

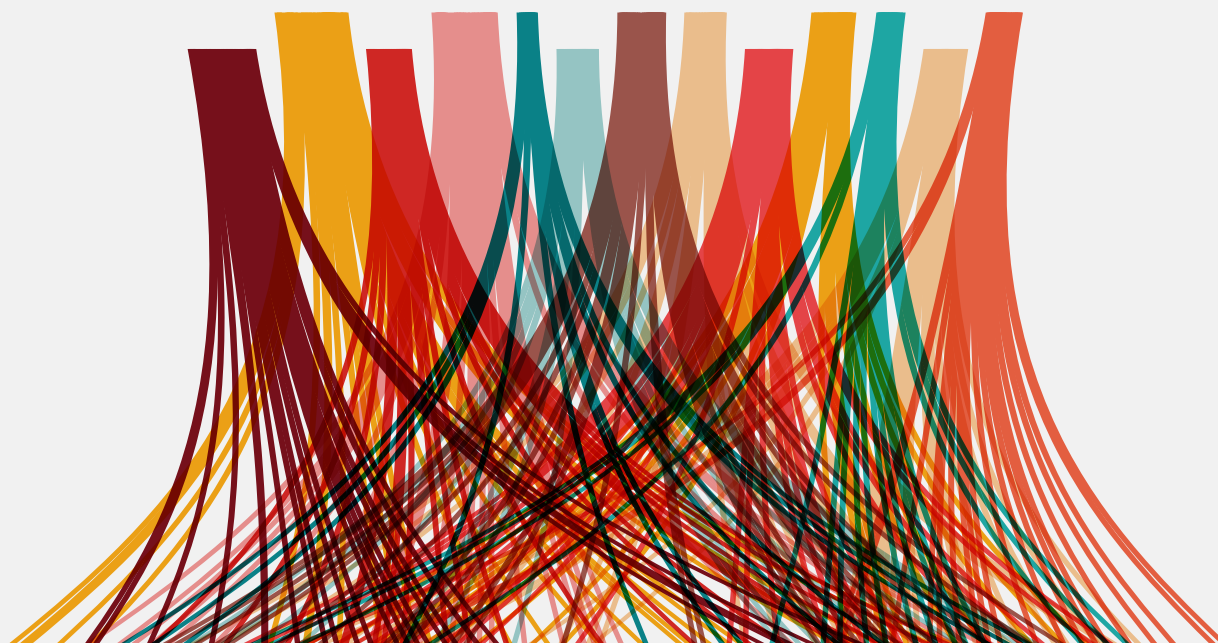


13<sup>ème</sup> colloque annuel de  
**SALTISE**  
13<sup>th</sup> Annual Conference

**THÈME** | LES TECHNOLOGIES ÉMERGENTES EN ÉDUCATION : FAÇONNER LES POTENTIELS, GÉRER LES PIÈGES

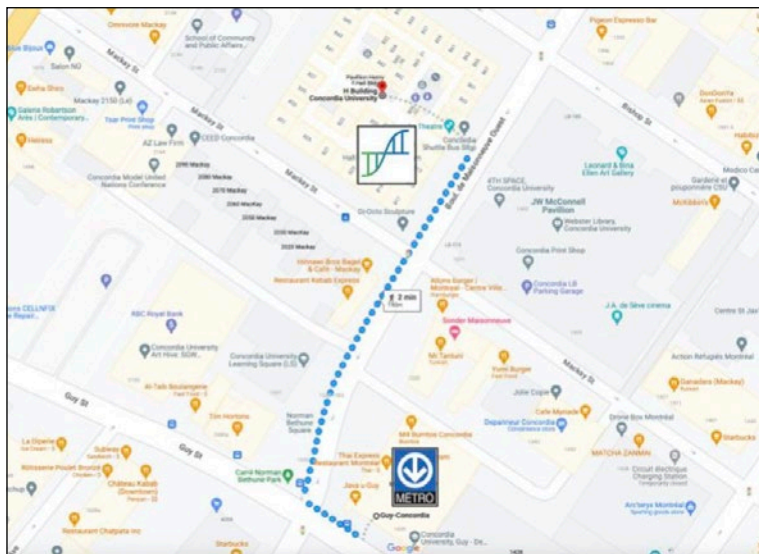
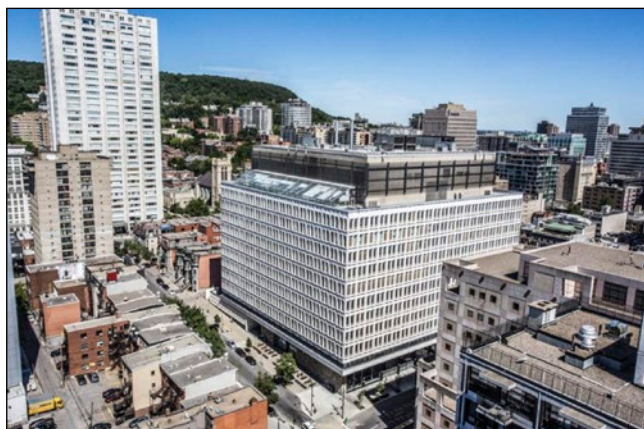
**THEME** | EMERGING TECHNOLOGIES IN EDUCATION: SHAPING POTENTIAL, MANAGING PITFALLS

**3 & 4 juin 2024 | June 3 & 4, 2024**



# SALTISE Conference Venue

OUR HOST FOR 2024 IS CONCORDIA UNIVERSITY



## Location of Events | Lieu des événements

### EVENTS WILL BE HELD AT:

#### Concordia University

The main venue is the Henry Hall Building  
1455 Boul. de Maisonneuve Ouest, Montréal, QC H3G 1M8  
<https://www.concordia.ca/maps/buildings/h.html>

### VISITOR PARKING

Parking in the vicinity of Concordia is limited.

[Click here](#) for information on parking options and rates around Concordia University Downtown Campus.

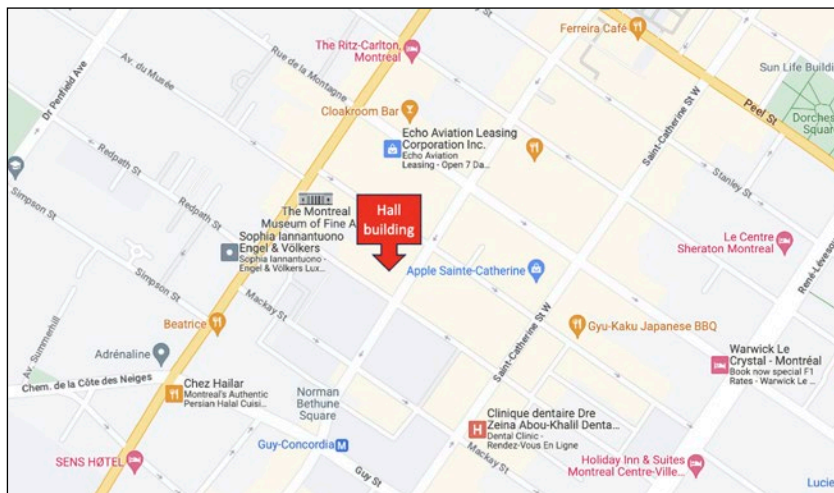
### PUBLIC TRANSPORTATION

Concordia is centrally located in downtown Montreal.

**Metro:** Guy-Concordia (Green Line)

**Bus:** there are several bus lines that serve the Guy-Concordia metro station. For bus lines see the map above or visit [www.stm.info](http://www.stm.info) for more information.

## Registration & Room Information Information sur les inscriptions et les salles



### REGISTRATION

- on the Mezzanine - 2nd floor, Hall building

### CONFERENCE PRESENTATIONS

- on the 4th and 6th floors, Hall building

### KEYNOTES

- in the H110 amphitheatre, Hall building

### REFRESHMENT BREAKS:

- Mezzanine

### AWARDS CEREMONY:

- on the 6th floor, room H-655, Hall building

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Internet connection for the conference days:

NETWORK / RÉSEAU:  
ConcordiaGuest

USERNAME / NOM D'UTILISATEUR:  
saltise

PASSWORD / MOT DE PASSE:  
WAC-Saltise24

## Connect with SALTISE Connectez avec SALTISE

Visit our website at | Visitez notre site web: **[www.saltise.ca](http://www.saltise.ca)**



Join the discussion on X @SALTISE  
Joignez-vous à la conversation  
sur X @SALTISE  
<https://x.com/saltise>



Find us on Facebook:  
Retrouvez-nous sur Facebook  
[www.facebook.com/SALTISE/](http://www.facebook.com/SALTISE/)



Check us out on YouTube  
Retrouvez-nous sur Youtube  
<https://www.youtube.com/channel/UCHMPP0rG7ZQdPb68s8NF-bg/featured>

# About SALTISE

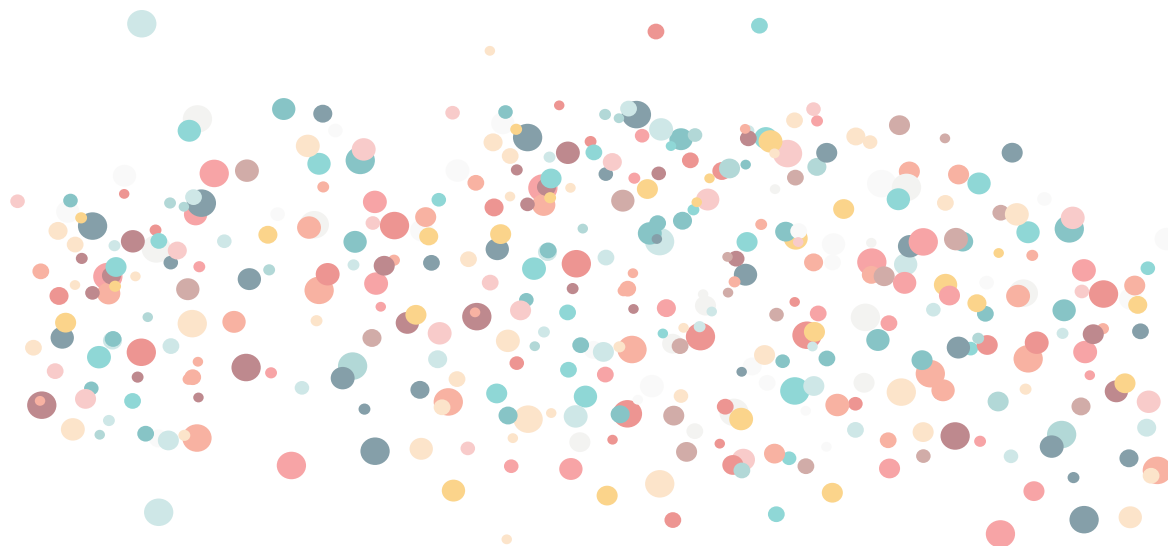
SALTISE - SUPPORTING ACTIVE LEARNING & TECHNOLOGICAL INNOVATION IN STUDIES OF EDUCATION is a professional learning community made up of educators from both English and French institutions within the Greater Montreal area, and beyond. Our community of post-secondary instructors, educational researchers, educational/faculty developers and instructional designers are brought together because of our shared goals of advancing evidence-based pedagogies and educational technologies to promote deeper learning, which in turn closes achievement gaps, supports students' academic success and perseverance through the post-secondary levels.

SALTISE owes its development and expansion to the financial support of the Entente Canada-Québec (ECQ), funded through the Ministère de l'Éducation et de l'Enseignement supérieur. It extends its resource development, knowledge mobilization innovations and community-based efforts to over 1500 educators. Its expanding website (<https://www.saltise.ca/>) consists of dozens of resources and tools that support the implementation of instructional innovations; as well as aims to provide a venue for our community to make connections and engage in conversations around topics of educational research and practice. The SALTISE annual conference 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. To learn more, go to <https://www.saltise.ca/about/about-us/>

# À propos de SALTISE

SALTISE - SUPPORTING ACTIVE LEARNING & TECHNOLOGICAL INNOVATION IN STUDIES OF EDUCATION (SOUTENIR L'APPRENTISSAGE ACTIF ET L'INNOVATION TECHNOLOGIQUE PAR LA RECHERCHE EN ÉDUCATION) est une communauté d'apprentissage professionnelle composée d'éducatrices provenant d'établissements d'enseignement supérieurs francophones et anglophones originaires de la grande région de Montréal ainsi que d'autres régions du Québec. Cette communauté d'enseignants, de chercheurs en éducation et de concepteurs de matériel didactique se rassemble autour d'objectifs communs : mettre en œuvre des innovations pédagogiques reconnues et des technologies éducatives afin de promouvoir un apprentissage profond, tout en soutenant la réussite des étudiants et leur motivation durant leurs études post-secondaires.

