faculté de génie, Faculté des sciences, Service de soutien pédagogique (TLS), Projet Tomlinson en enseignement des sciences à l'université (T-PULSE), et les Bureaux de la vie étudiante et de l'apprentissage des Doyens académiques des Collèges John Abbott et Dawson; et, le Centre d'enseignement et d'apprentissage (CEA) de l'Université Concordia. SALTISE tient finalement à remercier le gouvernement pour le financement du projet SALTISE/S4 du Collège Dawson dans le cadre de l'entente Canada Québec et son soutien de la communauté SALTISE.

Encore une fois cette année, le Comité organisateur a élaboré un programme inspirant, livré par des intervenants locaux et internationaux du domaine de l'éducation, chercheurs de renom et praticiens passionnés, qui présenteront des pratiques en apprentissage actif soutenues par des résultats de recherche. Le programme comprend plus de 50 présentations de différents formats, notamment des symposiums, des conférences individuelles, des séances interactives et des présentations par affiches.

Nous vous souhaitons une riche journée de réflexion concernant votre propre pratique et son lien avec la recherche en éducation, qui puisse vous donner aussi l'occasion de discuter et de partager vos idées sur ce domaine en pleine croissance. Surtout, nous espérons que vous apprécierez cette occasion de vous réunir à nouveau, d'apprendre les uns des autres, de célébrer nos succès collectifs et de renforcer notre réseau.

***Cordialement,***

***Elizabeth (Liz) Charles***

## *Profitez de la Conférence !*

SALTISE

# 2018 SALTISE Best Practices & Pedagogical Innovators Award
# Prix d'excellence et d'innovation pédagogique

## CLAIRE TROTTIER

Dr. Trottier's leadership has brought teaching and learning to the forefront of her department of Microbiology and Immunology at McGill University. She is an innovative, passionate and caring instructor as well as a leading educator and professor in the Department. "She truly elevates the standard for STEM educators" quoting one of her students in Introductory Immunology. Highlights of Claire's "teaching renaissance" include transforming two cookbook style lab courses into authentic research, project-based labs; and, an advanced lecture course into an interactive course featuring activities such as primary scientific literature analysis, in small groups.

She has significantly contributed to the new culture within her Department, where teaching is valued, and professors are proud of their teaching. By working one-on-one with professors, mediating workshops and retreats, and working on the undergraduate committee, Claire empowers and encourages other instructors to develop expertise in teaching and learning. Having led a recent curriculum mapping, Claire is now leading us to implement curriculum changes for Fall 2018. She is also spearheading efforts to better fund our teaching labs and advocate for more TAs for our courses. "Dr. Trottier is a role model to us all. She supports each and every one of us in our diverse needs, going beyond her contract-defined role as an educator."

## LOUIS NORMAND

Depuis plus de 20 ans, Louis Normand enseigne la physique au Collège de Rosemont et ne cesse de trouver de nouvelles façons de favoriser l'apprentissage des étudiants. Il a développé des méthodes d'enseignement actives et innovantes, y compris la résolution de problèmes, des logiciels de simulation, des laboratoires revisités pour l'apprentissage en profondeur de la physique.

"Sa contribution est exceptionnelle pour son département et son collège, mais dépasse largement le cadre de celui-ci," a déclaré par l'un de ses collègues. Il contribue également à la formation des futurs enseignants en offrant des cours à l'Université de Montréal en apprentissage actif. En 2010, il a dirigé le développement d'un cours d'apprentissage actif, faisant de son collège l'un des pionniers, en particulier avec Dawson, les premières classes de ce type dans le réseau. Depuis lors, c'est une référence pour les stratégies éducatives à développer dans ce type d'environnement. La contribution au développement professionnel de ses collègues enseignants a été inestimable avec ses publications en pédagogie collégiale, ses communications au colloque, ses conférences offertes dans plusieurs collèges du réseau et ses nombreuses actions sur les réseaux sociaux permettent à de nombreux enseignants du réseau de découvrir des approches pédagogiques novatrices.

## Past recipients of the SALTISE Best Practices & Pedagogical Innovators Award

### 2013
- Murray Bronet (John Abbott College)
- Edward Awad (Vanier College)
- Chris Buddle (McGill University)

### 2014
- Kevin Lenton (Vanier College)
- Sean Hughes (John Abbott College)

### 2015
- Rhys Adams (Vanier College)
- Samantha Gruenheid (McGill University)
- Lawrence Chen (McGill University)

### 2016
- Jean-François Brière (Dawson College)
- Lynda Gelston (John Abbott College)
- Marielle Beauchemin (Vanier College)
- Rosemary Reily (Concordia University)

### 2017
- Michael Dugdale (John Abbott College)
- Karl Laroche (Vanier College)
- Ann-Louise Davidson (Concordia University)

# Lifetime Achievement Award
# Reconnaissance pour l'ensemble de la carrière

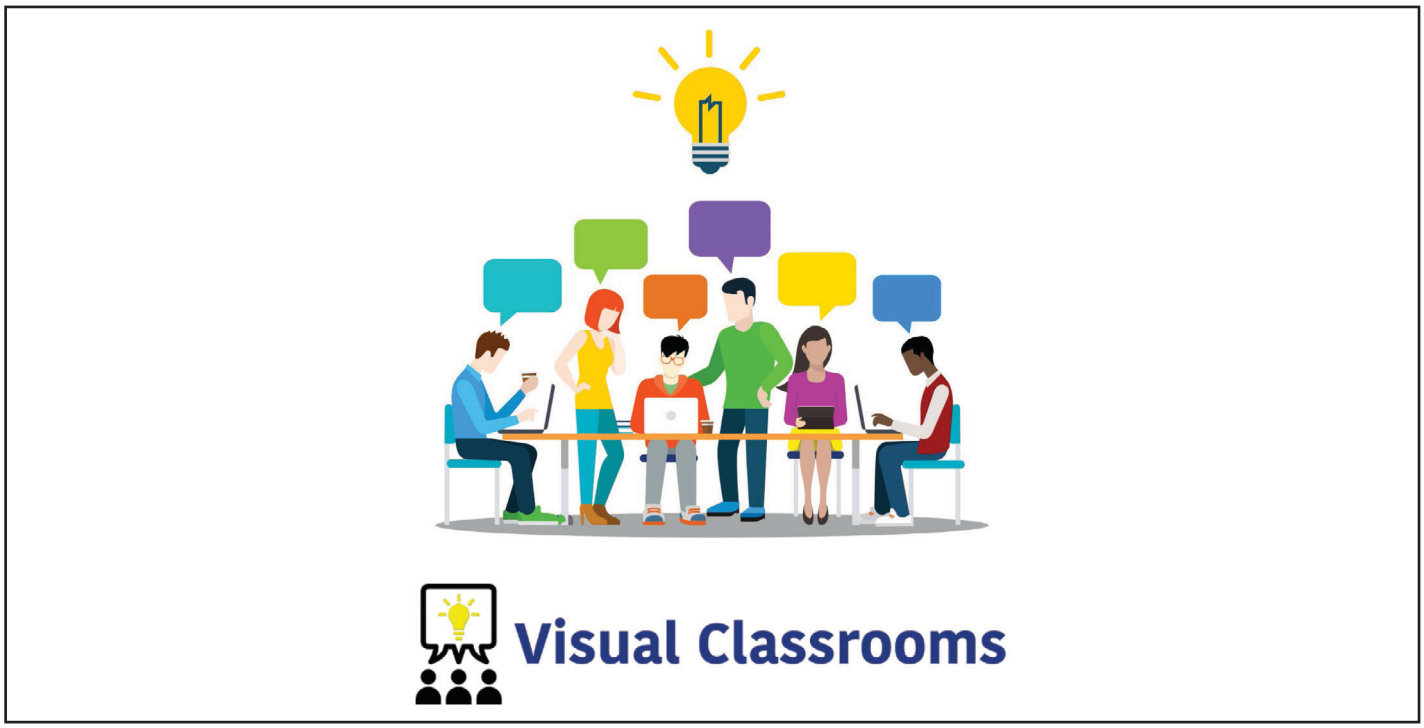
SALTISE is proud to announce the 2018 recipient of our Lifetime Achievement award for exceptional contributions to pedagogical innovation and our community: Thérèse Laferrière.

SALTISE est fière de remettre le prix de reconnaissance 2018 à Thérèse Laferrière pour ses contributions exceptionnelles à l'innovation pédagogique et la source d'inspiration qu'elle a personnifiée durant toute sa carrière pour l'ensemble de notre communauté.

Thérèse Laferrière is full professor at l'Université Laval, Département d'études sur l'enseignement et l'apprentissage.Currently, the director of CRIRES, a multi-university research center on successful schooling, she is the lead researcher of a large network on school attendance and student and school success named PERISCOPE, funded by the Quebec main research funding agency (FRQSC). SALTISE is a member of PERISCOPE.

Prof. Laferrière's research activities focus on networked learning environments and especially teacher-student(s) interactions and peer interactions in networked classrooms at the elementary, secondary, and post-secondary levels. Since 1995, she has been conducting design research projects. These projects include the Networked Remote School initiative, network-supported communities of practice, and knowledge building communities, TACT (Technology for Advanced Collaboration among Teachers / TéléApprentissage Communautaire et Transformatif); the latter being an example of a community of learners involving research and practice partnerships. She has been the principal investigator of the research theme "Educating the Educators" within the TeleLearning Network of Centres of Excellence (NCE Canada).

Thérèse is well known and immensely appreciated locally and internationally for the indefatigable energy and wisdom she devotes to the improvement of education. With deeply humanistic and ethical values, she combines high-level strategic and political understandings with a hands-on "roll-up-your-sleeves" capacity to make things happen. Last but not least, Thérèse has been a supporter of SALTISE from its beginning. We deeply appreciate this unwavering belief in the vision and mission of the association. Thank you for all you have done for us and for the educational system in Quebec.



SALTISE

# Keynote Speakers

### RICHARD M. FELDER

Hoechst Celanese Professor Emeritus
Department of Chemical and Biomolecular Engineering
North Carolina State University

### REBECCA BRENT

President, Education Designs, Inc.

**Time: 8h45**

### RICHARD M. FELDER

B.Ch.E., City College of New York; Ph.D. in Chemical Engineering, Princeton University

Dr. Felder joined the N.C. State University faculty in 1969. He is a co-author of the book Elementary Principles of Chemical Processes, which has been used as the introductory chemical engineering text by roughly 90% of all chemical engineering departments in the United States and many abroad, and he has authored or co-authored over 300 papers on chemical process engineering and engineering education. He has won numerous awards for his teaching, research, and publications, including the American Institute of Chemical Engineers Warren K. Lewis Award for Contributions to Chemical Engineering Education, the International Federation of Engineering Education Societies Global Award for Excellence in Engineering Education (first recipient), and the American Society for Engineering Education Lifetime Achievement Award in Engineering Education (first recipient). For a bibliography of Professor Felder's papers and reprints of his columns and some articles, access his website at www.ncsu.edu/effective_teaching.

### REBECCA BRENT

B.A., Millsaps College; M.Ed., Mississippi State University; Ed.D., Auburn University

Dr. Brent is President of Education Designs, Inc., a consulting firm in Cary, North Carolina. She has more than 35 years of experience in education and specializes in staff development in engineering and the sciences, teacher preparation, and evaluation of educational programs at both precollege and college levels. She holds a Certificate in Evaluation Practice from the Evaluators' Institute at George Washington University. She has authored or coauthored roughly 65 papers on effective teaching and faculty and teaching staff development. Prior to entering private consulting, she was an Associate Professor of Education at East Carolina University where she won an outstanding teacher award. In 2014, Dr. Brent was named a Fellow of the American Society for Engineering Education.