SALTISE doit sa création et son développement à une subvention d'Entente Canada-Québec, relative à l'enseignement dans la langue de la minorité et à l'enseignement des langues secondes (ECQ), Ministère de l'Éducation et de l'Enseignement supérieur. Par son développement de ressources, ses innovations en matière de partage des connaissances et ses efforts communautaires, SALTISE rejoint plus de 1500 éducateurs. Son site web qui ne cesse de se développer (<https://www.saltise.ca/>) offre à présent une douzaine de ressources et d'outils pour mettre en œuvre des innovations pédagogiques. Le site héberge la communauté SALTISE lui permettant d'établir des liens, d'échanger des pratiques pédagogiques et de partager des recherches en éducation. Dans le cadre de sa conférence annuelle, SALTISE accueille des chercheurs canadiens et internationaux, offrant ainsi aux spécialistes locaux l'occasion de discuter et d'échanger des pratiques exemplaires en pédagogie active et concernant l'utilisation des technologies éducatives. Pour plus d'information concernant SALTISE, voir le site <https://www.saltise.ca/about/about-us/>





# 2024 SALTISE Conference Committee

## Comité organisateur du Colloque SALTISE

(IN ALPHABETICAL ORDER)

### Conference Chair

Suéli Bonafim, SALTISE

### Conference Planning Committee

Alexandre Enkerli,  
User Experience Researcher / Chercheur UX

Andy Van Drom, Collecto

Azra Khan, Dawson College

Carolyn Sealfon, Minerva University, San Francisco

David Hoida, Vanier College

Elizabeth S. Charles, Dawson College (SALTISE)

Emilie Albert-Toth, Concordia University

Eric Francoeur, École de technologie supérieure

Eva Bures, Bishop's University

Josephine Guan, Concordia University

Laura Pavelka, McGill University

Lorraine Chiarelli, Dawson College (SALTISE)

Maria Orjuela-Laverde, McGill University

Michael Dugdale, John Abbott College (SALTISE)

Murray Bronet, John Abbott College

Preeti Raman, Toronto Metropolitan University

Rebecca Brosseau, McGill University

Remi Arora, Concordia University, Montreal

Sara Hashem, Champlain Regional College

Sarah Anthony, Concordia University

Selma Hamdami, Dawson College

Suéli Bonafim, Dawson College (SALTISE)

Wonneken Wanske, Heritage College, Gatineau

### Innovator Awards Selection Sub-Committee

David Hoida, Vanier College

Josephine Guan, Concordia University

Lorraine Chiarelli, Dawson College (SALTISE)

### Student Awards Selection Sub-Committee

Lorraine Chiarelli, Dawson College (SALTISE)

Tannia Ditchburn, Dawson College

Wonneken Wanske, Heritage College, Gatineau

### Keynote Sub-Committee

Alexandre Enkerli, User Experience Researcher / Chercheur UX

Maria Orjuela-Laverde, McGill University

Preeti Raman, Toronto Metropolitan University

Sara Hashem, Champlain Regional College

### Program & Schedule

Elizabeth Charles, Dawson College (SALTISE)

Rebecca Brosseau, McGill University

Eric Francoeur, École de technologie supérieure

Sara Hashem, Champlain Regional College

Michael Dugdale, John Abbott College (SALTISE)

### Reviewers

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Lorraine Chiarelli, SALTISE

Alan de Aguiar Lopes, Concordia University

Margo Echenberg, McGill University

Alvaro Roque, William S. Hart  
Union High School

María Orjuela-Laverde, McGill University

Amanda Argento, John Abbott College

Max Salomine, Vanier College

Amine Rahj, Concordia University

Maxime Denis, McGill University

André Villeneuve, Université du Québec à  
Trois-Rivières

Mohammad Al Bukhari Marzuki,  
Sultan Azlan Shah Polytechnic

Andy Van Drom, Eductive-Collecto

Mohammed Marzuq Abubakari, University of  
Applied Management, Ghana

Annie Chevrier, McGill University

Nadia Helal, Lasalle College

Belkacem Kamel Edine FETITA, Kasdi Merbah  
University of Ouargla (Algeria)

Niusha Zohoorian Fooladi, John Abbott College

Beth Acton, John Abbott College

Pallavi Sirjoosingh, McGill University

Caroline Begg, McGill University

Phoebe Jackson, John Abbott / Saltise

Cathy Roy, Dawson College

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Chloe Lei, Concordia University

Prisca Fenoglio, Ecole normale  
supérieure de Lyon

Chris Whittaker, Dawson College

Rebecca Brosseau, McGill University

Eric Francoeur, École de  
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Grace Mitri-Younes, McGill University

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Jean-François Brière, Dawson College

Sarah Marshall, McGill University

Jennie Ferris, McGill University

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Concordia University

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Tim Campbell, Vanier College

Laura Pavelka, McGill University

Valerie Bherer, John Abbott College

Laura Pickell, Carleton University

Varda Nisar, Concordia University

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Wonneken Wanske, Cegep Heritage College

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Volunteer Coordinator: Amine Rahj

Translation: Eric Francoeur, École De Technologie Supérieure,  
Selma Hamdami, Dawson College

# Welcome Message from the Senior Director of the Centre for Teaching and Learning (CTL), Concordia University

# Message de bienvenue du directeur principal du Centre for Teaching and Learning, Université Concordia

THE CENTRE FOR TEACHING AND LEARNING  
IS DELIGHTED TO HOST SALTISE'S 13<sup>TH</sup>  
ANNUAL CONFERENCE.

This year's theme, Emerging Technologies in Education: Shaping Potential, Managing Pitfalls, is at the very heart of the work of the SALTISE learning community.

Since its inception, SALTISE has given us so much, including: the curation of a diverse set of highly impactful classroom activities intended to engage students more deeply with content; the collaborative development of the myDALITE open digital platform that promotes social learning and peer instruction; and the creation of a thriving community of instructors and educational developers working across institutions to lead innovation in educational design.

As a newcomer both to Montreal and to SALTISE, it is wonderful to see how the SALTISE community has grown far beyond the institutions of the greater Montreal area and heartening to see how many professionals have remained so passionately committed to its mission.

From the entire CTL team at Concordia, we hope this conference brings you an opportunity for reflection, inspiration and reinvigoration!



LE CENTRE FOR TEACHING AND LEARNING  
EST ENCHANTÉ D'ACCUEILLIR LE 13<sup>E</sup>  
COLLOQUE ANNUEL SALTISE.

Le thème cette année, «Les technologies émergentes en éducation : façonner les potentiels, gérer les pièges», est au cœur même de la communauté SALTISE.

Depuis sa création, SALTISE nous a apporté beaucoup, y compris : la mise en commun d'un ensemble diversifié d'activités en classe très efficaces destinées à engager les étudiants plus profondément avec le contenu; le développement collaboratif de la plateforme numérique ouverte myDALITE, qui promeut l'apprentissage social et l'enseignement par les pairs; et la création d'une communauté florissante d'enseignants, d'enseignantes et de développeurs de ressources éducatives travaillant dans diverses institutions pour encourager l'innovation en conception pédagogique.

En tant que nouvel arrivant à Montréal et nouveau membre de SALTISE, il est formidable de voir comment la communauté SALTISE s'est étendue bien au-delà des institutions de la grande région de Montréal et réconfortant de constater que de nombreux professionnels restent si passionnément engagés envers sa mission.

---

***John Paul Foxe, Ph.D.***  
*Senior Director / Directeur senior*  
[Centre for Teaching and Learning](#)

# 2024 Welcome & Acknowledgements from SALTISE

ON BEHALF OF THE CONFERENCE COMMITTEE AND THE SALTISE EXECUTIVE, we extend a warm welcome to the participants of the 13<sup>th</sup> Annual SALTISE Conference. We express our sincere gratitude to our host, Concordia University's Centre for Teaching and Learning (CTL), for their unwavering support and hospitality. Their commitment to making this event a success is a true testament to their partnership in the SALTISE mission to build a community of educators dedicated to understanding and sharing knowledge about practices that improve teaching and learning.

The theme of this year's conference, "Emerging Technologies in Education: Shaping Potential, Managing Pitfalls," is particularly apt as we stand at the brink of a new age where the role of technology is being redefined. From artificial intelligence to adaptive learning systems to virtual reality, opportunities are boundless, but so too are the questions. At the heart of these discussions is the crucial consideration of how we maintain "human-centeredness" and address "human needs" as our guiding principles.

This year has been marked by both awe-inspiring and challenging events. We have witnessed natural wonders such as a total solar eclipse, the spectacle of northern lights in lower latitudes, and volcanic lava flows that reshape the landscape without loss of life, reminding us of the marvels that unite humanity. However, we cannot ignore the grave concerns affecting our world. Stories of inhumanity, war, and endless grief, alongside the devastating impacts of manmade climate change, such as uncontrolled forest fires, drought, famine, and forced migration, remind us of our collective responsibility.

These challenges should sensitize us to our privilege and reinforce the need for us to work together to increase opportunity, access, and success rates for a diverse range of populations in higher education. Not to be forgotten, as we reflect on this academic year, we must also acknowledge local challenges, such as the teachers' strike, underscoring the importance of supporting those who educate the next generations. Additionally, the accelerating developments in generative AI technologies over the past year have brought both excitement and apprehension as we grapple with their impact on the education system.

SALTISE has strived to stay updated and provide our community with valuable insights by gathering resources and designing tools to support the work of educators. This year, we have addressed emerging issues through various initiatives, including webinars on AI and academic integrity, presentations at local workshops, and our visiting scholar program, highlighted by a weeklong visit from Professor Yannis Dimitradis.

In collaboration with local universities and colleges, we have developed solutions for a variety of programs, such as tools for program design, competency alignment, and assessment rubrics. Additionally, we have begun collaboration with our network partners [i-mersion](#) CP (Université de Sherbrooke), expanding on the CourseFlow tool; and with colleagues from the [GRIIPTIC](#) group (Université de Montréal), who are examining the pedagogical integration of information and communication technologies. Currently, we are working with them on the development of a special issue on "Artificial Intelligence in Post-Secondary Education: Between Enthusiasm and Mistrust" in *La Revue internationale des technologies en pédagogie universitaire (RITPU)/International Journal of Technologies in Higher Education (IJTHE)*.

SALTISE is grateful for the support of our Orientation Committee, which includes representation from the Ministère de l'Enseignement supérieur (MES). Their continued confidence in our community, along with the funding from the Entente Canada-Québec (ECQ), enables us to accompany and support educators as they further develop their student-centred practice. Additionally, this funding, along with contributions from our other sponsors, allows us to hold this annual event.

Lastly, as we gather for this year's conference, we are reminded of the importance of our collective efforts to navigate the evolving landscape of education. We look forward to the insightful discussions and collaborations that will emerge, furthering our mission to enhance teaching and learning through innovative practices and shared knowledge.

***Enjoy the Conference!***

*Liz & Michael*



# Mot de bienvenue de SALTISE 2024

AU NOM DU COMITÉ DU COLLOQUE ET DE L'EXÉCUTIF DE SALTISE, nous souhaitons chaleureusement la bienvenue aux participants du 13<sup>e</sup> colloque annuel de SALTISE. Nous tenons à exprimer notre sincère gratitude à notre hôte, le Centre for Teaching and Learning (CTL) de l'Université Concordia, pour leur soutien indéfectible et leur hospitalité. Leur engagement à faire de cet événement un succès témoigne de leur partenariat dans la mission de SALTISE de construire une communauté d'éducateurs dédiés à la compréhension et au partage des connaissances sur les pratiques améliorant l'enseignement et l'apprentissage.

Cette année, le thème du colloque, "Les technologies émergentes dans l'éducation : façonner le potentiel, gérer les pièges", est particulièrement pertinent alors que nous nous tenons au seuil d'une nouvelle ère où le rôle de la technologie est redéfini. De l'intelligence artificielle aux systèmes d'apprentissage adaptatif, en passant par la réalité virtuelle, les opportunités sont illimitées, mais les questions le sont tout autant. Au cœur de ces discussions se trouve la considération cruciale de la manière dont nous maintenons "l'humanité centrée sur l'être humain" et abordons les « besoins humains » comme nos principes directeurs.

Cette année a été marquée à la fois par des événements impressionnants et difficiles. Nous avons été témoins de merveilles naturelles telles qu'une éclipse solaire totale, le spectacle des aurores boréales à des latitudes plus basses, et des coulées de lave volcanique redessinant le paysage sans perte de vie, nous rappelant les merveilles qui unissent l'humanité. Cependant, nous ne pouvons ignorer les graves préoccupations qui touchent notre monde. Les récits d'inhumanité, de guerre et de douleur infinie, ainsi que les impacts dévastateurs du changement climatique, tels que les incendies de forêt incontrôlés, la sécheresse, la famine et les migrations forcées, nous rappellent notre responsabilité collective.