Drs. Brent and Felder are coauthors of Teaching and Learning STEM: A Practical Guide (Jossey-Bass, 2016). Separately and together, they have presented over 450 workshops on effective teaching, course design, mentoring and supporting new faculty members, and faculty development, on campuses around the world. They co-directed the American Society for Engineering Education National Effective Teaching Institute from 1991 to 2015. Visit their Facebook page.

(www.facebook.com/felderandbrent)

# Keynote Speaker

## DR. PAUL DENNY

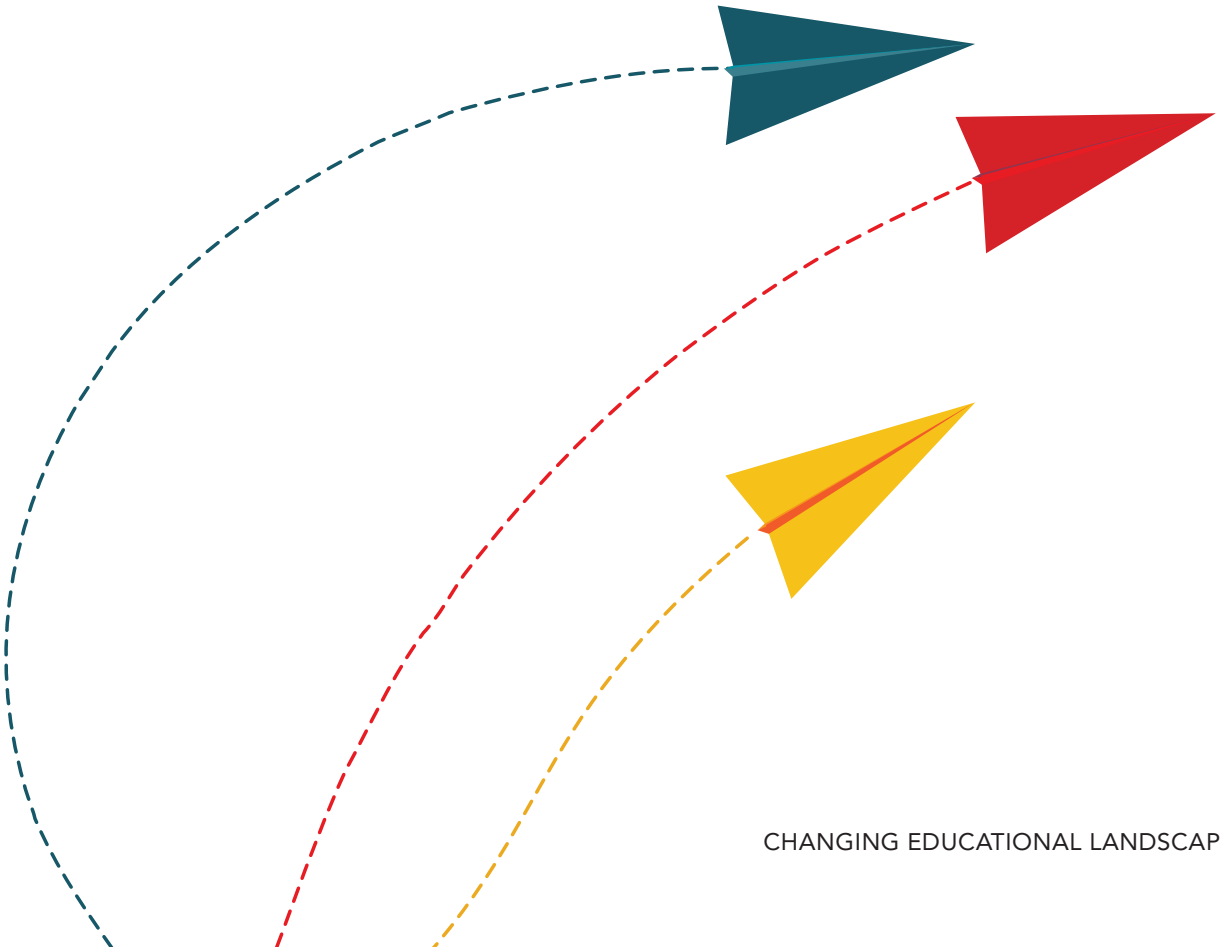
Associate professor in Computer Science at the University of Auckland, New Zealand.

**Time: 14h30**

## DR. PAUL DENNY

His research interests include developing and evaluating technologies for supporting collaborative learning, particularly involving student-generated resources, and exploring ways to motivate students to engage within online learning environments. One of his developments, PeerWise, is an award-winning, freely available web-based tool that instructors can use to support collaborative student learning across a wide range of disciplines.

The tools that he has developed have had a wide impact, being used by more than half a million students in 80 countries and helping to form a global community of educational researchers, more than 80 of whom have published their research as a result. To support this community, he has delivered more than 60 invited talks and workshops, focusing on both the practical use of technology in the classroom and approaches for evaluation. He has been recognized for contributions to teaching both nationally and internationally, receiving New Zealand's National Tertiary Teaching Excellence Award (2009), the Australasian Association for Engineering Education Award for Innovation in Curricula, Learning and Teaching (2009) and the Computing Research and Education Association of Australasia Teaching Award for Outstanding Contributions to Teaching (2010). He has strong connections with Canada, having visited Toronto in late 2017 as an Association of Commonwealth Universities Titular Fellow (the 2017 Jacky McAleer Memorial Fellowship).



SALTISE thanks Nureva for their sponsorship of this conference

**REGISTRATION** 8h00– 8h30 (McIntyre lobby – 6th floor)

**WELCOME** 8h30 – 8h50 (McIntyre Palmer amphitheater – 6th floor)
**Morning Keynote Speaker: Richard M. Felder and Rebecca Brent** 8h50-9h55

**Session 1** 10h10–11h20

| ENGAGING THE LEARNER: SUPPORTING THINKING & LEARNING<br>Session 1.1<br>**(ED. 211)** | PROFESSIONAL DEVELOPMENT: NEXT-GEN TEACHERS<br>Session 1.2<br>**(ED. 216)** | ED TECH: BRINGING INNOVATION INTO THE CLASSROOM<br>Session 1.3<br>*(bilingual)*<br>**(ED. 433)** | ED TECH: ONLINE AND WEB-BASED LEARNING<br>Session 1.4<br>*(bilingual)*<br>**(ED. 624)** | STUDENT AS PARTNER: MCGILL STEM INITIATIVE<br>Session 1.5<br>*(interactive symposium)*<br>**(ED. 129)** | AL PRACTICE: ED-TECH<br>Session 1.6<br>*(interactive)*<br>**(McIntyre 210)** | SPECIAL TOPIC: BROADER PERSPECTIVES IN LEARNING<br>Session 1.7<br>*(interactive)*<br>**(McIntyre 208)** |
|---|---|---|---|---|---|---|
| ***Increasing the effectiveness of active learning using deliberate practice: a homework transformation***<br>Kelly Miller (Harvard) | ***A team-based approach to implementing peer assessment***<br>Jennie Ferris, Justin Fletcher, Carolyn Samuel (McGill) | ***Fovéa : un objet-frontière pour rendre visible l'engagement des étudiants***<br>Séverine Parent (U. Laval) | ***Making your online course active and interactive – an example of a college-level French blended course, online and in an Active Learning Classroom (ALC)***<br>Chantale Giguère (Dawson) | ***Integrating students into freshman STEM course redesign***<br>Léa Blondel, Samantha Gateman, Ivan Gonzalez, Émilie Parent, OuLin Yu (McGill grad.students) | ***Learning is participating with VR***<br>Josie Salvo Farella (LaSalle) | ***Who am I? An interactive learning experience***<br>Daniel Goldsmith (Dawson) |
| ***Assessing the impact of environmental education on students' environmental knowledge, attitudes, and behaviour***<br>Constantinos Yanniris, Anila Asghar (McGill) | ***The Tomlinson Project in university-level science education (TPULSE) and knowledge translation for improved future STEM teaching and learning***<br>Armin Yazdani, Valerie Bourassa, Dan Petrescu, Wagner Souza-Silva, Mercedes Garcia-Holguera, Chris Bailey, Benjamin Keenan, Cassidy Vander Schee, Faygie Covens, David Harpp (McGill) | ***Usages didactiques des tablettes tactiles pour soutenir le développement des compétences en gymnase***<br>Hugo Beausoleil (UdeM) | ***myDALITE 2.0: your hosted service for peer instruction, inside and outside of the classroom***<br>Sameer Bhatnagar (Dawson) | Project coordinators: Maria Orjuela-Laverde, Anita Parmar, Tamara Western (McGill) | ***Teaching in a flipped classroom***<br>Catherine Payne (Dawson) Vanessa Vandergrift (Vanier) | ***Gardening across disciplines***<br>Costanza Graziani, Anna-Liisa Aunio (Dawson) |
| ***Three case studies implementing portfolios into higher education to support the development of student competencies and self-regulated learning skills***<br>Pamela Gunning, Teresa M. Hernandez Gonzalez (Concordia) Eva Bures (Bishops) | ***A case study of a successful adaptation of the SALTISE activities***<br>Phoebe Jackson (JAC) Jeremie Choquette (McGill/Dawson) | ***Building arcade tables: a collaborative hands-on experience***<br>Bojana Krsmanovic, Ann-Louise Davidson, Darren Wershler, Nathalie Duponsel (Concordia) | ***La stratégie inversée dans l'enseignement universitaire***<br>Jalila Zaafouri (RdL) | | ***Online collaborative annotation and curation***<br>Patti Kingsmill (Vanier) | ***Gender gap in an era of technological education: What should we do next?***<br>Jihan Rabah (Concordia) |
| ***OCLaRE: Scaffolding lab report writing to better understand the science and engineering communities***<br>Petra Turkewitsch (GIM) Murray Bronet, Michael Dugdale (JAC) | ***Supporting students with learning disabilities in science, technology, engineering, and mathematics (STEM) education***<br>Anila Asghar, Ingrid E. Sladeczek, Emily Beaudoin (McGill) Julien Mercier (UQAM) | ***Using benchling to do virtual cloning experiment online***<br>Christopher Gregg (Vanier) | ***Découvrir de nouveaux horizons éducatifs par l'intégration scénarisée des outils du web 2.0: le projet Inno-moti-vation***<br>Sarah Anthony (McGill) Prisca Fenoglio (Université Paris 8) | | ***Active learning through virtual collaborative team teaching***<br>David Hoida (Vanier), Gabe Flacks (Champlain) | ***The sandbox: where students play with ideas***<br>Tara Walker (JAC) |
| | | | | | ***Touchscreen technologies for an engaged classroom***<br>Liliya Nikolova (JAC) | ***Developing research skills of college students through a multidisciplinary and collaborative research project***<br>Hélène Nadeau, Rajesh Malik, Silvia d'Apollonia, Maria Dikeakos (Dawson), Sylvia Cox (McGill) |
| Chair: Eva Bures | Chair: Armin Yazdani | Chair: Rob Cassidy | Chair: Eva Pomeroy | Chair: Anita Parmar | Chair: Joel Trudeau | Chair: Saul Carliner |

11h20–11h40 **Break & Refreshments** (Library of the Education building, 1st floor)

**Session 2** 11h40–12h50

| PROFESSIONAL DEVELOPMENT: REFLECTING ON EVOLVING PRACTICE<br>Session 2.1<br>**(ED. 211)** | ENGAGING THE LEARNER: DIDACTIQUE DE PHYSIQUE ET GENIE *(French)*<br>Session 2.2<br>**(ED. 216)** | ENGAGING THE LEARNER: EXAMINING SCIENCE INSTRUCTION<br>Session 2.3<br>**(ED. 433)** | AL PRACTICES: STRATEGIES & APPROACHES<br>Session 2.4<br>**(ED. 624)** | SPECIAL TOPIC: DESIGNING FOR INQUIRY AND COLLABORATION<br>Session 2.5 *(symposium)*<br>**(ED. 129)** | STUDENT AS PARTNER: INNOVATION IN STEM CLASSROOMS<br>Session 2.6 *(interactive)*<br>**(McIntyre 210)** | FINDING SOLUTIONS: ASKING MORE QUESTIONS<br>Session 2.7 *(interactive)*<br>**(ED. 627)** |
|---|---|---|---|---|---|---|
| ***Research and practice of gamification in e-learning: real benefits or edutainment?***<br>Robert Cassidy (Concordia) | ***Analyse qualitative des conceptions des étudiants sur le fonctionnement de circuits électriques: construction d'un questionnaire à choix multiples***<br>Abdeljalil Métioui (UQAM) | ***Flipped classroom in organic chemistry: significant effect on final grades***<br>Caroline Cormier, Bruno Voisard (CEGEP AL) | ***Managing groups in active learning classrooms – lessons learned at Dawson College***<br>Chris Whittaker (Dawson) | ***Knowledge community and inquiry (KCI) - a model for guiding active learning designs***<br>James Slotta & colleagues (Boston College) Alisa Acosta, Maria Serevetas (UofT, OISE) Steven Ehrlick (Ryerson) Mike Tissenbaum (MIT) | ***Active learning activities in college mathematics***<br>Angela Smart & students (Heritage) | ***The Power of PowerPoint: student, teacher and professional perspectives***<br>Alice Havel (Dawson/ARN) Mary Jorgensen (ARN) |
| ***Faculty creating their own professional teaching portfolios: Supporting pedagogical innovation and professional development***<br>Eva Bures (Bishops) | ***Projet de conception en génie et mobilisation de processus cognitifs supérieurs***<br>Anastassis Kozanitis (UQAM) | ***A qualitative analysis of inquiry based learning and teaching (IBTP) in Ethiopian science classrooms***<br>Shanmugavalli Narayanan (McGill) | ***Interrupted case studies: an effective way to us problem based learning without the time investment***<br>Leslie Schneider (Visual Classroom) | | ***Learning assistants in the physics classroom***<br>Hubert Camirand, Etienne Portelance, Caroline Viger (JAC) | ***Teaching parsing and the importance of using poetry as an teaching tool in ESL***<br>Anastasia Boldireff (McGill) |
| ***Driving change, navigating turbulence: launching learning communities at Dawson College***<br>Ian MacKenzie (Dawson) | ***Étude des difficultés des étudiants à comprendre le mouvement parabolique telles que révélées par une approche multimodale au laboratoire de physique***<br>Louis Trudel (U. Ottawa) | ***Learning outcome versus order of content type (conceptual, theoretical and example based) in electromagnetism***<br>Michael Hilke (McGill) | ***Facilitation in experiential learning***<br>Nadia Naffi, Ann-Louise Davidson (Concordia) | | | ***On the use of friendly competition to promote active learning in engineering courses***<br>Lawrence Chen, Mathias Legrand (McGill) |
| ***Bring it to them: An EPSS for faculty development***<br>Saul Carliner (Concordia) | ***La persistance des conceptions préscientifiques d'étudiants sur les notions de mouvement et de force***<br>Abdeljalil Métioui (UQAM) | ***Impact of reflective writing and labatorials on student understanding of force and motion in Introductory physics***<br>Calvin Kalman (Concordia) | ***Two-stage exams for small groups in mathematics and physics (symposium)***<br>Andreea Stanciu-Panait, Jean François Brière (Dawson) | | | ***Safer spaces project: cultivating the conditions for optimal student engagement***<br>Karina Leonard (Dawson) |
| | | | | | | ***Academic barriers experienced by students with learning disabilities in learning science***<br>Neerusha Gokool Baurhoo (McGill) |
| Chair: Michael Dugdale | Chair: Anastassis Kozanitis | Chair: Calvin Kalman | Chair: Andreea Stanciu-Panait | Chair: Jim Slotta | Chair: Hélène Nadeau | Chair: Neerusha Baurhoo |

**LUNCH/POSTER SESSION** (Library of the Education building, 1st floor)
12h50–14h10

**Award Presentations** 14h00–14h30 (McIntyre Palmer amphitheater – 6th floor)
**AFTERNOON KEYNOTE SPEAKER: Paul Denny** 14h30–15h35

**Session 3**
15h50–17h00

| SPECIAL TOPIC: THE LARGER SCALES OF LEARNING<br>Session 3.1<br>**(ED. 211)** | ED TECH: INNOVATION IN THE CLASSROOM<br>Session 3.2<br>**(ED. 216)** | PROFESSIONAL DEVELOPMENT: EXAMINING TEACHERS' EXPERIENCES<br>Session 3.3 *(bilingual)*<br>**(ED. 433)** | ENGAGING THE LEARNER: LANGUAGE LEARNING<br>Session 3.4 *(bilingual)*<br>**(ED. 624)** | ED TECH: SOLUTIONS FOR PHYSICS AND ENGINEERING<br>Session 3.5 *(interactive)*<br>**(ED. 129)** | SPECIAL TOPIC: COGNITIVE SCIENCE AND TEACHING<br>Session 3.6 *(interactive)*<br>**(McIntyre 210)** | PROFESSIONAL DEVELOPMENT: CASE STUDY<br>Session 3.7 *(symposium)*<br>**(ED. 627)** |
|---|---|---|---|---|---|---|
| ***Student perceptions of the most effective and engaging online learning activities in a blended graduate seminar***<br>Alicia Cundell (Concordia) | ***Theorists' treasure hunt: playing board games in undergraduate classrooms***<br>Neerusha Gokool-Baurhoo (McGill) | ***Examens collaboratifs à l'ÉTS : bilan d'une expérience pilote***<br>Dominique Piotte, Anis Boubaker (ÉTS) | ***Re-envisioning ESL-FSL teaching within Canada: A tandem approach***<br>Susan Parks (U. Laval) | ***Scaling Peer Instruction for Post-Secondary Science with myDALITE***<br>Yann Brouillette (Dawson) | ***Go GRASP: How to manage group work and facilitate active learning in large classrooms***<br>Nathaniel Lasry & SALTISE Research Team (JAC) | ***A success story: how Dawson College developed, supported and grew active learning pedagogical capacity over a ten-year period***<br>Chris Whittaker, Dawson Active Learning Community (DALC) Fellows (Dawson) |
| ***Blurring the boundaries between community and academia: The U.lab Social Innovation Hub at Concordia***<br>Eva Pomeroy (Concordia) | ***Best practices for integrating Labster simulations into your classroom***<br>Laura Wirpsza (Labster) | ***Effets des formations suivies en formation continue sur les pratiques pédagogiques des enseignants universitaires***<br>Hélène Meunier (UQAM) | ***Hypothesi.is: Can it promote extensive reading in the second language classroom?***<br>Grace Labreche (Concordia) | ***Learning by design: design-based learning in and out of the classroom***<br>Joel Trudeau (Dawson) | ***Testing the socialification scoring grid: an empirical study***<br>Sam Faissal (Concordia) | |
| ***Training climate and weather citizen scientists: investigating how students learn by rescuing historical weather data screen reader support enabled.***<br>Drew Bush (McGill) | ***VR in the classroom: learning through immersion, engagement and empathy***<br>Johnathan Mina, Pascale Warmoes (LaSalle) | ***Teaching high leverage practices through practice-based pedagogy: Challenges and adaptations for science teacher education in Quebec***<br>Allison Gonsalves (McGill) | ***La salle d'apprentissage actif : quand l'espace d'apprentissage incarne la perspective actionnelle en enseignement des langues***<br>Diane Querrien (Concordia) | ***Using smartphone tilt behaviours to teach physics***<br>Chris Isaac Larnder (JAC) | ***The socialification scoring grid: a theoretically based scoring tool***<br>Reem Ayouby (Concordia) | |
| ***Peer engagement, ongoing feedback and formative assessment with Nureva®***<br>Anna-Liisa Aunio (Dawson) | ***The disruptive social potential of 3D printing in higher education***<br>Nathalie Duponsel, Ann-Louise Davidson, Bora Bodur (Concordia) | ***Understanding active learning teachers' instructional practices with PIPS***<br>Michael Dugdale (JAC)<br>Chao Zhang (McGill) | ***Approche par la tâche et classe inversée : Une combinaison efficace pour favoriser l'interaction et la production orale en classe de langue***<br>Alida Soucé<br>Kevin Papin (McGill) | ***Rethinking first year physics laboratories***<br>Emilie Parent, Oulin Yu (McGill)<br>***How to improve open-ended engineering design problem solving skills?***<br>Mark Driscoll (McGill) | ***Reaction speed consistency and academic achievement: a fundamental connection?***<br>Joseph Dent (McGill) | |
| Chair: Anna-Liisa Aunio | Chair: Dan Petrescu | Chair: Michael Dugdale | Chair: Victoria Pickering | Chair: Murry Bronet | Chair: Joseph Dent | Chair: Chris Whittaker |

17h00–18h00 **Wine & Cheese** (Education Building, lobby)

# Legend

ED = Education building
McIntyre = McIntyre Medical building

ARN = Adaptech Research Network
Bishops = Bishops University
Boston = Boston College
Cégep AL = Cégep André-Laurendeau
Concordia = Concordia University
Dawson = Dawson College
ÉTS = École de Technologie Supérieure
GIM = Cégep de la Gaspésie et des Îles
Harvard = Harvard University
Heritage = Heritage College
JAC = John Abbott College
Lasalle = Lasalle College
MIT = Massachusetts Institute of Technology
McGill = McGill University
RdL = Collège Notre-Dame de Rivière-du-Loup
Ryerson = Ryerson University
U. Laval = Université de Laval
UdeM = Université de Montréal
U. Ottawa = University of Ottawa
UofT – OISE = University of Toronto Ontario Institute for Studies in Education
UQAM = Université du Québec à Montréal
Vanier = Vanier College

SALTISE

# SALTISE PROGRAM

## REGISTRATION (8h00 – 8h30)

## OPENING ADDRESS (8h30 – 8h50)

## MORNING KEYNOTE (8h50 – 9h55)

RICHARD M. FELDER (North Carolina State University, Hoechst Celanese Professor Emeritus); REBECCA BRENT (President, Education Designs, Inc.) ***Understanding And Minimizing Student And Faculty Resistance To Learner-Centered Teaching***

Learner-centered teaching (LCT) is a generic name for instruction that makes students take more responsibility for their learning than traditional instruction (instructor lectures, students complete individual assignments) requires. Well-known LCT methods include active learning, cooperative (team-based) learning, and inductive teaching methods such as inquiry-based learning and problem-based learning.