Ces circonstances nous amènent à prendre conscience de nos privilèges et à renforcer la nécessité de collaborer pour améliorer les opportunités, l'accès et les taux de réussite pour une variété de populations diverses dans l'enseignement supérieur. En réfléchissant à cette année scolaire, il est également essentiel de reconnaître les défis locaux, tels que la grève des enseignants, soulignant ainsi l'importance de soutenir ceux qui forment les générations futures. De plus, les progrès rapides des technologies d'IA générative au cours de la dernière année ont suscité à la fois de l'enthousiasme et de l'appréhension alors que nous cherchons à comprendre leur impact en éducation.

SALTISE s'est efforcé de rester à jour et de fournir à notre communauté des informations précieuses en rassemblant des ressources et en concevant des outils pour soutenir le travail des éducateurs. Cette année, nous avons abordé les enjeux émergents grâce à diverses initiatives, notamment des webinaires sur l'IA et l'intégrité académique, des présentations lors d'ateliers locaux et notre programme de chercheur invité, souligné par une visite d'une semaine du Professeur Yannis Dimitradis.

En collaboration avec les universités et collèges locaux, nous avons développé des solutions pour divers besoins académiques, tels que des outils pour la conception de programmes, l'alignement des compétences et les grilles d'évaluation. De plus, nous avons entamé de belles collaborations avec nos partenaires du réseau i-mersion CP (Université de Sherbrooke), en développant l'outil CourseFlow ; ainsi qu'avec des collègues du groupe GRIIPTIC (Université de Montréal), qui examinent l'intégration pédagogique des technologies de l'information et de la communication. Actuellement, nous travaillons ensemble sur une publication spéciale intitulée "L'intelligence artificielle dans l'enseignement supérieur : entre enthousiasme et méfiance" dans La Revue internationale des technologies en pédagogie universitaire (RITPU)/International Journal of Technologies in Higher Education (IJTHE).

SALTISE exprime sa profonde gratitude envers notre Comité d'Orientation, incluant des représentants du Ministère de l'Enseignement supérieur (MES). Leur confiance constante en notre communauté, combinée au financement accordé dans le cadre de l'Entente Canada-Québec (ECQ), nous permet d'accompagner et de soutenir les éducateurs dans leur mission essentielle d'améliorer la réussite des étudiants. De plus, ce financement, ainsi que les contributions de nos autres partenaires, rendent possible l'organisation de cet événement annuel.

Enfin, à l'occasion de ce colloque annuel, nous sommes rappelés à l'importance de nos efforts collectifs pour naviguer dans le paysage évolutif de l'éducation. Nous attendons avec enthousiasme les discussions et les collaborations enrichissantes qui en résulteront, poursuivant ainsi notre mission d'améliorer l'enseignement et l'apprentissage grâce à des pratiques innovantes et au partage des connaissances.

***Nous vous souhaitons un excellent colloque.***

*Liz & Michael*



# Lifetime Achievement Award 2024

## Reconnaissance pour l'ensemble de la carrière

### Éric Francoeur



Éric Francoeur is a teaching-stream professor of social sciences and has been actively involved in various educational and research initiatives at École de technologie supérieure (ÉTS) over the past 20 years.

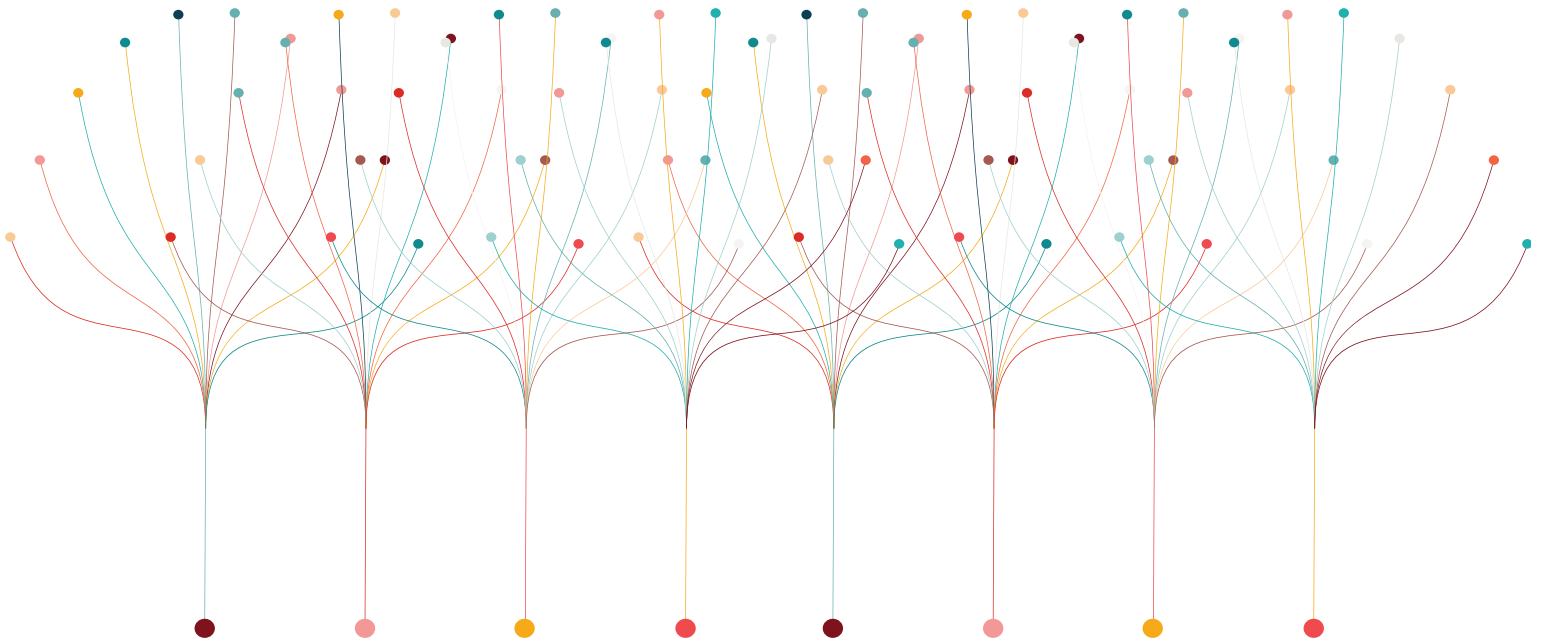
The SALTISE Executive is truly honoured to give Éric the 2024 SALTISE Lifetime Achievement Award, in recognition of his significant contributions to the community since the organization's founding.

Some of you may know Éric from his years of participation on the Conference Committee, while others may know him as the principal connection between SALTISE and ÉTS. As a member of SALTISE, Éric has contributed significantly to promoting evidence-based teaching strategies and professional development for educators across Quebec. What is less known is that Éric has actively contributed to SALTISE since its inception in 2013, helping to shape and grow our community within the francophone sector. His involvement with SALTISE highlights his dedication to improving educational practices through collaboration and research and is sincerely appreciated.

As a teaching-stream professor at ÉTS, Éric's work primarily focuses on integrating technology into education, digital learning environments, and hybrid course designs. He co-founded a community of practice to enhance the use of technology in education, demonstrating his commitment to innovative pedagogical approaches. While chair of the pedagogy committee at ÉTS, he organized two events focused on educational innovation and the enhancement of teaching methods, bringing together faculty members to discuss and implement effective teaching strategies (Journées de la pédagogie). These contributions made him a key figure in both academic and community-oriented educational initiatives.

Finally, Éric's generosity as an instructor, and mentor to newer faculty, and colleagues highlights his dedication to supporting students and educators. We appreciate your efforts to foster the development of this SALTISE community and promote the work to improve learning.

*Congratulations!*



# 2024 SALTISE Best Practices & Pedagogical Innovators Award Prix d'excellence et d'innovation pédagogique

The SALTISE “Best Practices & Pedagogical Innovators Award” recognizes educators (instructors and educational designers) who stand out as leaders in the promotion of academic excellence, use of innovative pedagogies, and support of their academic communities.

We are happy and proud to present these five recipients who truly represent the best among us!

## Congratulations to our 2024 Winners!



### *Best Practices & Pedagogical Innovators Award for College Instructors:*

**Daniel Goldsmith,**  
DAWSON COLLEGE

Daniel Goldsmith has been teaching humanities at Dawson since 2009, where he has sought to engage students in meaningful learning through such fasci-

nating subjects in the humanities as compassionate action, and enlightened consciousness. As a fellow in the Dawson Active Learning Community of Practice (DALC), he explored active learning strategies and shared with colleagues successes and challenges in a collegial atmosphere of continuous learning. He was an e-learning CoP fellow in 2019, where he produced an open-access portfolio on a blended learning format for two of his courses. He has contributed social science resource activities through SALTISE and continued in DALC CoP meetings.

Reflecting on his role as an educator, Daniel asked himself what changes he could make to bring his class to more upper-level cognitive taxonomy discussions. He combined his explorations of active learning methodologies with e-learning concepts in collaborative learning and developed a strategy to flip his classroom. He explored Moodle to help students learn effectively in a blended learning course. He created activities to engage students in core course concepts and provided low-stakes assignments to gauge student learning. In recent years, Daniel has integrated numerous somatic activities in recognition of the essential role that the body plays in cognition. He encourages students to breathe, move, and vocalize in different ways in the hopes that their understanding spreads throughout their cells, not just the ones up in the head!

Daniel has observed that students are learning better through these pedagogical activities. He shares his explorations with Dawson communities of practice, participates in community meditation sessions for students and staff, supports his students, and is engaged in SALTISE. For this reason, Daniel has been nominated by his peers as a SALTISE Innovator.



### *Best Practices & Pedagogical Innovators Award for University Instructors:*

**Giuliana Cucinelli**  
CONCORDIA UNIVERSITY

Since arriving at Concordia University in 2014, Dr. Giuliana Cucinelli has distinguished herself as an excellent and inno-

vative instructor who incorporates student-centered pedagogy into all of her work. Before joining the Education department, Giuliana taught as a Limited Term Appointment (Lecturer) in the Communication Studies department at Concordia where her teaching earned her the Dean's Award of Excellence for Teaching.

Wherever she has taught Giuliana has gone beyond implementing innovative pedagogical techniques, by creating a nurturing environment where every student feels valued and empowered to make their own learning decisions. In this environment, students are allowed the freedom to shape their assignments according to their unique perspectives, all while adhering to necessary protocols and regulations. Through detailed discussions and probing questions, Giuliana ensures that students understand not only their grades but also the underlying thought processes driving their work. She also uses and promotes active engagement and student-centered pedagogical models to foster deep learning and understanding. She makes special contributions regarding pedagogy to the community of higher education educators, and designs innovative, technologically focused programs for students.

In addition to frequently presenting at SALTISE conferences (not only the one this June, but also in 2020-2023), Giuliana has made contributions to the community of teaching by serving on the university-wide working group on Universal Design for Learning; Serving on the departmental Equity, Diversity, and Inclusion committee, and arranging for workshops on accessibility, Indigenous teaching, and applications of inclusive design principles to influence teaching in the department.

Giuliana is a role model, an inspiration to the educational community, and is committed to the professional development of others as well as her own.



*Best Practices & Pedagogical  
Innovators Award for  
College Pedagogical  
Counsellors  
or Educational  
Developers:*

**Sara Hashem,**  
CHAMPLAIN COLLEGE -  
ST. LAMBERT

Dr. Sara Hashem is an exceptional educator who has made remarkable contributions to the field of education at Champlain College Saint-Lambert and beyond.

In her role as a pedagogical counsellor, Sara has been acting as a catalyst for pedagogical innovation and development. She started an onboarding program that encourages the participation of all college units, offering new faculty a fulsome introduction to the college teaching experience. She developed the Workshop Series, an extensive professional development offering focusing on knowledge mobilization, inter- and intra-institutional sharing, and community building. Sara has equally been a driving force in advancing inclusive pedagogy at Champlain Saint-Lambert, collaborating with Faculty and Student Services to create more equity-driven classroom environments. Her global efforts have helped introduce diverse voices and varied pedagogical perspectives to further enrich learning experiences at the college.

Within the wider college network, Sara has been actively involved in multiple inter-collegiate and inter-institutional committees and initiatives. She graciously shares her expertise with her colleagues and reaches across institutional boundaries to collaborate. She is a trusted and valued member of the network.

As an accomplished researcher, Sara is the co-founder of the Artful Inquiry Research Group at McGill University. She published her latest edited book in 2023 and is currently working on another book that will carve a space for the voices of emerging researchers.

Sara is an outstanding educator who embodies the qualities of a pedagogical innovator. Her dedication to advancing pedagogical practices, supporting her colleagues through inter- and intra-college exchange, and fostering a culture of inclusion and innovation all make her an excellent candidate for this award.



*Best Practices & Pedagogical  
Innovators Award for  
University Pedagogical  
Counsellors  
or Educational  
Developers:*

**John Bentley**  
CONCORDIA UNIVERSITY

John Bentley is an established and highly respected member of Montreal's education community and established mainstay of Concordia's Centre for Teaching and Learning. He is known for his commitment to supporting faculty and graduate students, advocating for high-impact pedagogical practices, innovative technology integration, and spaces that promote the adoption of active learning.