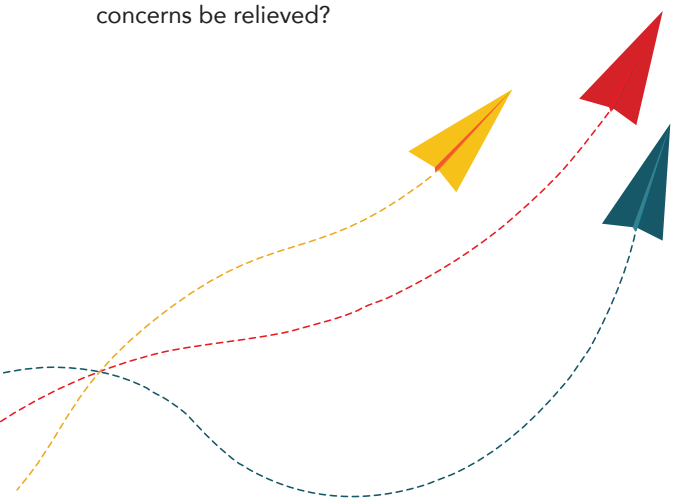
Thousands of research studies have shown that when done properly, learner-centered teaching outperforms traditional instruction on almost every measure of learning and skill development but rote memorization. Despite the research, however, traditional instruction has continued to dominate higher education in every discipline, with some students and instructors resisting any attempts to impose any form of LCT on them.

This interactive session examines resistance to learner-centered instruction, addressing the following questions:

What are active learning, cooperative learning, inquiry-based learning, and problem-based learning? Why use them?

How common is student resistance to LCT? What forms does the resistance take? How can it be minimized or eliminated?

What concerns keep many faculty members from integrating learner-centered teaching into their instruction? How can their concerns be relieved?



## MORNING SESSIONS

### SESSION 1: 10h10 – 11h20

### 1.1 Engaging the learner: supporting thinking & learning (individual presentations)

KELLY MILLER (Harvard University) ***Increasing the effectiveness of active learning using deliberate practice: a homework transformation***

This presentation reports on a study that shows how learning can be improved, beyond that reported from actively taught classrooms, by also transforming the homework, using the principles of deliberate practice. We measured the impact on student learning of the transformed homework practice, in a course that had already implemented an active approach to in-class teaching.

CONSTANTINOS YANNIRIS, ANILA ASGHAR (McGill University) ***Assessing the impact of environmental education on students' environmental knowledge, attitudes, and behaviour***

Environmental education constitutes a form of active learning that seeks to create awareness about the functions and properties of natural ecosystems. This research aims to assess whether the participation of grade 9 and 10 students in 6-month Environmental Education interventions associates with improvements in their environmental knowledge, attitudes, and pro-environmental behaviour. Preliminary analysis suggests a significant correlation between students' environmental education experiences and their knowledge, attitude and behaviour.

PAMELA GUNNING, TERESA M. HERNANDEZ GONZALEZ (Concordia University); EVA MARY BURES (Bishop's University) ***Three case studies implementing portfolios into higher education to support the development of student competencies and self-regulated learning skills***

Research has reported positive impacts of implementing electronic portfolios within higher education, but has also found that the quality of critical thinking and other outcomes varies widely. Research suggests conditions conducive for effective implementation of portfolios, for instance, incorporating self-regulated learning and/or using them to synthesize learning from a course or an internship. In this presentation three faculty members will each briefly present an example of how they used portfolios in higher education, drawing on the research.

PETRA TURKEWITSCH (Cégep de la Gaspésie et des Îles); MURRAY BRONET, MICHAEL DUGDALE (John Abbott college) ***OCLaRE: Scaffolding lab report writing to better understand the science and engineering communities***

The Online Collaborative Lab Reporting Environment (OCLaRE), is a new platform, currently under development, that uses a scaffolded writing-to-learn approach with the aim of guiding students to enhance their reflection and critical analysis skills. It does this through student participation in report writing that more closely reflects the style and structure of authentic scientific articles and engineering reports. We report on the first year of the OCLaRE project, highlight its underlying pedagogical framework, and discuss plans for future development.

## 1.2 Engaging the learner: supporting thinking & learning (individual presentations)

JENNIE FERRIS, JUSTIN FLETCHER, CAROLYN SAMUEL (McGill University) ***A team-based approach to implementing peer assessment***

Implementing peer assessment can be challenging. Instructors sometimes require support designing pedagogically sound tasks and using technology tools to facilitate these tasks. Our Teaching and Learning Centre (TLC) developed a one-stop-shop approach to offering this support. We present a Peer Assessment Consultation Guide, a one-page document that offers guiding questions for instructors and TLC consultants to use when designing course-specific assignments together. Participants will discuss the guide and consider its transferability to their practice.

ARMIN YAZDANI, VALERIE BOURASSA DAN PETRESCU, WAGNER SOUZA-SILVA, MERCEDES GARCIA-HOLGUERA, CHRIS BAILEY, BENJAMIN KEENAN, CASSIDY VANDER SCHEE, FAYGIE COVENS, DAVID HARPP (McGill University) ***The Tomlinson Project in University-Level Science Education (TPULSE) and knowledge translation for improved future STEM teaching and learning***

Large undergraduate STEM classes impact the learning and career outcome for thousands of students at McGill University. The Tomlinson Project in University-Level Science Education (TPULSE) plays an important role in the training of teaching assistants and undergraduate teaching assistants at McGill. The purpose of T-PULSE is to promote and enhance all aspects of science teaching and learning within the university, and to ensure the appreciation of successful and innovative teaching practices in STEM classes.

PHOEBE JACKSON, (John Abbott College); JEREMIE CHOQUETTE (McGill University/Dawson College/SALTISE) ***A case study of a successful adaptation of the SALTISE activities***

We present the experiences of a beginning teacher with no experience in active learning, who used the SALTISE resources website to adapt reflective writing activities from a more experienced instructor. We showcase how the resources can be used to find effective ways of employing active learning strategies, along with the activity itself which blends with multiple technologies including Visual Classrooms, Perusall, and DALITE.

ANILA ASGHAR, INGRID E. SLADECZEK, EMILY BEAUDOIN (McGill University); JULIEN MERCIER (Université du Québec à Montréal) ***Supporting Students with Learning Disabilities in Science, Technology, Engineering, and Mathematics (STEM) Education***

Despite their intellectual potential, students with learning disabilities (LD) face enormous challenges in science education. This presentation draws on the literatures from special, inclusive, and science education, to illuminate myriad challenges faced by students with LD in science, technology, engineering and mathematics (STEM) education. This multidimensional analysis presents the barriers to the inclusion of students with LD in STEM and highlights effective interventions to address their unique needs and to support their cognitive development.

## 1.3 Ed Tech: bringing innovation into the classroom (FR/EN) (bilingual session)

SÉVERINE PARENT (Université de Laval) ***Fovéa: un objet-frontière pour rendre visible l'engagement des étudiants***

Après avoir documenté manuellement la variation de l'engagement d'étudiants, il est apparu essentiel de recourir au numérique pour accéder aux données en temps réel. Nous avons conçu et développé Fovéa, un outil permettant de rendre visible l'engagement des étudiants. Nous verrons comment les données fournies par les étudiants ont suscité la réflexion et influencé les actions d'une chargée de cours ayant utilisé Fovéa durant une session.

HUGO BEAUSOLEIL (Université de Montréal) ***Usages didactiques des tablettes tactiles pour soutenir le développement des compétences en gymnase***

L'un des défis importants de l'enseignant en éducation physique et à la santé (EPS) est de rendre compétents les élèves dans divers contextes de pratique d'activités physiques. Alors, comment l'usage de la tablette tactile, un outil qui est souvent associé à la sédentarité des jeunes, peut-il soutenir le développement des compétences en EPS? Afin de répondre à cette question, quatre enseignants d'EPS seront interrogés et observés au même titre que leurs élèves.

BOJANA KRSMANOVIC, ANN-LOUISE DAVIDSON, DARREN WERSHLER, NATHALIE DUPONSEL (Concordia University) ***Building Arcade Tables: A Collaborative Hands-on Experience***

Building an arcade table with a video game emulation station is a complex, ill-defined, multi-faceted 20-hour challenge. Our team undertook this challenge in the context of an international Summer school in Media Archeology. Many challenges arose within the experience, however participants developed a wide set of skills that included media theory, collaboration, teamwork, planning and organization, problem solving, adaptation and ability to work in an interdisciplinary environment. This presentation will present the preliminary data analysis.

CHRISTOPHER GREGG (Vanier College) ***Using Benchling to Do Virtual Cloning Experiment Online***

An essential skill in the field of molecular biology is the ability to produce constructs used to genetically modify cells. Using the online software called Benchling, I was able to teach a small cohort of students how to design and virtually execute cloning experiments. This interactive activity is a simple and effective tool for teaching the principles behind cloning and training students to design such experiments on their own. These skills are being used toward the completion of a project being funded by the FRQNT to genetically engineer yeast cells to produce useful compounds.

## 1.4 Ed Tech: Online and Web-based Learning (EN / FR) (bilingual session)

CHANTALE GIGUÈRE (Dawson College) ***Making your online course active and interactive – an example of a college-level French blended course, online and in an Active Learning Classroom (ALC)***

Using the example of a college-level French blended learning course given partly online and partly in an active learning classroom, this presentation will discuss some advantages and disadvantages of teaching/learning online, strategies to engage students with a variety of online tools and pedagogical questions to consider when building an active, interactive and student centred online courses.

SAMEER BHATNAGAR (Dawson College) ***myDALITE 2.0: Your hosted service for Peer Instruction, inside and outside of the classroom***

Have you ever tried to engage your students outside of class? Peer Instruction is a simple and effective collaborative approach where students answer conceptual questions and then try to convince each other of their answers. myDALITE: The Distributed Active Learning Interactive Technology Environment is a free web-based tool designed on the principles of Peer Instruction that promotes student's self explanation and asynchronous explanation to others. In a few words, myDALITE allows learners to write, reflect on, compare and vote on explanations of peers and experts. This presentation will provide an overview of the platform.

SARAH ANTHONY (McGill University); PRISCA FENOGLIO (Université Paris 8) ***Découvrir de nouveaux horizons éducatifs par l'intégration scénarisée des outils du Web 2.0: le projet Inno-moti-vation***

Le projet Inno-moti-vation a pour objectif d'expérimenter des scénarios pédagogiques faisant usage du Web 2.0 et d'analyser si cette intégration des outils numériques peut être mise en lien avec la motivation des apprenants de FLS et, le cas échéant, de préciser par quel(s) biais. Le but de cette communication est de présenter ce projet et son site Internet. Ce dernier vise, entre autres, la création d'une communauté de pratique, en diffusant les scénarios pédagogiques développés, les résultats de nos recherches et les ressources que nous pensons intéressantes dans ce cadre.

ZAAFOURI JALILA (Collège Notre-Dame de Rivière-du-Loup) ***La stratégie inversée dans l'enseignement universitaire***

La technologie a permis de faire évoluer les méthodes d'enseignement, un des éléments qui peut être utilisé, la classe inversée. Toutefois, le problème est que l'exploitation de cette stratégie se fait pour des raisons non pédagogiques, tels que le fait de dégager plus de temps. Le présent travail montre que la classe inversée est retenue comme un outil d'information au lieu d'être un outil de formation. L'utilisation du numérique et son effet sur l'innovation pédagogique demeure toujours un défi.

## 1.5 Student as Partner: innovation in STEM classrooms (interactive symposium)

ANGELA SMART, (Heritage College) ***Active learning activities in college mathematics***

This project aimed to incorporated technologies in the form of manipulatives, to compliment instructional methods, akin to active learning, in college mathematics classrooms. Specifically, the project lead along with six senior science students, worked together to design active learning activities for statistics, linear and matrix algebra, and trigonometry.

HUBERT CAMIRAND, ETIENNE PORTELANCE, and CAROLINE VIGER (John Abbott College) ***Learning assistants in the physics classroom***

In the winter of 2018, physics teachers from John Abbott College invited former students to be learning assistants in

mechanics classes. The winter mechanics cohort typically has a lower success rate at John Abbott College, and it was the hope that bringing learning assistants would help student success. In this session, we will share the challenges and the successes of our experience.

## 1.6 AL practice: Ed-Tech (interactive session)

JOSIE SALVO FARELLA (LaSalle College) ***Learning is participating with Virtual Reality (VR)***

Teaching tourism is rewarding. However going on field trips or physically visiting destinations is difficult if not impossible to do on a weekly basis. With VR apps and goggles I can incorporate field trips, city tours and attraction, visit anywhere in the world, without leaving the classroom. The VR field trips activities create an environment where students can be "present" and provide unforgettable learning experiences. Students are eager and excited to try them out at the same time as learning important lessons.

CATHERINE PAYNE (Dawson College); VANESSA VANDERGRIFT (Vanier College) T***eaching in a Flipped Classroom***

Are you under the impression that flipped classroom only work in the realm of sciences? Contrary to popular belief, flipping a classroom can work for any discipline. This presentation will focus on how a flipped classroom can be applied to an English Literature course. Additionally, it will describe how these methods and strategies for making flipped classroom work can be expanded to other disciplines in the Creative and Applied Arts, Humanities and the Social Sciences.

PATTI KINGSMILL (Vanier College) ***Online Collaborative Annotation and Curation***

Colleagues from Vanier, VTE, and the CDC are exploring how online collaboration and annotation can develop students' research, critical-thinking, writing, and editing skills. This talk aims is to discuss the benefits of collaborative annotation and curation, share our work to-date, and unveil an online comparison of 16 platforms, looking at their functions, features, pedagogical values, along with several other criteria. The aim is to initiate a conversation with participants on the potential of online annotation and collaboration.

DAVID HOIDA (Vanier College); GABE FLACKS (Champlain College) ***Active Learning through Virtual Collaborative Team Teaching***

This presentation explores a model for encouraging active learning and social engagement through high quality teacher collaboration. Using a virtual collaborative team teaching model this project achieves dynamic blended learning environments. Virtual collaborative teaching success requires identifying pedagogical goals, the ideal collaborative partner, the best supporting constructivist learning activities and the ideal virtual platform. We will discuss design principles that can lead to innovative and engaging student learning experiences.

LILIYA NIKOLOVA (John Abbott College) ***Touchscreen technologies for an engaged classroom***

Engagement of students in our digital age shows to be challenging as they are easily distracted by a variety of devices. Particularly, engineering students who are inclined to build than to deal with dry theory. The use of touchscreen technology for in-class activities has shown great potential for the involvement of the students and improvement of their academic success. In this project, I am experimenting with use of tablets and touchscreen laptops as an alternative to multiple Smart Boards for group work. In this session, advantages and challenges related to the technology and pedagogy will be discussed.

## 1.7 Special topic: broader perspectives in learning (interactive session)

DANIEL GOLDSMITH (Dawson College) ***Who am I? An Interactive Learning Experience***

This interactive presentation will showcase an example of experiential learning, a classroom activity developed around the question, Who am I? (currently documented on the SALTISE website resources page). This activity can be used in a variety of disciplines, including psychology, religious studies, and philosophy. I will demonstrate and invite the audience to try out the activity – i.e., "take it for a spin"!

COSTANZA GRAZIANI, ANNA-LIISA AUNIO (Dawson College) ***Gardening across disciplines***

In the past few years, Dawson's three main garden sites have come to play an important role as 'living labs' creating links between peace, sustainability, and indigenous pedagogies for all Dawson students. Our project documented the activities created by instructors integrating garden activities in curricula across disciplines and is now working with the Dawson active learning community to create active learning modules that will be disseminated through the SALTISE website.

JIHAN RABAH (Concordia University) ***Gender gap in an era of technological education: what should we do next?***

To address gender disparities in our technology-supported active-learning teaching practices, we discuss the research that characterizes these disparities. We then invite discussion

with practitioners to facilitate a shared understanding of these issues as experienced in practice. We then brainstorm practical next steps for researchers and practitioners toward more gender-accommodating designs and implementations in tech-supported active learning.

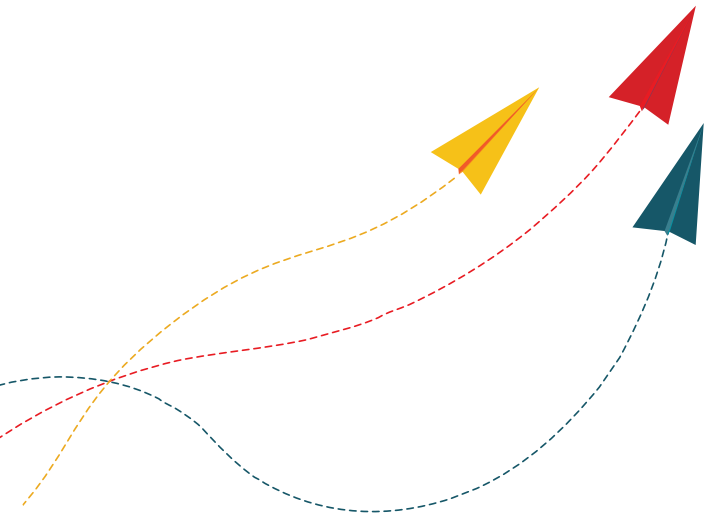
TARA WALKER (John Abbott College) ***The Sandbox: where students play with ideas***

The Sandbox is a student innovation and social entrepreneurship hub at John Abbott College launched in 2017. Our mission is to engage students from all disciplines in a problem-solving process for real-world problems where students participate in non-credit activities, developing their own projects and gain experience. This interactive session will introduce participants to our journey with founding The Sandbox, share our lessons learned and profile the students' projects and learning in their words.

HÉLÈNE NADEAU, RAJESH MALIK, SILVIA D'APOLLONIA, MARIA DIKEAKOS (Dawson College); SYLVIA COX (McGill) ***Developing research skills of college students through a multidisciplinary and collaborative research project***

We will present a report on our SALTISE mini-grant project which explored how to adapt the very successful model of our summer internship to a school-year extra-curricular activity. The main challenges we had to deal with were the lack of common periods of availability and the small number of hours a week that the students could devote to the project. We will describe how we managed to complete the project despite numerous hurdles.

**11h20 – 11h40 Break & Refreshments**



## SESSION 2: 11h40 – 12h50

### 2.1 Professional development: reflecting on evolving practice (individual presentations)

ROBERT CASSIDY (Concordia University) ***Research and practice of gamification in e-learning: real benefits or edutainment?***

We will present the current state of research in gamified education. Lessons and courses implementing gamification will be presented and analyzed. We will invite a discussion on the learning advantages and disadvantages of gamified learning designs.

EVA MARY BURES (Bishop's University) ***Faculty creating their own professional teaching portfolios: supporting pedagogical innovation and professional development***

This session focuses on faculty creating professional electronic teaching portfolios to support pedagogical innovation and the expansion of teaching skills as well as to showcase achievements. It introduces various models grounded in literature, incorporating participant interaction to refine models. It also describes an ongoing professional development collaborative process where a group of faculty create professional teaching portfolios to support an innovation by engaging in a retreat followed by online work, culminating in a poster presentation.

IAN MACKENZIE (Dawson College) ***Driving change, navigating turbulence: launching learning communities at Dawson College***

Creating spaces in the traditional college curriculum for integrative learning and interdisciplinary teaching is no walk in the park. Designing and implementing paired-course learning communities requires collaboration between faculty and across academic and administrative units. This presentation will examine the primary drivers of a Dawson College initiative for integrative learning; introduce results of surveys of impacts of these communities, courses and environments on students and participating faculty; and detail challenges faced and strategies devised thus far in the three-year start-up phase of the project.

SAUL CARLINER, DAVID PRICE, YUAN CHEN, YANG GAO, EZGI OZYONUM, AUDREY MARIAMO (Concordia University); MONICA LOPEZ (Marianopolis College) ***Bring it to them: an electronic performance support system for faculty development***

In this project, a team comprised of members from university and a Cegep are developing an alternate approach to professional development: an electronic performance support system (EPSS) that provides teaching support online and consists of (a) generalized and discipline-specific research-based guidance

for their most significant challenges as identified by a needs assessment; (b) teaching cases that illustrate practical applications in the classroom and (c) other approaches to engage faculty with this system. This session, by the research team describes the system and summarizes the first topics covered.

## 2.2 Engager les apprenants : didactique de physique et génie (FR , présentations individuelles)

ABDELJALIL MÉTIOUI (Université de Québec à Montréal) ***Analyse qualitative des conceptions des étudiants sur le fonctionnement de circuits électriques: construction d'un questionnaire à choix multiples***

On présentera dans cette communication une synthèse des modèles erronés des étudiants à l'égard du fonctionnement de circuits électriques (modèle unipolaire, modèle du courant qui s'atténue, modèle séquentiel, etc.), ainsi qu'un « Double questionnaire à choix multiples », que nous avons construits et que les enseignants du collégial pourront utiliser pour diagnostiquer les fausses conceptions de leurs élèves avant enseignement.

ANASTASSIS KOZANITIS (Université de Québec à Montréal) ***Projet de conception en génie et mobilisation de processus cognitifs supérieurs***

Les résultats d'une recherche portant sur la formation et le développement de compétences en conception dans le domaine du génie montrent que l'exposition à des problèmes complexes et réels peut susciter la mobilisation de processus cognitifs supérieurs chez les étudiants de baccalauréat en génie. L'analyse de contenu d'entretiens d'explicitation a permis d'identifier et de décrire ces processus cognitifs de façon détaillée.

LOUIS TRUDEL (Université d'Ottawa) ***Étude des difficultés des étudiants à comprendre le mouvement parabolique telle que révélées par une approche multimodale au laboratoire de physique***

En raison de la nature complexe du mouvement, les étudiants éprouvent de la difficulté à construire une compréhension conceptuelle des concepts de la cinématique, surtout lorsqu'il est nécessaire de coordonner ces concepts en une représentation en deux dimensions (Knight, 2004; Dilbert, Karaman & Duzgun, 2009). Notre objectif de recherche est donc d'étudier les difficultés des étudiants à comprendre les propriétés des objets en mouvement parabolique lorsqu'ils tentent de prédire ce mouvement sous différentes modalités.

ABDELJALIL MÉTIOUI (Université de Québec à Montréal) ***La persistance des conceptions préscientifiques d'étudiants sur les notions de mouvement et de force***

Nous présentons dans cette communication une synthèse des conceptions préscientifiques d'étudiants à l'égard des notions de mouvement et de force, telles que répertoriées dans la revue de la littérature internationale. Aussi, nous verrons qu'il y a un parallélisme entre ces conceptions et celles développées au cours de l'histoire entre autres par Aristote et Buridan et qui ont été abandonnées. Finalement, nous verrons comment les enseignants pourront rendre compte dans leur enseignement des conceptions préscientifiques de leurs élèves.