At the core of John's practice is peer-based faculty development and over the years, he has led many peer-to-peer faculty interest groups, where faculty come to discuss their experiences and challenges on a regular basis. Some of the groups he has led include blended learning, active learning, and most recently his book club for Teach Students How to Learn.

His biggest legacy is the adoption of Active Learning Classrooms at Concordia. John played a key role in the design and installation of the first active learning classrooms at every step; he worked hard to convince reluctant stakeholders of the importance of active pedagogies and helped devise solutions to mitigate concerns. This achievement in combination with the initiation of several technology pilots (that would later come to be institutionally-adopted tools) demonstrate the lasting impact John has had on teaching and learning at Concordia.

John has been active within SALTISE since around 2010, working as part of a small community of educators who were committed to promoting active learning in higher education around Montreal. Over the years he has participated in many ways, such as the 3S project, the conference, committee work and other collaborative projects with other institutions. John is among only a few who have served as long and with as much integrity in the SALTISE community.

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

## 2023

- Tim Miller (Dawson College)
- Danielle Vlaho (McGill University)
- Amanda Argento (John Abbott College)
- Charlene Lewis-Sutherland (McGill University)

## 2022

- Nik Provatas (McGill University)
- Cathy Roy (Dawson College)
- Cory Legassic (Dawson College)
- Monica Lopez (Dawson College)
- Marina Caplain (UQAM)

## 2021

- Carmen Leung (Dawson College)
- Saul Carliner (Concordia University)
- The Dawson Faculty HUB (Dawson College)
- Andrea Cooperberg (John Abbott College)

## 2020

- Alice Cherestes (McGill University)
- Phoebe Jackson (John Abbott College)
- Ian MacKenzie (Dawson College)
- Laura Pavelka (McGill University)
- Laura Winer (McGill University)

## 2019

- Yann Brouillette (Dawson College)
- Nadia Naffi (Université Laval)
- Dominique Pottie (Ecole de Technologie Supérieure (ÉTS))
- Roberta Silerova (John Abbott College)

## 2018

- Louis Normand (Collège de Rosemont)
- Claire Trottier (McGill University)

## 2017

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

## 2016

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

## 2015

- Rhys Adams (Vanier College)
- Samantha Gruenheid (McGill University)
- Lawrence R. Chen (McGill University)

## 2014

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

## 2013

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



# 2024 SALTISE Students as Educational Innovators Award

## Prix Saltise pour les étudiants comme innovateurs en éducation

The SALTISE “**Student as Educational Innovators Award**” recognizes students (undergrad/college/continuing education and graduate) who stand as contributors to the SALTISE community through their actions in achieving academic excellence, promoting innovative pedagogies, as Teaching Assistants (TAs), Research Assistants (RAs), Course Lecturers, and in other tasks that support and/or are consistent with the goals of the SALTISE community.

### Congratulations to our Awardees



*Student as Educational  
Innovators Award*  
**Undergraduate, College  
or Continuing  
Education Student**

**Andrew Rochon,**  
CONCORDIA UNIVERSITY

Andrew Rochon is an undergraduate student currently completing a Bachelor of Arts in Philosophy at Concordia University. As a Research Assistant Andrew prepared technical instructions on software installation and configuration for other undergraduates, and helped them use sophisticated classroom tools for virtual reality and immersive experience. As a member of a SSHRC-funded research team with other undergraduate and continuing education students, he has presented his own research locally and nationally. At the 2023 Canadian Game Studies Association national conference, Andrew and his teammates won the Most Creative Paper award, for a paper which is now in peer review for publication in an academic journal.

Andrew is a problem solver and the quintessential team player. He has a strong sense of what needs to be done and is eager to acquire the skills he needs to finish the task for the good of the group. By working with faculty as a pedagogical innovator; Andrew has in a very short time had astonishing success presenting his and his team's pedagogical materials at local and national refereed conferences. Andrew supports the ongoing development of student-centred pedagogy; helping to promote transformative teaching and acting as a mentor to students in the class as well as new student members of the research team.

Andrew has also presented at SALTISE in the past, as well as volunteered to provide online help desk support during the COVID-imposed online Gathertown edition of the SALTISE conference in 2022.

In conclusion, all of Andrew's work, contributions and dedication make him an ideal candidate for this award.



*Student as Educational  
Innovators Award*  
**Graduate Student**

**Victoria Marie Glynn,**  
MCGILL UNIVERSITY

Victoria Glynn started her doctoral studies in 2019 at McGill University and is a Vanier and Fulbright scholar, a testament to her research aptitude. She joined the Tomlinson Project in University-Level Science Education as a graduate teaching fellow and the Office of Science Education (OSE) in 2020 as a science education fellow. Victoria's pedagogical, science communication, and artistic skills have benefited many student-centered projects at OSE including the Tomlinson Engagement Award for Mentoring (TEAM) program, a peer mentoring program that attracts 700-900 students each year. She has also contributed to the flourishing of OSE-led projects including FSCI 198: Climate Crisis and Climate Actions, a cross-disciplinary undergraduate course.

Victoria makes a special contribution to faculty through her dedication to the Inclusive Teaching Initiative, a faculty learning community for science instructors. As a teaching assistant for BIOL 308: Ecological Dynamics, Victoria is committed to her own learning and experiments with innovative and evidence-based approaches to teach/in her teaching. In the past year, Victoria has taken on more of a leadership role at OSE, creating professional development workshops for the faculty team on novel topics such as using collage as a communication tool. Victoria's artistic talents combined with her deep pedagogical knowledge have also benefited key OSE initiatives such as the SciLean program and the undergraduate poster showcase. Victoria has supported the highly cross-disciplinary and collaborative work of OSE to promote teaching and learning across all science disciplines and bring the science of learning/pedagogy to a broad audience.

Victoria's outstanding contributions to pedagogy, transformative teaching practices, and commitment to inclusive education make her an exemplary candidate for this award.

# Past recipients of the SALTISE Student as Educational Innovator Award

## 2023

- Hilary Sweatman, Ph.D. (candidate), Neuroscience, McGill University
- Claudia Flynn, MA in Integrated Studies in Education, McGill University

## 2022

- Jamilah Dei-Sharpe, Ph.D. (candidate), Critical Gender Studies Program, Concordia University
- Valérie Bourassa, Ph.D., Integrated Program in Neuroscience, McGill University
- Dan Stefan Petrescu, PhD in Chemistry, McGill University (posthumously)

## 2021

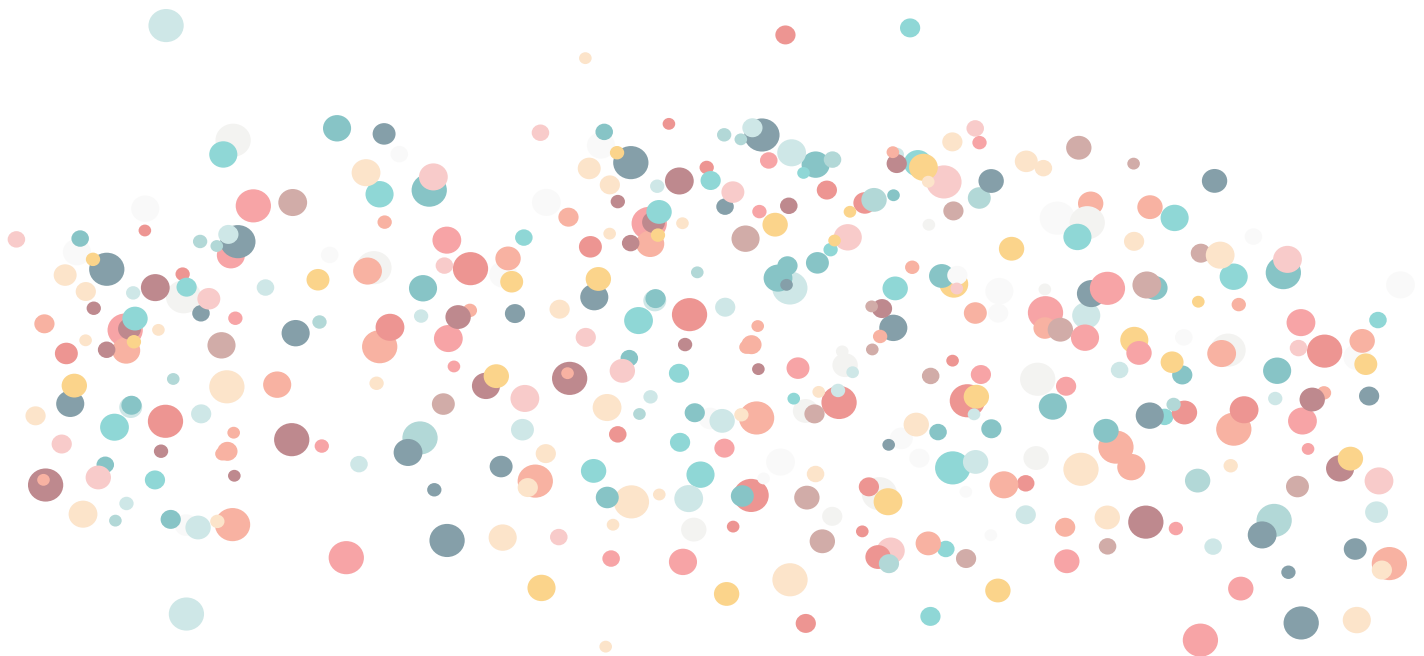
- Rebecca Brosseau, MA in Education, McGill University
- Cynthia Feng, MSc in Biochemistry, McGill University

## 2020

- Jasmine Chahal, PhD in Microbiology and Immunology, McGill University
- Franco La Braca, MSc in Physics Education, Concordia University

## 2019

- Armin Yazdani, PhD in Neuroscience, McGill University



# SALTISE 2024 Keynote Speaker / Conférencier



**Mutlu Cukurova**

PROFESSOR OF LEARNING AND ARTIFICIAL INTELLIGENCE  
UNIVERSITY COLLEGE LONDON, UK

## Keynote abstract:

“Educators collaborating to innovate: The roles digital technologies can play”

AI in Education is more than tools like ChatGPT. This talk presents a multi-dimensional view of AI's role in learning and education, emphasizing the intricate interplay between AI and the cognitive processes of learning. Prof. Cukurova challenges the prevalent narrow conceptualization of AI as stochastic tools, highlighting the cognitive diversity inherent in AI algorithms, and posits that AI can serve as an instrument for understanding human learning. Early learning sciences and AI in Education research, which saw AI as an analogy for human intelligence, have diverged from this perspective, prompting a need to rekindle this connection. The presentation delves into three conceptualizations of AI in education: the externalization of cognition, the internalization of AI models to influence human thought processes, and the extension of human cognition via tightly integrated human-AI systems. Prof. Cukurova argues for a balanced view that recognizes AI's limitations and the need for AI systems that support human agency, facilitate the internalization of learning process models, and enhance human cognition without replacing it. The presentation concludes with an advocacy for a broader educational approach that includes educating about AI itself and innovating educational systems to remain relevant in a world with ubiquitous AI.

## Bio

Mutlu Cukurova is Professor of Learning and Artificial Intelligence at University College London. Prof. Cukurova investigates the potential of AI to understand and support human learning with a particular interest in “learning how to learn” and solving complex problems collaboratively. His work emphasises human-AI complementarity, aiming to address the pressing socio-educational challenge of preparing people for a future with AI systems that will require a great deal more than the routine cognitive skills currently prized by many education systems and traditional approaches to automation. Prof. Cukurova is the Director of the UCLAIT team and works with UNESCO's Unit for Technology and AI in Education as an external expert. He contributed to numerous influential policymaking documents including UNESCO's recent report on Guidance for generative AI in education and research. He is currently leading the report on UNESCO AI competency frameworks for teachers and students. He was the programme chair of the International Conference of AI in Education in 2020, currently serving as the editor of the British Journal of Educational Technology and an Associate Editor of the International Journal of Child-Computer Interaction.

## SPECIAL plenary session - a Panel discussion on

“Emerging Technologies in Education:  
Shaping Potential, Managing Pitfalls”

From artificial intelligence and virtual reality to adaptive learning systems, rapid technological advancements promise to unlock boundless educational potentials. However, significant challenges such as digital equity, privacy concerns, information overload, and the need for critical digital literacy must be addressed. This special plenary session features a panel of four stakeholders (practitioners and researchers), each discussing these issues from their area of expertise. Each panelist will provide insights, from their perspective, on the important opportunities and challenges arising from the question of how new technologies can/should redefine the education landscape.

In addition, the panel moderators will ensure a lively and provocative discussion that will enrich us as we prepare for the next advancements in teaching and learning.

## Session plénière SPÉCIALE - Une table ronde sur

« Technologies émergentes dans l'éducation :  
façonner le potentiel, gérer les embûches »

### Panelists



TERESA HERNÁNDEZ  
GONZÁLEZ

Dr. Teresa Hernández González is an accomplished educator with a background spanning over three decades in various educational domains such as ESL pedagogy, critical pedagogy, assessment for learning, and gamification. Currently serving as the TESL Program Director at Concordia

University, her dedication extends to mentoring both pre-service and in-service teachers. In her recent research, Dr. Hernández González explores the potential of technologies, specifically virtual reality, to support reflective practice in teacher education.