## 2.3 Engaging the learner: examining science instruction (individual presentations)

CAROLINE CORMIER, BRUNO VOISARD (Cégep André-Laurendeau) ***Flipped classroom in organic chemistry: Significant effect on final grades***

We implemented a model of flipped classroom in our organic chemistry course in which students had to watch videos prior to class and work on applying knowledge during class time. We found that, overall, grades were higher by 4% in the flipped classroom setting, and even more so for lower-achieving students (higher by 10%). These results might be explained by better feedback due to teachers and students being more active in the flipped classroom.

SHANMUGAVALLI NARAYANAN (McGill University) ***A qualitative analysis of inquiry-based learning and teaching (IBTP) in Ethiopian science classrooms***

My dissertation research focuses on helping develop a professional learning community (PLC) of secondary science teachers in Ethiopia. This PLC will serve as a supportive professional platform for Ethiopian teachers where they collaboratively explore inquiry-based teaching practices (IBTP) and develop pedagogical tools to practice IBTP in their science classrooms. Using an ethnographic approach, this study will examine the process of teachers' participation, collaboration, and learning in a PLC as they implement IBTP in their science classrooms.

MICHAEL HILKE (McGill University) ***Learning outcome versus order of content type (conceptual, theoretical and example based) in electromagnetism***

We designed an online system in order to test the learning outcome as a function of order in which the students see new material. The new material was divided in three categories: conceptual-, theoretical- and example-based. In a study consisting of 1000 students, we observed significant differences in the learning outcomes as a function of the order in which students were exposed to new material. The worst outcomes arise when students first learn from the theoretical approach. Work with Juliann Wray, Ben Dringoli, Ksenia Kolosova, and Thomas Rademaker.

CALVIN KALMAN (Concordia University) ***Impact of reflective writing and Labatorials on student understanding of force and motion in introductory physics***

We examine a way to deal with alternative student conceptions about force and motion in a university introductory physics course. The course combines reflective writing: an approach that engages students in textual material metacognitively; and Labatorials: an in-class active learning intervention. Our analysis is based on both pre- and post- interview statements, which give a picture of the students' initial state and evolution of their understanding of force and motion.

## 2.4 Active learning practices: strategies and approaches (individual presentations)

CHRIS WHITTAKER (Dawson College) ***Managing groups in active learning classrooms; lessons learned at Dawson College***

Managing groups in active learning environments is a constant challenge. This individual talk will present some of the ways in which members of the Dawson Active Learning Community (DALC) manage groups in active learning environments. The focus of the talk will be practical in nature and attendees can expect to go away with some new ideas about how they might manage groups in their classrooms.

LESLIE SCHNEIDER (The Tufts Medical School) ***Interrupted case studies: an effective way to use problem based learning without the time investment***

This talk will introduce Bioscann, a technology platform to support "interrupted case studies," a version of problem-based learning that engages students in solving carefully constructed real world scenarios. "Interruption points" allow student teams to stay in sync and give instructors multiple opportunities to pose questions, review student responses, and use those responses to address student conceptions.

NADIA NAFFI, ANN-LOUISE DAVIDSON (Concordia University) ***Facilitation in experiential learning***

Students enrolled in higher education institutions are in dire need of authentic and relevant experiences to develop 21st century skills for employability. More than ever, instructors need to rethink how they design learning experiences for their students. This changes the role of students and instructors, which creates an identity crisis in both parties. In the midst of this turmoil, we have decided to focus on our facilitation skills within experiential learning projects. We report on our experiences and our systematic reflections.

ANDREEA PANAIT, JEAN FRANÇOIS BRIÈRE (Dawson College) ***Two-stage exams for small groups in mathematics and physics***

Exams are usually used as an evaluation tool in our experience as teachers. During exams, students are very well prepared. They have the knowledge of the material for the test and they become active and focused during tests. Therefore, the possibility of using the exams as a learning tool seems to fit perfectly within this framework. In a two-stage test, students complete a set of problems individually and then work in groups on a subset of the actual set. The main advantage is that students have the opportunity to discuss their solutions and have immediate feedback. In this session, we present our perspectives for this type of testing.

## 2.5 Special topic: designing for inquiry and collaboration (symposium)

JAMES SLOTTA (Boston College); ALISA ACOSTA, MARIA SERVETAS, MICHELLE LUI (University of Toronto, OISE), STEVEN EHRLICK (Ryerson University); MIKE TISSENBAUM (Massachusetts Institute of Technology) ***Knowledge community and inquiry (KCI); a model for guiding active learning designs***

The Knowledge Community and Inquiry (KCI) model has been developed at the University of Toronto to guide the design of semester length curricula in which the entire classroom works as an inquiry community. Students create a collective knowledge base that serves as a persistent resource for various forms of individual, small group and whole class inquiry activities. This symposium presents an overview of KCI, and 4 distinct studies, each of which examines a different aspect of the model. Three of the studies are from high school science and one is a university large lecture course.

## 2.6 Student as Partner: McGill STEM initiative (symposium)

LÉA BLONDEL, SAMANTHA GATEMAN, IVAN GONZALEZ, ÉMILIE PARENT, OULIN YU (McGill)

**Project coordinators**: MARIA ORJUELA-LAVERDE (McGill), ANITA PARMAR (McGill), TAMARA WESTERN (McGill)

***Integrating students into freshman STEM course re-design***

We present our experiences in our first year of a two-year pilot project within the Association of American Universities (AAU) STEM Network initiative to implement changes in large (1000+ students) freshman STEM courses at McGill University. The project addresses courses in four departments (Biology, Chemistry, Mathematics, and Physics), and represents a collaboration among several different units at McGill. We describe

results from year one, a project that pairs faculty with graduate students in a "Teaching Development Fellows" (TDF's) model. TDF's help faculty to conceive new teaching strategies, motivated by feedback from undergraduate students. This symposium will feature presentations by the TDF's who will share their experiences in this process of re-designing these freshmen courses, challenges encountered, and lessons learned.

## 2.7 Finding solutions: asking more questions (interactive session)

ALICE HAVEL, MARY JORGENSEN (Dawson College) ***The power of PowerPoint: student, teacher and professional perspectives***

The Adaptech Research Network, through three focus groups with students, teachers and professionals and a student questionnaire, explored the following questions regarding the popular use of PowerPoint in the Social Science program: What proportion of teachers post their PowerPoints online and when? When do students look at the PowerPoints and how do they use them? Has anyone taught them how these materials can be used effectively? Does availability of online PowerPoints affect course attendance? In this session, our findings are outlined.

ANASTASIA BOLDIREFF (Universidad de Los Andes/McGill University) ***Teaching parsing and the importance of using poetry as an teaching tool in ESL***

English as a Second Language (ESL) teachers lack pedagogical formation in teaching pronunciation, let alone in teaching poetry, prosody or phonetics. Poetry should be used as a tool to have a three-in-one impact in ESL to improve phonological awareness; to improve knowledge of the written system, and to be able to develop a second identity within the L2 culture. This research presents fixed-form poetry as a teaching tool to develop their listening discrimination and improve their intelligibility.

LAWRENCE CHEN, MATHIAS LEGRAND (McGill University) ***On the use of friendly competition to promote active learning in engineering courses***

We share our experiences of implementing exercises featuring friendly competition, as a means to increase student engagement and improve student learning, in engineering courses. The exercises are conducted during tutorial sessions or regular class times and provide students with an opportunity to practise solving problems, obtain feedback, work collaboratively, and practise for summative assessments. In this presentation, we describe the implementation of the exercise, their impact on student learning, and review challenges and possibilities for improvement.

KARINA LEONARD (Dawson College) ***Safer Spaces Project: cultivating the conditions for optimal student engagement***

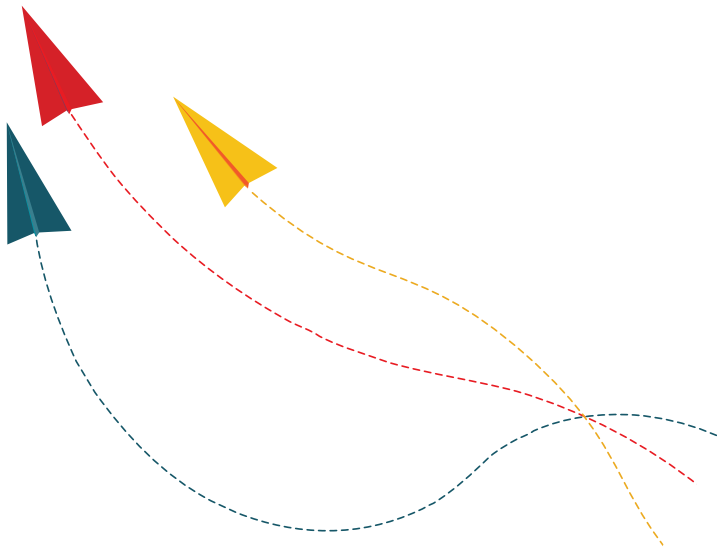
The Safer Spaces Initiative was born in consultation with faculty from the women/gender studies program. They described a need for further refinement of professional practices in response to challenging topics such as microaggressions, and colonial or misogynistic attitudes. Therein, we planned a semester long initiative using high impact educational practices to start conversations about cultivating the conditions for optimal student engagement, and how the Dawson community might mobilize to draw on our strengths.

NEERUSHA GOKOOL BAURHOO, ANILA ASGHAR (McGill University) ***Academic barriers experienced by students with learning disabilities in learning science***

Through qualitative approaches, this study explored the barriers experienced by CEGEP students with learning disabilities (LD) in learning science. Several themes stemmed from the analysis of data (i.e., interviews, journals, and photographs) which included: (1) disability-related issues, (2) low engagement in learning; (3) surface learning strategies, and (4) undifferentiated teaching approach. This study offers valuable insights into designing effective interventions to effectively address the academic needs of students with LD.

**12h50 – 14h10 Lunch and Poster Session**

**14h – 14h30 Award Presentations**



## AFTERNOON KEYNOTE (14h30 – 15h35)

DR. PAUL DENNY, University of Auckland, New Zealand. ***Practicing with peers: student-generated questions as a learning activity***

Tests and examinations are a common form of assessment in many classrooms. When preparing to be examined students adopt various strategies - including answering practice questions which is both a popular approach and known to be effective. However, creating large repositories of practice questions can be very time consuming for instructors, particularly if corrective feedback such as explanations are provided. So, what if students create their own practice questions, targeting the material they are learning, and share them with each other online where they can be answered, rated and discussed by all?

This talk attempts to address this question by drawing upon data from the popular PeerWise tool that hosts more than three million questions created by students in a vast array of subjects. As a learner-centered activity, question generation is relatively simple for instructors to adopt as it requires no modification to course material and with appropriate tool support can run with virtually no supervision - making it practical even in very large classes. However there are also a number of challenges and these will be discussed alongside a summary of research findings, and the talk will conclude with a look to the future.

## AFTERNOON SESSION

### SESSION 3: 15h45 – 17h00

### 3.1 Special Topic: the larger scales of learning (individual presentations)

EVA POMEROY (Concordia University) ***Blurring the boundaries between community and academia: the U.lab Social Innovation Hub at Concordia***

ULab is an online-to-offline educational platform for leadership and social change developed by Otto Scharmer at MIT that integrates social science, evolving consciousness, and design thinking. At Concordia University, we created a for-credit curriculum integrating the active and experiential learning of ULab with a hub open to the public. The course brings together students with members of the community, creating the opportunity to learn together and to develop initiatives that address current needs in the community alongside those individuals responsible for implementing these initiatives.