KORAH WILEY

Dr. Korah Wiley is a Learning Scientist whose interests lie at the intersection of classroom education, research, and development. Driven by her academic and professional experiences in the STEM field as a cancer researcher and her 10+ years as a biology instructor, Dr. Wiley has a passion for developing

and investigating ways to improve STEM teaching and learning. She has designed professional development for educators and developed numerous STEM pathways programs for students from communities that have been historically and systemically excluded from postsecondary education. Dr. Wiley's current research focuses on the development of education technology that can support educators in providing students with equitable and empowering learning experiences.



MARCO LUNA BARAHONA

Montreal-based, Marco Luna, filmmaker, cinema instructor, and researcher, holds a master's degree in fine arts from Concordia University. Faculty member at the Mel Hoppenheim School of Cinema, he instructs on montage, filmmaking, and interactive documentary VR cinema. Marco also contributes

to conferences, exploring themes like immersive technology and social documentary filmmaking. Currently, he serves as a Technologist at Milieux, Immersive Reality Lab, showcasing his commitment to blending traditional filmmaking with cutting-edge technologies in diverse filmography.





## Panelists (cont.)

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JOEL P. WIEBE

A PhD candidate at OISE, University of Toronto who combines his expertise in computer science with his passion for the learning sciences. Holding a BSc in Computer Science and an MA in Knowledge Building, his PhD contributes to the field of learning community research,

designing innovative software solutions to foster social and collaborative learning. His research interests span co-regulation, adaptable (collaboration) scripts, and adaptive learning systems. Currently, he investigates AI for detecting students' knowledge integration and adding pedagogical intelligence to AI content generation and adaptation.



JOEL TRUDEAU

Since 2004 Joel Trudeau has taught in the Physics Department at Dawson College. He is project co-lead of the DawsonAI Artificial Intelligence initiative and founder of SPACE, an interdisciplinary student enrichment para-academic project. His work in education lies in the intersection of sciences,

arts and technology, fostering an integrative approach to teaching and learning. Joel has led and collaborated on numerous research projects, primarily focusing on design-based, active, and experiential learning. With his collaborators he is committed to helping students develop vital skills to thrive in the AI era.

## Moderators

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PREETI RAMAN

Dr. Preeti Raman is an Assistant Professor in the Department of Computer Science at the Faculty of Science at the Toronto Metropolitan University in Canada. She is a Computer Scientist with more than 20 years of consulting and training experience in higher education, corporate and consulting

settings. Her work is situated in the fields of Affect Studies, Human Computer Interaction, the Learning Sciences and AI in Education. She is the Director of the CIRCLE lab and an Affiliate at the MIT Teaching Systems Lab. Her experiences in the design and research of computational innovations, educational experiences and technologies to support caring pedagogies across a range of settings will help inform this panel discussion.



REMI ARORA

Remi Arora is the Manager for the Lab for Innovation in Teaching and Learning (LITL) at Concordia University. Remi has been active in Higher Education, the event logistics and technology industry, as well as the creative fields. He brings his diverse background and his passion for exploring innovation

and the intersection of education and creativity to his role as Project Manager for LITL projects.

2024 Schedule at a glance | Résumé du programme

| Day 1 – June 3, 2024 |  |   |  |  |  |  |
|----------------------|--|---|--|--|--|--|
| 8:00 - 9:00          | Registration (Mezzanine)   |   |  |  |  |  |
| 9:00-10:15           | AI and Technology / IA et Technologie  | AI and Technology / IA et Technologie   | Improving Practice / Amélioration des pratiques  | Focus on STEM / Accent sur les STIM  | Exploring Breadth / Exploration de la Diversité  | Principled Design / Conception basée sur des principes   |
|                      | IS1: Tools for Design / Outils pour Conception   | T1: Issues in Technology-driven Learning Environments / Enjeux des Environnements Riches en Technologie   | T2: Digital Strategies in the Classroom / Stratégies Numériques en Classe  | T3: Innovation and Accessibility in STEM / Innovation et Accessibilité dans les STIM   | IL1: Supporting Accessible Pedagogy / Soutien à la Pédagogie Accessible  | IS2: Interdisciplinary Competency Development / Développement de Compétences Interdisciplinaires   |
|                      | <i>Program Flow: Leveraging CourseFlow for Program Management at Vanier College</i><br><br>Aishwarya Nair, Max Salonine<br><br><i>Advancing Inclusive Education: Leveraging Emerging Technologies to Enhance Accessibility and Universal Design in Digital Learning Environments for Students with Disabilities from an Indian Perspective</i><br><br>Mathew Martin Poothullil | <i>The Link between Feedback and Performance in Multimodal Data: Preliminary Results of a Systematic Review</i><br><br>Chenxi Zhu, Yajie Song, Maria Cutumisu<br><br><i>Policies to enhance online learning in higher education during the post-pandemic era</i><br><br>Rasel Babu, Adam Dube<br><br><i>Transforming a MOOC on Online Courses to a Blended Course on Blended Learning for CEGEP Teachers: A Collaborative Process between Université de Montréal and Dawson College</i><br><br>Bruno Poellhuber, Nadine Samia Bekkouche, Fabien Brinjean, Mark Mattei, Chantale Giguère | <i>Video Rubrics: the academic and emotional benefits of an interactive editing tool</i><br><br>Tim Campbell<br><br><i>Creating Digital Experiences to Foster Collaborative Active/ Experiential Learning</i><br><br>David Hoida<br><br><i>Zettelkasten: Harnessing Note "Making" Technologies as Pedagogy</i><br><br>Justin Feng  | <i>Developing an entrepreneurial mindset in engineering students through new modules integrated within existing courses</i><br><br>Katya Marc, Zinan He, Amanda Saxe, Michael Avedesian<br><br><i>Empowering Faculty for Inclusive STEM Instruction: Insights from a University Initiative</i><br><br>Victoria Marie Glynn, Diane Dechief, Charlene Lewis-Sutherland, Andrea Miller-Nesbitt<br><br><i>Teamwork, EDI in Engineering: Building interpersonal skills into technical courses</i><br><br>Renee Pellissier, Shay Heans-Moreyra | <i>Supporting Accessible Pedagogy: A Choose Your Own Adventure Technology Workshop</i><br><br>Josephine Guan, Ann Gagné  | <i>Enhancing Statistical Literacy in Quebec's Colleges through Interactive Online Applications</i><br><br>Sandi Mak, Ivan T. Ivanov, Christian Stahn, Kevin Lenton, Quentin Van Ginhoven, Marie-Josée Bolduc, Catherine Cyr-Ganon<br><br><i>Crafting Quebec's Portrait of a Graduate: A Collaborative Vision for Our Graduates</i><br><br>Avery Rueb   |
|                      | Room: H-670<br>Chair: Nick Park  | Room: H-429<br>Chair: Theo Stojanov   | Room: H-420<br>Chair: Neerusha B. Gokool   | Room: H-421<br>Chair: Maxime Denis   | Room: H-625<br>Chair: N/A  | Room: H-621<br>Chair: Aeron MacHattie  |
| 10:15-10:30          | Break (Mezzanine)  |   |  |  |  |  |
| 10:30-11:45          | From the Research Side / Résultats de recherche  | AI and Technology / IA et Technologie   | Improving Practice / Amélioration des pratiques  | Focus on STEM / Accent sur les STIM  | Exploring Breadth / Exploration de la Diversité  | Principled Design / Conception basée sur des principes   |
|                      | S1: Symposium: ALC Design / Conception de CLAAC  | T4: Insights from AI in Education Research / Recherche sur l'IA en Éducation  | T5: New Perspectives on Assessment / Nouvelles Perspectives sur l'Évaluation   | T6: Issues in Chemistry Education / Enjeux de l'Enseignement de la Chimie  | T7: Accesibility through Technology / Accessibilité par la Technologie   | IS3: Design considerations / Considérations de conception  |
|                      | <i>Lessons from a 15-year effort to develop Active Learning classrooms and pedagogical capacity at Dawson College.</i><br><br>Chris Whittaker  | <i>Developing Student Emotional Literacy through Rehearsals</i><br><br>Preeti Raman, Harjot Singh<br><br><i>Bilingual narratives: Probing media literacy in an AI world</i><br><br>Noga Broitman<br><br><i>Five Fresh Insights about the Role of Artificial Intelligence in Education</i><br><br>Giuliana Cucinelli, Saul Carliner  | <i>Rethinking Assessment: Exploring the Potential of Gradeless Learning</i><br><br>Yusuf Josiah<br><br><i>Not just another entry point: Using a podcast to draw connections between assessment for learning and student well-being</i><br><br>Margo Echenberg, Jasmine Parent<br><br><i>Ungrading Successfully Improved Physics Student Writing in Two Instances of a Physics in Society Course</i><br><br>Garrick Burron, Carolyn Sealfon | <i>Greening Chemistry Labs</i><br><br>Kim Silkauskas<br><br><i>A modular and engaging approach to the Suzuki reaction for the undergraduate organic chemistry laboratory</i><br><br>Danielle Vlaho, Mitchell Huot, Alexei Kieran, Gagan Daliaho<br><br><i>It Takes a Village! A Community-driven Approach to Developing Teaching Assistants as Educators</i><br><br>Stephen George, Laura Pavelka, Véronique Brulé, Janette Barrington, Marcy Slapcoff   | <i>A Pocketful of Tools: Mobile Solutions to Bring to the Internship</i><br><br>Alice Havel, Susie Wileman, Catherine Fichten, Mary Jorgensen<br><br><i>The Impact of Marginalization and Intersectionality on Post-Secondary Students with Disabilities' Use of Assistive Technology: A Scoping Review of the Literature</i><br><br>David Pickup, Evgueni Borokhovski, Richard F. Schmid, Christine Vo, Fichten Catherine<br><br><i>Making PowerPoint, Excel, Google Docs, and Teams More Accessible to Your Students</i><br><br>Catherine Fichten, Roberta Thomson, Alice Havel, Susie Wileman | <i>Designing for Interdisciplinary Education</i><br><br>Kevin Lenton, Elizabeth Charles, Annie-Hélène Samson, Selma Hamdani, Mathilde Hitter, Michael Dugdale, Sean Hughes, Rhys Adams, Karl Laroche, Jean-François Brière<br><br><i>Introducing VIRTmac: an innovative digital platform for biology &amp; biochemistry education.</i><br><br>Lorie Mills, John MacLellan, Martha Mullally   |
|                      | Room: H-621<br>Chair: N/A  | Room: H-429<br>Chair: Kevin Casey   | Room: H-420<br>Chair: Aeron MacHattie  | Room: H-421<br>Chair: Maxime Denis   | Room: H-613<br>Chair: Grace Mitri-Younes   | Room: H-431<br>Chair: Phoebe Jackson   |
| 11:45-13:00          | Lunch  |   |  |  |  |  |
| 13:00-13:30          | Welcome  |   |  |  |  |  |
| 13:30-14:45          | Keynote H-110  |   |  |  |  |  |
| 14:45-15:45          | Poster Session (Mezzanine)   |   |  |  |  |  |
| 15:45-17:00          | AI and Technology / IA et Technologie  | AI and Technology / IA et Technologie   | Improving Practice / Amélioration des pratiques  | Focus on STEM / Accent sur les STIM  | Exploring Breadth / Exploration de la Diversité  | From the Research Side / Résultats de recherche  |
|                      | IS4: Exploring and expanding the use of AI / Explorer et étendre l'utilisation de l'IA   | S2: Skills of the Future / Compétences de l'avenir  | IL2: AL Best Practices / Meilleures pratiques  | IS5: Teaching with technology / Enseignement avec la technologie   | IS6: Deepening in-class discussions / Approfondissement des discussions en classe  | T8: Insights from Current Research / Perspectives issues de la recherche actuelle  |
|                      | <i>Enhancing Transversal Skills with AI: A New Path for Collaboration</i><br><br>Avery Rueb, Neerusha Baurhoo Gokool<br><br><i>Enhancing Moodle with Generative AI: Transforming Educational Experiences</i><br><br>Rafael Scapin, Cameron Campbell  | <i>Enriched Learning with 21<sup>st</sup> Century Transferable Skills</i><br><br>Steven Henle, Megan Marcoux, Janette Barrington, Susan T. Dinan, Sandra Gabriele   | <i>Best practices for group work, self-, peer-assessment, self-reflection</i><br><br>Hélène Nadeau, Sylvia Cox   | <i>Plateformes électroniques à distance (PEAD) pour les cours en génie électrique</i><br><br>Mamane Moustapha Dodo Amadou, Mustapha Rafat, Lyne Woodward, Richard Al Hadi, Maarouf Saad, Vahe Nerguizian<br><br><i>Empowering Climate Change Education with En-ROADS</i><br><br>Eric Francoeur   | <i>Building Class Communities</i><br><br>Carolyn Sealfon<br><br><i>Designing a faculty learning community to foster equitable, inclusive classroom discussions</i><br><br>Jennie Ferris, Mithura Sanmugalingam   | <i>Rethinking the makerspace ethos in K-12 educational spaces: Implementing the makingspace to promote active learning</i><br><br>Lynda Yearwood<br><br><i>An Exploration of Students' Course Interest in EFL Flipped Classrooms</i><br><br>Sara Djamàa<br><br><i>Studying the interaction between academic performance, student motivation profiles, metacognition, and learning strategies with machine learning</i><br><br>Emma Tomiuk, Armin Yazdani |
|                      | Room: H-625<br>Chair: Melissa Rivosecchi   | Room: H-420<br>Chair: N/A   | Room: H-621<br>Chair: Valerie Bherer   | Room: H-670<br>Chair: Grace Mitri-Younes   | Room: H-431<br>Chair: Hugo Marchand  | Room: H-421<br>Chair: Maxime Denis   |
|                      |  |   |  |  |  |  |

2024 Schedule at a glance | Résumé du programme

| Day 2 – June 4, 2024 |   |   |   |  |  |  |
|----------------------|---|---|---|--|--|--|
| 8:00 - 9:00          | Registration (Mezzanine)  |   |   |  |  |  |
| 9:00-10:15           | AI and Technology /<br>IA et Technologie  | AI and Technology /<br>IA et Technologie  | Improving Practice /<br>Amélioration des pratiques  | Focus on STEM /<br>Accent sur les STIM   | Exploring Breadth /<br>Exploration de la Diversité   | Principled Design / Conception<br>basée sur des principes  |
|                      | IL3: Roboethics /<br>Roboéthique  | T9: Harnessing<br>Generative AI / Exploiter<br>l'IA Générative  | T10: Integrating New<br>Technologies / Intégration de<br>Nouvelles Technologies   | IL4: Active Learning in<br>STEM / Apprentissage<br>Actif dans les STIM   | T11: Student Well-<br>being, Participation, and<br>Performance / Bien-être,<br>Participation et Performance<br>des Étudiants   | T12: From Student-<br>Centered to Program-Driven<br>Approaches / Approches<br>Axées sur les Étudiants et le<br>Programme   |
|                      | <i>Learn Roboethics:<br/>Introducing a non-<br/>technical interactive<br/>teaching module<br/>designed for all</i><br><br>Rahatul Amin Ananto,<br>Shalaleh Rismani,<br>Christopher Yee Wong,<br>Lixiao Zhu, Ajung Moon"   | <i>Future-Ready Education:<br/>Highlights from Dawson<br/>College's AI Curriculum<br/>Toolkit</i><br><br>Joel Trudeau,<br>Robert Stephens<br><br><i>Using chatbots in<br/>a discussion board<br/>assignment</i><br><br>Elizabeth Hirst<br><br><i>Transforming Education in<br/>the Age of Generative AI</i><br><br>Maha Daoud   | <i>Experiential, immersive<br/>learning at the Library:<br/>Navigating opportunities of<br/>course-integrated VR</i><br><br>Melissa Rivosecchi,<br>Hélène Brousseau<br><br><i>Discord, Modded Minecraft<br/>and Pedagogy in the Flipped<br/>Classroom</i><br><br>Darren Wershler, Bart Simon<br><br><i>Virtual Reality as a Pedagogical<br/>Tool in Science: Implementation<br/>of Educational Games at<br/>Dawson College</i><br><br>Annie-Hélène Samson,<br>Jean-François Brière,<br>Yann Brouillette,<br>Christine Marquis,<br>Sébastien Wall-Lacelle" | <i>Diving into Interactive<br/>Learning: Playing Tailored<br/>Educational Video Games<br/>in College Physics and<br/>Biology Courses</i><br><br>Nadim Boukhira,<br>Neerusha Baurhoo Gokool<br><br><i>The Relationship between<br/>Chinese Students' Well-being,<br/>Mathematics in PISA 2018</i><br><br>Yajie Song, Yimei Zhang,<br>Maria Cutumisu | <i>Benefits of Improved Self-<br/>Efficacy in Recreation Activity<br/>Leadership Students</i><br><br>Heather Martin<br><br><i>Champlain College Millennium<br/>Certificate Program: Technology<br/>Supported Pedagogical<br/>Expansion</i><br><br>Amanda Perry,<br>Gabriel Flacks<br><br><i>Unlocking the connection<br/>between motivation,<br/>achievement: enhancing<br/>students' engagement with<br/>STEM education</i><br><br>Giuliana Cucinelli<br><br><i>Using CourseFlow to (Re)<br/>vision Programmes Aligning<br/>to Professional Competencies:<br/>Benefits, Challenges</i><br><br>Neil MacIntosh,<br>Anila Asghar<br><br>Eva Mary Bures |  |
|                      | Room: H-621<br>Chair: N/A   | Room: H-429<br>Chair: Grace Mitri-Younes  | Room: H-420<br>Chair: Theo Stojanov   | Room: H-625<br>Chair: N/A  | Room: H-421<br>Chair: Nick Park  | Room: H-613<br>Chair: Sean Hughes  |
| 10:15-10:30          | Break (Mezzanine)   |   |   |  |  |  |
| 10:30-11:45          | Keynote Panel<br>H-110  |   |   |  |  |  |
| 11:45 - 13:15        | Lunch   |   |   |  |  |  |
| 13:15-14:30          | AI and Technology /<br>IA et Technologie  | AI and Technology /<br>IA et Technologie  | Improving Practice /<br>Amélioration des pratiques  | Focus on STEM /<br>Accent sur les STIM   | Exploring Breadth /<br>Exploration de la Diversité   | From the Research Side /<br>Résultats de recherche   |
|                      | IS7: Tools for Deeper<br>Learning / Outils pour<br>un Apprentissage<br>Approfondi   | T13: AI Integration in<br>College Education /<br>Intégration de l'IA au<br>Collégiale   | T14: Teaching and Learning<br>Strategies / Stratégies<br>d'Enseignement et<br>d'Apprentissage   | IL5: Problem-<br>Based Learning /<br>L'apprentissage par<br>Problème   | IL6: Designing for<br>Sustainability / Concevoir<br>pour la Durabilité   | T15: Connecting Theory to<br>Practice / Relier la Théorie à<br>la Pratique   |
|                      | <i>La Triade: un projet<br/>interdisciplinaire dans le<br/>programme Arts, lettres et<br/>communication</i><br><br>Hélène Rompré,<br>Yvan Tétreault,<br>Marc André Barsalou<br><br><i>Bridging Classroom and<br/>Co-Curricular Learning<br/>with Arduino</i><br><br>Joel Trudeau,<br>Andrew Stewart | <i>Exploring college students'<br/>errors in derivatives to<br/>construct an AI-based<br/>support system for<br/>calculus courses</i><br><br>Jonathan Morcos,<br>Neerusha Baurhoo Gokool<br><br><i>Transparency in AI<br/>Integration: Sharing AI-<br/>Prompts to Enhance Learning</i><br><br>Bobby Connolly<br><br><i>Learning groups with<br/>professionals in a community<br/>of practice to apprehend<br/>the emergence of AI: A case<br/>study of the model at the<br/>Réseau REPTIC</i><br><br>Marco Guilbault,<br>Nathalie Bastien | <i>De la classe inversée à la<br/>classe redressée</i><br><br>Radhi Mhiri,<br>Faten M'Hiri<br><br><i>Innovation within ancient<br/>tradition: experiments in<br/>Latin teaching</i><br><br>Lauren Kaplow<br><br><i>Skill Bridge: Integrating Rich<br/>Skills Descriptors (RSD)<br/>into Active Learning for<br/>Enhanced Employability</i><br><br>Amine Rahj  | <i>Using socio-constructivist<br/>pedagogical approaches<br/>to integrate science<br/>and health education:<br/>empowering youth to<br/>promote their wellbeing<br/>through problem-based<br/>learning</i><br><br>Neil Macintosh,<br>Anila Asghar  | <i>Integrating principles<br/>of environmental and<br/>sustainability education into<br/>curriculum design</i><br><br>Stephanie Leite,<br>Jessica Latus<br><br><i>Enhancing equity across<br/>foundational science courses.</i><br><br>Martha Mullally,<br>Iain McKinnell<br><br><i>Analyzing, Addressing<br/>Students' Conceptual<br/>Understanding of Uncertainty<br/>in Experimental Physics<br/>Laboratory Courses</i><br><br>Rebecca Brosseau,<br>Matheus Azevedo Silva Pessoa,<br>Armin Yazdani,<br>Jack Sankey,<br>Marcy Slapcoff   |  |
|                      | Room: H-670<br>Chair: Valerie Bherer  | Room: H-420<br>Chair: Theo Stojanov   | Room: H-421<br>Chair: Ed Hudson   | Room: H-431<br>Chair: N/A  | Room: H-621<br>Chair: N/A  | Room: H-613<br>Chair: Jason Lapointe   |
| 14:30-14:45          | Break (Mezzanine)   |   |   |  |  |  |
| 14:45-16:00          | AI and Technology /<br>IA et Technologie  | AI and Technology /<br>IA et Technologie  | Improving Practice /<br>Amélioration des pratiques  | Focus on STEM /<br>Accent sur les STIM   | Exploring Breadth /<br>Exploration de la Diversité   | Principled Design /<br>Conception basée<br>sur des principes   |
|                      | IL7: Exploring AI /<br>Exploration de l'IA  | IL8: Virtual Reality /<br>Réalité Virtuelle   | S3: SALTISE Fellows<br>Symposium / Symposium des<br>Fellows de SALTISE  | IL9: Case Studies /<br>Étude de cas  | IL10: Classroom<br>Challenges /<br>Défis en Classe   | S4: Gamifying Science<br>Education / Gamifier<br>l'Enseignement des<br>Sciences  |
|                      | <i>Tinkering with AI with<br/>Scratch and the Micro:Bit</i><br><br>Chris Colley,<br>Christine Truesdale,<br>Lexi Tucker   | <i>Jumping the Barrier: Using<br/>Virtual Reality to Teach<br/>Science</i><br><br>Yann Brouillette,<br>Jean-François Brière,<br>Annie-Hélène Samson,<br>Sébastien Wall-Lacelle,<br>Christine Marquis  | <i>Supporting instructors<br/>teaching en français in multi-<br/>level classrooms</i><br><br>Beth Acton,<br>Valerie Bherer,<br>Karine Guay,<br>Selma Hamdami,<br>Phoebe Jackson,<br>Nicholas Park,<br>Cathy Roy,<br>Maxim Salonin   | <i>Taking case studies to<br/>new heights: Empowering<br/>students to create case<br/>studies as an assessment tool<br/>for enhanced learning</i><br><br>Laura Pickell,<br>Karina Hamilton,<br>Nicola Leppinen,<br>Kayla Randles,<br>Nalini Broadbelt  | <i>Empathy-based<br/>Approaches to Dealing<br/>with Challenging Moments<br/>in the Classroom</i><br><br>Naj Sumar  | <i>Gamifying CEGEP Science<br/>Education: Exploring<br/>Tailored Educational Video<br/>Games for Enhanced<br/>Classroom Learning in<br/>Physics, Biology and<br/>Chemistry</i><br><br>Neerusha Baurhoo Gokool,<br>Nadim Boukhira,<br>Tania Peres |
|                      | Room: H-431<br>Chair: N/A   | Room: H-621<br>Chair: N/A   | Room: H-420<br>Chair: N/A   | Room: H-625<br>Chair: N/A  | Room: H-670<br>Chair: Daniel Goldsmith   | Room: H-421<br>Chair: N/A  |
| 16:00-17:30 +        | Awards + Reception  |   |   |  |  |  |

# Conference Program Abstracts

## Résumés du programme de la conférence

DAY 1 – June 3<sup>rd</sup>

### Welcome and Keynote

13:00 - 14:45

**Mutlu Cukurova**

*Professor of Learning and Artificial Intelligence*

UNIVERSITY COLLEGE LONDON

#### *Interplay of Learning, Analytics, and Artificial Intelligence in Education*

AI in Education is more than tools like ChatGPT. This talk presents a multi-dimensional view of AI's role in learning and education, emphasizing the intricate interplay between AI and the cognitive processes of learning. Prof. Cukurova challenges the prevalent narrow conceptualization of AI as stochastic tools, highlighting the cognitive diversity inherent in AI algorithms, and posits that AI can serve as an instrument for understanding human learning. Early learning sciences and AI in Education research, which saw AI as an analogy for human intelligence, have diverged from this perspective, prompting a need to rekindle this connection. The presentation delves into three conceptualizations of AI in education: the externalization of cognition, the internalization of AI models to influence human thought processes, and the extension of human cognition via tightly integrated human-AI systems. Prof. Cukurova argues for a balanced view that recognizes AI's limitations and the need for AI systems that support human agency, facilitate the internalization of learning process models, and enhance human cognition without replacing it. The presentation concludes with an advocacy for a broader educational approach that includes educating about AI itself and innovating educational systems to remain relevant in a world with ubiquitous AI.