ALICIA CUNDELL (Concordia University) ***Student perceptions of the most effective and engaging online learning activities in a blended graduate seminar***

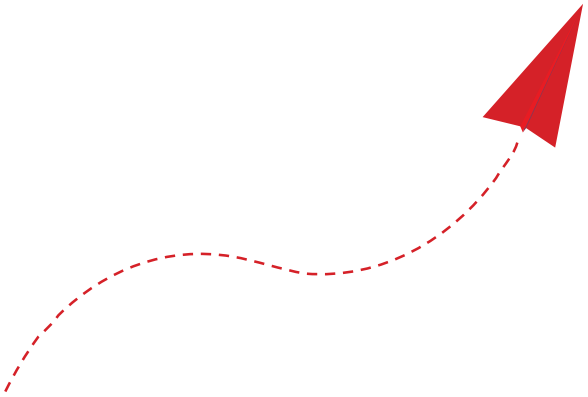
What kinds of online activities do students find most engaging? Which do they find most effective? Graduate students were asked to rate each of the online activities on effectiveness and engagement in a blended (60(in-class)-40(online)) graduate seminar on teaching in order to inform the design of future blended learning courses. This presentation will discuss the results of the survey by highlighting the most and least highly-rated activities.

DREW BUSH (McGill University) ***Training climate and weather citizen scientists: investigating how students learn by rescuing historical weather data***

The Data Rescue: Archives and Weather (DRAW, https://test.citsci.geog.mcgill.ca/) project furthers scientific understandings of weather and climate and its impact on people. Implemented during a three-week course module at Dawson College in March-April 2018, students worked as citizen scientists while transcribing logbooks from 1871 to 1964 from the McGill University Observatory. Compared against workshops with the public, findings hold implications for enhancing the public's knowledge and engagement with weather and climate science. In this session, we present preliminary findings from our pilot study.

ANNA-LIISA AUNIO (Dawson College) ***Peer engagement, ongoing feedback and formative assessment with Nureva***

How can we provide the kind of meaningful and continuous formative feedback central to building students' capacity, efficacy and skills in active learning environments? What kinds of tools in an increasingly crowded technological landscape can help us do so more efficiently and effectively? This presentation will address the lessons and experience from three different active learning classrooms at Dawson College and highlight the role of the SPAN Nureva system in supporting ongoing student assessment and feedback in these settings. Throughout, pedagogical strategies and technological tools that effectively build students' abilities in active learning environments through formative feedback, peer evaluation, and student engagement will be addressed.



## 3.2 Ed Tech: innovation in the classroom (individual presentations)

NEERUSHA GOKOOL BAURHOO, AMANDA CHAMOUN, ALYSSA YUNG, KIRK ELSMORE, NASTASIA SCHREINER, ERIC MAYHEW (McGill University) ***Theorists' treasure hunt: playing board games in undergraduate classrooms***

Our project aimed to design, implement, and assess the benefits of board games for a teacher education course at McGill University. The majority of students reported higher motivation, engagement, and deeper learning while playing the game. For example, in terms of deeper learning, one student reflected: "We clarified misconceptions." In this presentation, we will discuss the impact of the game on learning and the challenges encountered in implementing the game.

LAURA WIRPSZA (Labster) ***Best practices for integrating Labster simulations into your classroom***

Labster is a science education group dedicated to developing advanced lab Virtual Reality (VR) simulations allowing experiential and investigative learning via gamification. Preliminary research shows 101% increase in learning outcomes when mixing traditional teaching methods with Labster's virtual labs (Bonde et al., 2014). For practical techniques, Labster simulations outperformed 'real' lab experiences in facilitating higher-order learning (Makransky et al., 206). In this presentation we discuss the impact of implementing this innovative technology into Biology and Biochemistry courses while presenting its first-hand challenges and highlights.

JOHNATHAN MINA, PASCALE WARMOES (LaSalle College) ***VR in the Classroom: Learning through immersion, Engagement and Empathy***

The growing popularity of virtual reality (VR) experiences and 360o presents compelling opportunities for learning. In addition to being used in disciplines/fields related to the Tourism program, VR can also be used as "empathy making machines" that allow viewers to experience perspectives and worldviews that are otherwise inaccessible to them. Our presentation will focus on our implementation of VR experiences in our classroom in Humanities and the SCC program to facilitate learning through empathy.

NATHALIE DUPONSEL, ANN-LOUISE, BORA BODUR (Concordia University) ***The disruptive social potential of 3D printing in higher education***

As we enter the fourth industrial revolution, universities need to stay relevant. This involves creating meaningful and strong partnerships with the community so that both community members and students can work together in developing highly qualified personnel (HQP). To achieve this goal, we created a makerspace at the Milieux Institute. This presentation describes the first year of activities, which involved building three dimensional printers and learning to co-create objects through the development of shared expertise to disrupt innovation and solve authentic problems.

## 3.3 Professional development: examining teachers' experiences (FR/EN) (Bilingual session)

DOMINIQUE PIOTTE, ANIS BOUBAKER (École de Technologie Supérieure) ***Examens collaboratifs à l'ÉTS: bilan d'une expérience pilote***

Comment transformer une évaluation en activité d'apprentissage? Dans le prolongement de la pédagogie active, les enseignants proposent des examens collaboratifs dans le but de renforcer les compétences ou de corriger les erreurs au moyen d'une rétroaction immédiate par les pairs. Inspirés par Georg Rieger à SALTISE en 2017, nous avons expérimenté, dans le cadre de cours de chimie et d'informatique, un format d'évaluation dans lequel un examen individuel est suivi par un examen collaboratif. Découvrez ce qu'en ont appris les enseignants et ce qu'en ont pensé les étudiants.

HÉLÈNE MEUNIER (Université de Québec à Montréal) ***Effets des formations suivies en formation continue sur les pratiques pédagogiques des enseignants universitaires***

Les institutions accordent de plus en plus d'importance aux compétences pédagogiques des formateurs universitaires, soutenant ainsi qu'elles ont un impact sur la qualité de l'enseignement et sur la réussite des étudiants. La communication vise à rendre compte des résultats d'une recherche évaluative qui identifient les facteurs influant sur les pratiques pédagogiques des enseignants universitaires de l'Université de Québec à Montréal, suite aux formations offertes par le Centre de formation de soutien à l'académique.

ALLISON GONSALVES, DAWN WISEMAN (McGill University) ***Teaching high leverage practices through practice-based pedagogy: challenges and adaptations for science teacher education in Quebec***

This presentation will chronicle recent shifts in science teacher education at McGill University and the theoretical foundations of those shifts. In the last 5 years, our science teacher education program has shifted to a practice-based pedagogy with a focus on modeling, planning, rehearsing and enacting high leverage practices (HLPs) to elicit student thinking in the science classroom. We will discuss how this focus on HLPs, though cycles of modeling and rehearsing can prepare novice teachers for the complexities of teaching.

MICHAEL DUGDALE (John Abbott College); CHAO ZHANG (McGill University) ***Understanding active learning teachers' instructional practices with PIPS***

This presentation reports on the use of the Postsecondary Instructional Practices Survey (PIPS), a questionnaire designed to assess teachers' commitment to different approaches to teaching and learning. Findings revealed a strong correlation between the amount of time students engaging in group work and the teachers' self-reporting of instructional approach (student-centred vs. teacher-centred); which was also correlated with their observed classroom implementations of group work. Early findings suggest that the PIPS can be a reliable instrument to assess teacher readiness for active learning. Professional development implications will be discussed.

## 3.4 Engaging the learner: language learning (EN/FR) (bilingual session)

SUSAN PARKS (Université Laval) ***Re-envisioning English as a second language/ French as a second language teaching within Canada: a tandem approach***

In a tandem approach to second language learning, learners pair up with native (or competent) speakers of the language they are learning to help each other learn their respective languages. Thus, Québec English as a second language (ESL) learners would be paired up with French as a second language (FSL) learners in English-speaking areas of Canada. As a result of a grant from the Québec Ministry of Education, a virtual platform to facilitate such exchanges is being developed. This session will present our project thus far.

GRACE LABRECHE (Concordia University) ***Hypothesi.is: can it promote extensive reading in the second language classroom?***

This study examines how Hypothesi.is, a browser extension for reading online, can promote extensive reading outside of the language classroom. A survey of 49 language learners revealed, among other things, that participants were more likely to read in their L2 if they had access to a tool such as Hypothesi.is. The discussion of our findings highlights the importance of learner-centred approaches to L2 learning and emphasize their pedagogical implications and applications for L2 education.

DIANE QUERRIEN (Université Concordia) ***La salle d'apprentissage actif: quand l'espace d'apprentissage incarne la perspective actionnelle en enseignement des langues***

Le but de cette communication est de rendre compte de l'intégration de l'approche actionnelle (domaine de l'enseignement des langues) et des ressources liées à l'apprentissage actif au niveau universitaire, et ce, à travers des exemples et des observations concrètes réalisées auprès d'étudiants apprenants du français langue seconde. Seront discutés les apports potentiels de la didactique des langues pour d'autres disciplines dans le contexte d'une mise en œuvre de la pédagogie active.

ALIDA SOUCÉ, KEVIN PAPIN (Université McGill) ***Approche par la tâche et classe inversée : une combinaison efficace pour favoriser l'interaction et la production orale en classe de langue***

Au 21e siècle, l'approche par la tâche (Ellis, 2003) et la classe inversée (Basal, 2015) sont deux stratégies reconnues en enseignement des langues secondes. Cette étude a pour contexte la refonte d'un cours de français langue seconde de niveau élémentaire à l'université McGill. Elle vise à exposer les avantages à utiliser une méthodologie d'enseignement/apprentissage éclectique afin de favoriser l'interaction ainsi que le développement des compétences communicatives à l'oral.

## 3.5 Ed Tech: solutions for physics and engineering (interactive session)

YANN BROUILLETTE (Dawson College/SALTISE) ***Scaling peer instruction for post-secondary science with myDALITE***

Do you want to engage your students outside of class? Peer Instruction is a simple and effective collaborative approach where students answer conceptual questions and then try to convince each other of their answers. myDALITE: The Distributed Active Learning Interactive Technology Environment is a free web-based tool designed on the principles of Peer Instruction that promotes student's self-explanation and asynchronous explanation to others. This interactive session will provide a hands-on experiences with this platform.

JOEL TRUDEAU (Dawson College) ***Learning by Design: Design-based learning in and out of the classroom***

We examine how design-based learning approaches can positively impact/disrupt teaching and learning. Design thinking and related methodologies are presented with examples from S.P.A.C.E., an interdisciplinary initiative at Dawson College. A new complementary course (SPACE 365: Make Things That Matter) piloted in Winter 2018 is used to illustrate the capacity for designing authentic learning experiences afforded by active learning opportunities and environments.

CHRIS ISAAC LARNDER (John Abbott College) ***Using smartphone tilt behaviours to teach physics***

A constant challenge for physics educators is to link concepts to concrete examples that are relevant to the world in which students live. We present a novel laboratory activity for investigating tilt behaviours in smartphones and a resource kit for teachers who wish to design for students' engagement in

active learning. We also invite active-learning researchers to collaborate in the development of measures of the conceptual change that can occur when a student's everyday digital tool is transformed into an object of active scientific inquiry.