### SESSIONS

9:00 - 10:15

#### **IS1 Interactive Session - Tools for Design**

##### *Program Flow: Leveraging CourseFlow for Program Management at Vanier College*

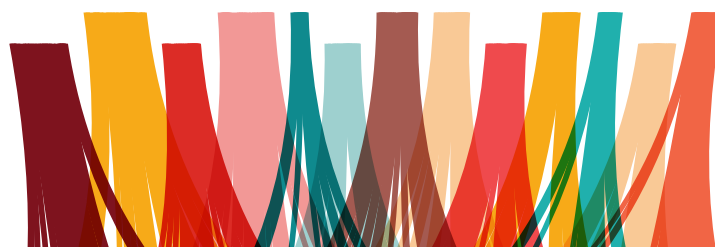
AISHWARYA NAIR (Vanier College), MAX SALONINE (Vanier College)

CourseFlow, a free cloud-based platform, offers tools for ensuring program and curriculum alignment. This interactive session will highlight observations from a pilot implementation of CourseFlow to assist with competency alignment during program revision at Vanier College. Presenters will share how the tool helped them manage time and resources effectively. Participants will be provided with the opportunity to learn how to use CourseFlow to facilitate program revision and ensure alignment of program competencies and courses.

##### *Advancing Inclusive Education: Leveraging Emerging Technologies to Enhance Accessibility and Universal Design in Digital Learning Environments for Students with Disabilities from an Indian Perspective*

MATHEW MARTIN POOTHULLIL (Ali Yavar Jung National Institute of Speech and Hearing Disabilities, University of Mumbai)

In advancing inclusive education, leveraging emerging technologies becomes pivotal to enhancing accessibility and promoting universal design in learning environments, particularly for students with disabilities. This paper employs the Uses and Gratification Theory as a framework to examine the dynamic interactions between students with disabilities and digital learning platforms. Exploring how individuals seek and utilize technology to fulfil specific needs and gratifications, this study delves into the multifaceted roles that technologies play in inclusive education.





## T1 Issues in Technology-driven Learning Environments

### *The Link between Feedback and Performance in Multimodal Data: Preliminary Results of a Systematic Review*

CHENXI ZHU (McGill University), YAJIE SONG (McGill University), MARIA CUTUMISU (McGill University)

This study examines empirical research on feedback based on multimodal data to understand how feedback can support performance. It poses two research questions: (1) What are the characteristics of the reviewed studies? (2) Does feedback support performance in the studies reviewed? This systematic literature review draws on the PRISMA framework. The results will inform the design of technology-rich learning environments that are essential to teaching and assessing 21st-century skills.

### *Policies to enhance online learning in higher education during the post-pandemic era*

RASEL BABU (McGill University), ADAM DUBE (McGill University)

From a policy perspective, this paper responds to Adedoyin and Soykan (2020) who reported universities' crisis response migration to online learning during the COVID-19 pandemic, its challenges, and opportunities. Analyzing these, five policy implications are suggested including evidence-based planning for online education, building public-private partnerships to eradicate discrimination among the learners of various socioeconomic classes, enhancing teachers' and students' digital skills, redesigning curriculum and assessment strategies, and promoting teachers' mental health through proper work-life balance.

### *Transforming a MOOC on Online Courses to a Blended Course on Blended Learning for CEGEP Teachers: A Collaborative Process between Université de Montréal and Dawson College*

BRUNO POELLHUBER (Université de Montréal), NADINE SAMIA BEKKOUCHE (Université de Montréal), FABIEN BRINJEAN (Université de Montréal), MARK MATTEI (Dawson College), CHANTALE GIGUÈRE (Dawson College)

Hybrid learning is on the rise in Canadian teaching institutions (Drysdale et al., 2013) and improved learning outcomes have been reported (Al-Qahtani and Higgins, 2012). A MOOC on distance learning previously developed by UdeM is currently being adapted in collaboration with Dawson College to a hybrid course on blended learning. This course, to be shared for use within the English CEGEP network, aims to assist teachers design a hybrid CEGEP-level course based on best practices outlined in the literature. Examples of learning modules and resources will be presented.

## T2 Digital Strategies in the Classroom

### *Video Rubrics: the academic and emotional benefits of an interactive editing tool*

TIM CAMPBELL (Vanier College)

Video Rubrics are an interactive tool that facilitate students' editing of written work. The instructor records a video explaining assignment instructions and marking criteria while also prompting students with questions that guide them in reviewing and editing. In this talk, the facilitator will discuss and demonstrate Video Rubrics, then share preliminary results of students' perception of the academic and emotional benefits of Video Rubrics as a tool to support learning in classroom and fieldwork environments.

### *Creating Digital Experiences to Foster Collaborative Active/Experiential Learning*

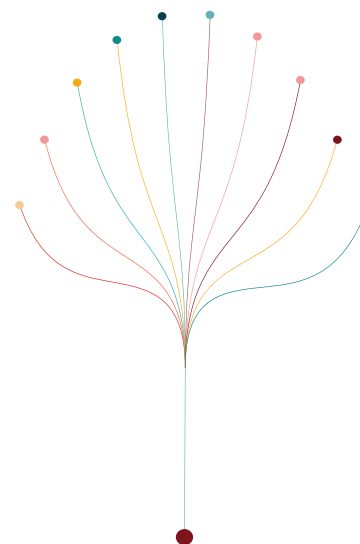
DAVID HOIDA (Vanier College)

Join in an exploration of the potential that digital experiences hold for encouraging diverse student engagement in active/experiential learning through accessible collaboration! Imagine various digital pedagogical activities shared across an online platform where students reflect and then contribute to interdisciplinary conversations. Vanier is proud to share an example inspired by our produced documentary film, which follows our nursing students through their stage experiences in Malawi.

### *Zettelkasten: Harnessing Note "Making" Technologies as Pedagogy*

JUSTIN FENG (McGill University)

We all take notes, from jotting down a simple grocery list to outlining our next diabolical plan. In this talk, I discuss how I turned note-taking into a formative assessment. The talk will cover (a) what is note-"making" and how to implement it as an assessment; (b) what kind of educational technologies can you use in the classroom; (c) student examples and testimonials; and (d) how to navigate benefits and limitations of note-taking technologies.



### T3 Innovation and Accessibility in STEM

*Developing an entrepreneurial mindset in engineering students through new modules integrated within existing courses*

KATYA MARC (McGill University), ZINAN HE (McGill University), AMANDA SAXE (McGill University), MICHAEL AVEDESIAN (McGill University)

This project aims to incorporate innovation and entrepreneurship concepts and practice into existing engineering undergraduate courses through the creation and execution of new T&L modules to develop an entrepreneurial mindset in our students. This is important so they can “create personal, economic, and societal value through a lifetime of meaningful work.” This will enhance their engagement, learning, retention and produce a more real-world experience, which will be beneficial to their academic and future career success.

*Empowering Faculty for Inclusive STEM Instruction: Insights from a University Initiative*

VICTORIA MARIE GLYNN (McGill University), DIANE DECHIEF (McGill University), CHARLENE LEWIS-SUTHERLAND (McGill University), ANDREA MILLER-NESBITT (McGill University)

A supportive community is essential for fostering equity, diversity, and inclusion in university classrooms. Navigating departmental hierarchies, as well as knowing where to begin can hinder meaningful action. McGill University’s Faculty of Science Inclusive Teaching Initiative addresses these challenges by providing a platform for instructors to exchange ideas, while building on existing practices and areas of interest. We will outline the initiative, highlight participant’s strategies to enhance classroom inclusivity, and reflect on key insights gained.

*Teamwork and EDI in Engineering: Building interpersonal skills into technical courses*

RENEE PELLISSIER (McGill University), SHAY HEANS-MOREYRA (McGill University)

The increasing value placed on effective, diverse, and globally minded engineering teams calls for universities to embed interpersonal skills development into engineering education. In McGill University’s Faculty of Engineering, the E-IDEA Teamwork Program has developed a unique framework to integrate the development of teamwork learning into technical courses. By offering tools, coaching, and targeted material to support student learning, the Teamwork Program aims to build capacity for inclusive teamwork and collaboration among students and instructors.

### IL1 Interactive Session - Supporting Accessible Pedagogy

*Supporting Accessible Pedagogy: A Choose Your Own Adventure Technology Workshop*

JOSEPHINE GUAN (Concordia University), ANN GAGNÉ (Brock University)

This session focuses on accessible pedagogy in the current educational landscape. We will explore theories and principles that ground our work with faculty and discuss the impact of inaccessibility. Our ‘choose your own adventure’ approach aims to support participants’ diverse knowledge and interests. Participants select between two paths: one focusing on accessibility within course materials beyond basic compliance; while the other path explores the intricacies of accessibility within emerging technologies, such as Generative AI.

### IS2 Interactive Session - Interdisciplinary Competency Development

*Enhancing Statistical Literacy in Quebec’s Colleges through Interactive Online Applications*

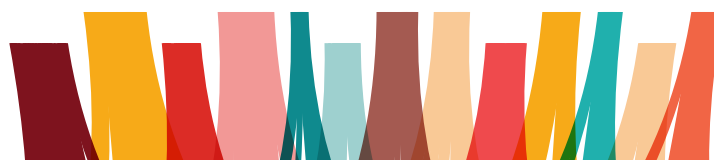
SANDI MAK (McGill University), IVAN T. IVANOV (McGill University), CHRISTIAN STAHN (McGill University), KEVIN LENTON (Vanier College), QUENTIN VAN GINHOVEN (McGill University), MARIE-JOSEE BOLDUC (McGill University), CATHERINE CYR-GANON (McGill University)

At this workshop, attendees will be offered the opportunity to interact a series of interactive applications aimed at developing data literacy skills and deepening students’ understanding of probability and statistics at the College level.

*Crafting Quebec’s Portrait of a Graduate: A Collaborative Vision for Our Graduates*

AVERY RUEB (Vanier College, Université de Montréal)

This workshop extends an invitation to stakeholders from across Quebec to come together and co-create a Transversal Competency Portrait of a Graduate, focusing on essential skills such as collaboration, health and wellness, decision-making, and time management. By joining this collaborative effort, you’ll contribute to shaping a comprehensive framework that helps guide students more effectively through their learning journeys to achieve their full potentials — personally, academically, and professionally.



## S1 Symposium - Active Learning Classroom Design

*Lessons from a 15-year effort to develop Active Learning classrooms and pedagogical capacity at Dawson College.*

CHRIS WHITTAKER (Dawson College)

What might the successful development of Active Learning (AL) classrooms and evidence-based pedagogical capacity in higher education look like? In the case of a specific faculty-driven, community-based, and research-centred initiative, what lessons can be drawn in terms of both process and outcomes? This symposium will provide an overview of a mixed methods doctoral dissertation that examined the Dawson Active Learning Ecosystem from 2005 to 2020. Highlights include a novel model for environment development across scales of implementation, a characterization of AL classroom design feature affordances based on the notion of access to learning artifacts, and a modified model of community development based on Wenger's notions of Communities of Practice.

## T4 Insights from AI in Education Research

*Developing Student Emotional Literacy through Rehearsals*

PREETI RAMAN (Toronto Metropolitan University), HARJOT SINGH (Toronto Metropolitan University)

This talk will present the Rehearsals platform, a novel approach to enhancing student well-being and emotional health through online practice-based education. Leveraging research in affect studies, Rehearsals offers a learning environment where students engage in improvisational interactions within real-life scenarios. Using generative-AI for real-time, emotion detection and feedback, Rehearsals aims to improve emotional literacy and decision-making skills. Results from a current study in a higher education Computer Science undergraduate course will be presented at SALTISE.

*Bilingual narratives: Probing media literacy in an AI world*

NOGA BROITMAN (Concordia University)

This study investigates how Generative Artificial Intelligence (GenAI) affects media literacy skills in a bilingual context, specifically exploring credibility judgements by examining 25 Spanish-English bilingual university students about their perceptions on AI-generated content in both languages. Understanding how bilingualism influences critical judgment is crucial for developing targeted educational strategies, ensuring individuals possess the necessary skills to navigate the evolving digital landscape shaped by AI.

## Five Fresh Insights about the Role of Artificial Intelligence in Education

GIULIANA CUCINELLI (Concordia University), SAUL CARLINER (Concordia University)

The current state of educational gaming in learning is characterized by significant advancements and growing recognition of its potential benefits (Rahimi et al., 2021, Garcia, Witte, & Dail, 2020). Educational games leverage interactive and immersive experiences to enhance learning outcomes and engage learners more enjoyably and effectively (Toda, Cristea, & Isotani, 2023). These games often incorporate elements such as gamification, simulations, and problem-solving challenges to promote critical thinking, collaboration, and knowledge retention.