EMILIE PARENT, OULIN YU (McGill University) ***Rethinking first year physics laboratories***

With the goal of improving the quality of undergraduate teaching and learning, this project's focus is to replace the current "cookbook-style" laboratories with exploratory experiments aimed at reinforcing students' understanding of concepts. The use of IOLab devices, handheld data-gathering devices equipped with multiple sensors that communicate data in real time, is central to the enactment of these new experiments. This presentation discusses the advantages of IOLab-based labs in freshman physics, as well as examples of experiments developed with the device.

MARK DRISCOLL (McGill University) ***How to improve open-ended engineering design problem solving skills***

A new corrective software is in the process of being developed by researchers from the Physics Department at McGill. Preliminary versions of the software has already served to enable open-ended engineering questions to be utilized in the context of a third-year mechanical engineering design class. Early use shows favourable results for both students and the professor. This session will describe the software and these preliminary findings.

## 3.6 Special topic: cognitive science and teaching (interactive session/talk)

NATHANIEL LASRY (John Abbott College) ***Go GRASP: How to manage group work and facilitate active learning in large classrooms***

In this session we describe and demonstrate how to use GoGRASP (Group Response Ambient Student Participation), a classroom augmentation tool that converts student's mobile phones into group management devices. GRASP is based on the research conducted by Pierre Dillenbourg and colleagues on the Dillenbourg-lanterns. Like the lantern, GRASP helps instructors orchestrate group-sessions by providing ambient feedback on group work status. Groups can use ambient feedback to determine which group is ahead and could help.

REEM AYOUBY (Concordia University) ***Testing the socialification scoring grid: the theoretical background***

This presentation, related to the one below, presents the theoretical base which inspired the creation of the socialification scoring grid to assess learning management system's (LMS) social functionality and features. Our model proposes that the interaction between implicit motives and perceived social LMS functionality leads to deep LMS use and deep learning. Based on our research model, we derive five major elements which comprise our Socialification Scoring Grid. We present this scoring grid, and how it can be used by administrators to assess LMS functionality.

SAM FAISSAL (Formerly Walden University) ***Testing the socialification scoring grid: an empirical study***

This presentation empirically tests the scoring tool proposed above. We illustrate the process administrators would follow to use the grid by applying it to the assessment of the Moodle learning management system (LMS). This clarifies the extent to which social functions and features are present in the Moodle LMS and its related plug-ins. We then discuss the pedagogical outcomes which could be expected from the various plugins. Our goal is to help administrators and educators choose the right tools to achieve their pedagogical goals.

JOSEPH DENT (McGill University) ***Reaction speed consistency and academic achievement: a fundamental connection?***

The biological basis of differences in academic achievement is poorly understood. A reaction speed test assigned to students to familiarize them with limitations of the nervous system revealed a significant and reproducible correlation between self-reported reaction speed consistency and achievement on a related midterm exam. Our results may point to a link between a fundamental cognitive trait and academic achievement.

## 3.7 Professional development: case study (symposium)

CHRIS WHITTAKER (Dawson College) ***A success story: how Dawson College developed, supported and grew active learning pedagogical capacity over a ten-year period***

As faculty and institutions seek to adopt active learning pedagogies, the task of supporting and sustaining change becomes critical to success. This symposium will take a detailed and practical look at the way Dawson College has successfully developed, supported and grown its active learning pedagogical capacity over a ten-year period using a Professional Learning Communities approach. The focus of this symposium will be practical with time a small group discussion and questions.

**17h – 18h Wine & Cheese**

SALTISE

# Posters

DANIEL GOLDSMITH dgoldsmith@dawsoncollege.qc.ca
***Who am I? An Interactive Learning Experience***

JOSIE SALVO FARELLA josiesalvo.farella@collegelasalle.com
***Learning is Participating with VR***

JOAN NETTEN joan.netten@sympatico.ca
***Teaching French Communication Skills Effectively in the Classroom: The Neurolinguistic Approach***

BRIAN LARADE brian.larade@johnabbott.qc.ca
***Locate your smartphone's accelerometer by spinning it***

REEM AYOUBY Reem.Ayouby@gmail.com
***The Socialification Scoring Grid: A Theoretically Based Scoring Tool***

DEBORAH LUNNY debbie.lunny@johnabbott.qc.ca
***Decolonizing/Indigenizing Cegep Education: Sharing Resources and Strategies***

CARMEN KUCZEWSKI cdella@jmsb.concordia.ca
***Live case Simulation - A summative assesment***

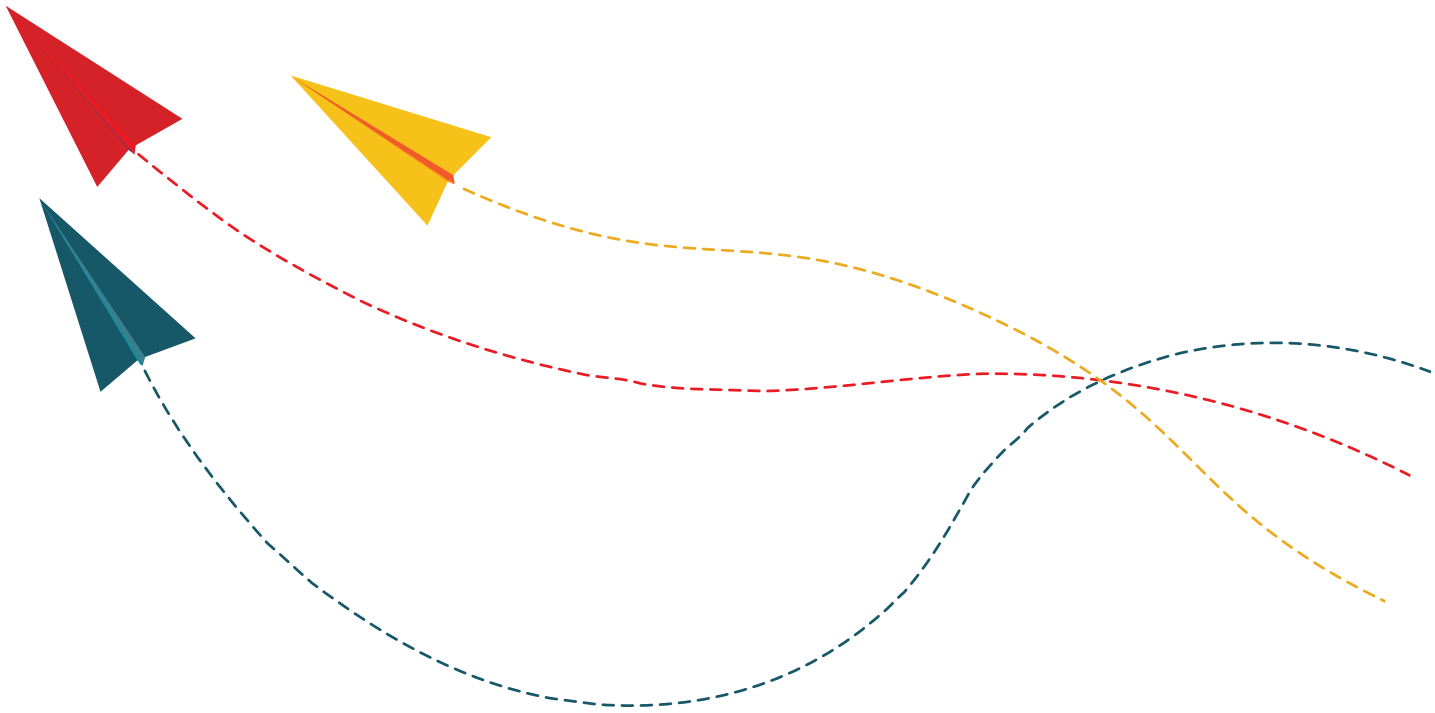
MARC FRICKER mfricker@cegep-heritage.qc.ca
***Wireless Communications in PBL***

STUART SPENCE stuart.a.spence@gmail.com
***Teaching a Week-long Workshop on 3D Games Programming for High School Girls: A Case Study***

IVAN RUBY ivan.ruby@mail.concordia.ca
***Should we care about natural languages in programming languages? A deeper look***

CHRIS WHITTAKER cwhittaker@dawsoncollege.qc.ca
***Dawson's New Toy: How teachers are using Dawson's newest active learning classroom and the surprising differences in the affordances of Nureva Span technology.***

UPASANA DASGUPTA upasana.dasgupta@mail.mcgill.ca
***Effects of Active Learning and Clinical Education : A Personal Ethnographic Study***



# Words of Appreciation
# Mots de remerciement

Enseignement supérieur, Recherche et Science Québec

THE SALTISE 7TH ANNUAL CONFERENCE COMMITTEE wishes to thank: the entente Canada-Québec on Minority-Language Education and Second Language Instruction (ECQ), which is managed by Ministère de l'Enseignement supérieur (MESRS), for their contribution towards the funding of this year's conference.

Le comité de programmation de la septième 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.

McGill

We thank our host, McGill University, for their warm welcome and commitment to ensuring the success of the SALTISE conference. Finally, we express our deep appreciation to the directors and personnel of TLS and special thanks to eLATE.

Nous remercions l'université McGill, notre hôte, pour leur chaleureux accueil et leur engagement à assurer le succès de la conférence SALTISE. Enfin, nous souhaitons exprimer notre profonde gratitude à l'équipe de direction de TLS et à son personnel et remercier tout particulièrement eLATE.

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

Concordia University Centre for Teaching and Learning Services

McGill Faculty of Engineering

DAWSON COLLEGE

VANIER CÉGEP/COLLEGE

JOHN ABBOTT CEGEP/COLLEGE

T-PULSE Tomlinson Project in University-Level Science Education

McGill Teaching and Learning Services

McGill Student Life and Learning

McGill Faculty of Science

SMART

nureva

NELSON

Visual Classrooms

SALTISE

# *NOTES*

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# SALTISE 2018 7th Annual Conference

wishes to thank its partner organizations for their support

Concordia University
Centre for Teaching and Learning Services

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. http://www.concordia.ca/offices/ctl.html

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/

PÉRISCOPE
Plateforme Échange, Recherche et Intervention sur la SCOlarité: Persévérance Et Réussite

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. http://periscope-r.quebec/en

centre de documentation collégiale

The Centre de documentation collégiale (CDC) was created in 1990 when the Ministère de l'Enseignement supérieur et de la Science took over the extensive collection of documents developed since 1970 by the Centre d'animation, de développement et de recherche en enseignement (CADRE). https://cdc.qc.ca

CCDMD
COLLEGIAL CENTRE FOR EDUCATIONAL MATERIALS DEVELOPMENT

CCDMD (Centre collégial de dévloppement de matériel didactique) provides digital and online materials for a number of college disciplines and programs. http://www.ccdmd.qc.ca

AQPC
ASSOCIATION QUÉBÉCOISE DE PÉDAGOGIE COLLÉGIALE

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. http://aqpc.qc.ca/

McGill Teaching and Learning Services

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/

ARC | Association pour la recherche au collégial

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/

vté
vitrine technologie éducation

Vitrine technologie-éducation (VTÉ) is a nonprofit 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. http://vteducation.org/en

Enseignement supérieur, Recherche et Science
Québec

http://www.education.gouv.qc.ca/ministere-de-leducation-et-de-lenseignement-superieur/

CÉGEP À DISTANCE

Cégep à distance develops distance education materials for college-level courses and provides on-line courses in many disciplines. http://cegepadistance.ca/en

profweb
Learning Objects and Inspiring Learning

Profweb supports IT integration in teaching and learning. Profweb - the Quebec College Crossroad for IT integration: http://www.profweb.ca/en