Research has shown that well-designed educational games can improve motivation, engagement, and knowledge acquisition among learners of all ages (Yu, Gao, & Wang, 2020). They offer personalized learning experiences, allowing students to learn at their own pace and receive immediate feedback. Additionally, educational games can foster the development of various skills, including problem-solving, decision-making, and creativity.

However, challenges still exist in the field of educational gaming. Ensuring the alignment of game content with educational objectives, maintaining a balance between entertainment and learning, and addressing the diverse needs of learners are ongoing considerations (Patricio & Moreira, 2021). Furthermore, the integration of educational games into traditional educational settings and the assessment of learning outcomes present additional complexities.

This presentation presents 10 important lessons learned when implementing design sprints in an Educational Technology Masters-level course on educational gaming. The results showcase examples of collaboration, cooperation, success, failure, and the constraints of time and access to material. Overall, applying a design thinking process to designing and developing educational games holds great promise as a learning experience."

## T5 New Perspectives on Assessment

*Rethinking Assessment: Exploring the Potential of Gradeless Learning*

YUSUF JOSIAH (McGill University)

Critics continue to question the heavy reliance on grades because of their identified detrimental effects on learning outcomes. This literature review explores the concept of gradeless learning as reduced grading or a practice that abandons grading and advocates a departure from traditional grading systems for assessment approaches that prioritize feedback and learner development. This review discusses the potential of gradeless learning to promote intrinsic motivation, deeper student engagement, and a holistic understanding among students.

*Not just another entry point: Using a podcast to draw connections between assessment for learning and student well-being*

MARGO ECHENBERG (McGill University), JASMINE PARENT (McGill University)

According to a new policy at our university, assessments should align with healthier learning environments. To help encourage and support instructors in adjusting their assessment practices, our CTL developed a podcast miniseries that illuminates assessment for learning's connection to student well-being. The podcast disseminates the rationale behind the policy by means of intimate conversations in which interviewees share authentic experiences. Our presentation highlights the innovative aspects of our podcast and focuses on its replicable elements.

*Ungrading Successfully Improved Physics Student Writing in Two Instances of a Physics in Society Course*

GARRICK BURRON (University of Toronto), CAROLYN SEALFON (Minerva University, Ronin Institute)

This study analyzes ungrading in two consecutive instances of an upper-level undergraduate course on physics and society taught by different professors at a large Canadian university. We used ungrading to combat students' inattentiveness to feedback from teaching assistants in a previous graded course for six reflective assignments that required students to link their in-class learning to real-world examples. Longitudinal data courses showed that students' writing improved to mastery level for most of the students examined.

## T6 Issues in Chemistry Education

### *Greening Chemistry Labs*

KIM SILKAUSKAS (Collégial international Sainte-Anne)

Chemistry labs can be adjusted to be more sustainable using Green Chemistry Principles. For example, a lab that abides by these principles minimizes use and generation of hazardous substances. By incorporating these principles in labs, students are given environmentally friendly alternatives while fostering development as global citizens. The objective of this presentation is to encourage adopting sustainable practices by introducing greener labs that fulfill curriculum requirements, as well as introduce on-line resources and supportive communities.

*A modular and engaging approach to the Suzuki reaction for the undergraduate organic chemistry laboratory*

DANIELLE VLAHO (McGill University), MITCHELL HUOT (McGill University), ALEXEI KIERAN (McGill University), GAGAN DALIAHO (McGill University)

This project introduces our work on a modular approach to the Suzuki Reaction in undergraduate organic chemistry courses at McGill University, focusing on active participation and collaborative learning to enhance student understanding and engagement. This project, part of a broader effort in our department to integrate active learning strategies into chemistry education, hopes to enrich the learning journey of our students by introducing them to the practical and theoretical aspects of synthetic organic chemistry, with a particular emphasis on carbon-carbon bond formation and green chemistry.

Central to our project is the modular design of the experiment, which invites students to explore the scope of Suzuki reactions through a variety of reactants and catalysts. The Suzuki reaction is a Nobel prize-winning reaction that is ubiquitous in pharmaceutical synthesis; its importance and wide substrate scope make it an attractive candidate for a "choose-your-own-adventure" style of experiment. We will present our progress on the development of a general methodology for this reaction which accommodates the use of a range of substrates, catalysts, and conditions, while remaining feasible for the undergraduate level.

We hope that this experiment will not only promote a deeper understanding of the subject matter but also encourage students to engage actively in the scientific process. By allowing students to design their own experiments, we aim to foster a sense of ownership and creativity in their learning process.

In alignment with SALTISE's mission, our project underscores the significance of active and collaborative learning in the sciences. We anticipate that our approach will enhance students' understanding and enthusiasm for chemistry, but we hope that it will also inspire educators to adopt similar strategies. Ultimately, our goal is to cultivate a community of learners equipped with the knowledge, skills, and curiosity to pursue scientific inquiry and innovation.

We will present the results we have obtained thus far with respect to the synthetic methodology of our planned experiment and provide an overview of how we plan to incorporate this modular reaction in our laboratory curriculum. We will also discuss our plans to further expand the scope of the reaction.



### *It Takes a Village! A Community-driven Approach to Developing Teaching Assistants as Educators*

STEPHEN GEORGE (McGill University), LAURA PAVELKA (McGill University), VÉRONIQUE BRULÉ (McGill University), JANETTE BARRINGTON (McGill University), APRIL COLOSIMO (McGill University), MARCY SLAPCOFF (McGill University)

McGill's Chemistry Education Research group composed of instructors, lab coordinators, educational developers, a librarian, and a graduate student aims to enhance student engagement in learning chemistry. Using consensus mapping methodology to bring together this diversity of perspectives, we identified motivating and training graduate teaching assistants (TAs) as our most promising strategy. During this session, we will discuss the conceptualization of a new multi-year Chemistry TA Program that involves developing pathways to support TAs as educators.

## **T7 Accessibility through Technology**

### *A Pocketful of Tools: Mobile Solutions to Bring to the Internship*

ALICE HAVEL (McGill University, Dawson College), SUSIE WILEMAN (Dawson College), CATHERINE FICHTEN (Dawson College), MARY JORGENSEN (Dawson College)

General use technology is widely accepted in the post-secondary classroom. What happens when students move into a clinical setting to fulfill their internship requirements? Students with disabilities may require the accessibility features of PCs and mobile devices while other students view them as productivity tools. Concerns arise regarding privacy, distraction, and contamination of mobile devices with biohazards. How can educators support students in utilizing PCs and mobile technologies while assuring their responsible use during internships?

### *The Impact of Marginalization and Intersectionality on Post-Secondary Students with Disabilities' Use of Assistive Technology: A Scoping Review of the Literature*

DAVID PICKUP (Concordia University), EVGUENI BOROKHOVSKI (Concordia University), RICHARD F. SCHMID (Concordia University), CHRISTINE VO (Concordia University)

This project investigated the impact of privilege, marginalization, and intersectionality on assistive technology (AT) use among post-secondary students with disabilities. The research highlighted that while AT can reinforce marginalization, thoughtful implementation can enhance independence. Intersecting factors such as specific disabilities, socio-economic status, and context (e.g., STEM) create complex challenges. Emphasizing Universal Design for Learning in online education and AT development is crucial for equitable access.

### *Making PowerPoint, Excel, Google Docs and Teams More Accessible to Your Students*

CATHERINE FICHTEN (Dawson College), ROBERTA THOMSON (Adaptech Research Network), ALICE HAVEL (Dawson College, Concordia University), SUSIE WILEMAN (Dawson College)

Over 20% of students have a disability. Many use screen readers that employ the accessibility features in general use computer technologies. We will showcase how to make technologies faculty use to prepare their teaching materials more accessible to their students. To do so we will demonstrate accessibility features in Word, PowerPoint, Excel, Google Docs and TEAMS. A "take away" resource of videos and text files will be provided.

## **IS3 Interactive Session - Design considerations**

### *Designing for Interdisciplinary Education*

KEVIN LENTON (Vanier College), ELIZABETH CHARLES (Dawson College), ANNIE-HÉLÈNE SAMSON (Dawson College), SELMA HAMDANI (Dawson College), MATHILDE HITIER (Dawson College), MICHAEL DUGDALE (John Abbott College), SEAN HUGHES (John Abbott College), RHYS ADAMS (Vanier College), KARL LAROCHE (Vanier College), JEAN-FRANÇOIS BRIÈRE (Dawson College)

This interactive presentation delves into the challenges of interdisciplinary education, centering on structural barriers and the lack of integration guidelines. Through models of learning communities, we will illustrate examples of designing teaching for integrated knowledge and supporting teachers in interdisciplinary thinking, in addition to exploring methods to assess its impact on learning. Case studies from three cégeps will be used to analyze co-design, implementation, and revision processes, engaging teachers in discovering innovative pedagogical approaches for interdisciplinary knowledge integration.

### *Introducing VIRTmac: an innovative digital platform for biology & biochemistry education.*

LORIE MILLS (Nova Scotia Community College), JOHN MACLELLAN (Carleton University), MARTHA MULLALLY (Carleton University)

VIRTmac evolved from twenty years of experience by educator John MacLellan who collaborated with digital learning specialist Lorie Mills. Students build and interact with fundamental biochemical molecules from the level of atom to macromolecule to cellular process. This workshop will introduce VIRTmac to biology and biochemistry educators, provide educators with a chance to play with the tool, and to engage in practitioner co-design, where feedback from the educators informs VIRTmac's ongoing iterative design process.

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## Posters

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14:45 - 15:45

### *"Augmented Lecturing": An Immersive Pedagogical Method for the 21st Century*

DANIEL MILLER (Bishop's University)

"Augmented Lecturing" functions through interspersing of conventional speech with relatively brief audio-visual excerpts. In Augmented Lecturing, any material extraneous to the instructor's specific didactic point is removed from video and audio excerpts through an editing application (e.g., iMovie) and those excerpts are embedded within the presentation program (e.g., Keynote), eliminating any pause in the shift between verbal and audio-visual modalities. There is a constant forward momentum and contextualization of information within a more comprehensive scaffolding.

### *A Curriculum Design Framework for Critical Action Learning*

RENATO CARVALHO, JIM SLOTTA (University of Toronto),  
PREETI RAMAN (Toronto Metropolitan University)

We present an international network of Professional Learning Communities where educators design and enact new forms of curriculum for Critical Action Learning (CAL). CAL curriculum empowers students as transformative agents when facing socio-environmental issues (i.e., climate change, social justice, pandemics, economic inequality, etc.) that affect themselves and their communities. We present diverse elements of this project, with a particular focus on a design framework that facilitates the design of CAL curricula.

### *A Poster Presentation on Pre-service Teacher's Reactions to Children's Literature on Diverse Family Structures*

MARIA STERGIOU (McGill University)

This poster presentation delves into the realm of instruction and learning, spotlighting arts-based methods (ABER), particularly collage, as a novel avenue for exploring pre-service teachers' responses to children's literature depicting diverse family structures. In a field where traditional modes of expression like speaking and writing often take precedence, the utilization of arts-based methods introduces a nuanced approach that can offer fresh insights and perspectives. Through qualitative inquiry and engagement with collage-making activities, the study seeks to amplify the voices of pre-service teachers while unraveling their reactions to diverse family narratives. By embracing arts-based methodologies, the research aims to bridge the gap between unfamiliarity and engagement, shedding light on the transformative potential of incorporating such approaches in teacher education and pedagogical practices.

### *Achieving Optimal Learning Efficiency in Education: Understanding Human Capacity Zone and Workload Equilibrium*

MENGTING ZHAO and YONG ZENG (Concordia University)

This research aims to assist students in achieving their optimal learning efficiency by exploring the concept of human capacity zones and workload equilibrium. By explaining the parameters that define the 'good' workload for learners, we hope to provide insights into improving instructional strategies and workload allocation in educational settings. We seek to enhance overall learning efficiency and help students in achieving their success in schools through the investigation on how workload management influences learning outcomes.

### *Active Learning Pedagogy as a Tool of Anti-racism in English as a Foreign Language Classroom*

MOHAMMED MARZUQ ABUBAKARI (University of Applied Management, Ghana)

An ideal class of English as a Foreign Language (EFL) is characterized by a multi-racial student population of non-native speakers of English. The class may be threatened by racial tensions among the students. This Paper examines the extent to which Active Learning Pedagogy could be used to prevent racism in EFL classrooms. After literature review and analysis, the Paper finds Active Learning Pedagogy as a tool of racial harmony and solidarity in multi-racial classrooms.

### *An Analytical Study of the Implementation of Immersive Technologies in Mechanical Engineering Education in Morocco: A Qualitative Approach*

KHADIJA TALBI, IMANE ZERGOUT, SOUAD AJANA, ZINEB AIT HADDOUCHANE (Université Hassan II, Casablanca)

This research is conducted within the framework of Moroccan higher education to investigate the current status of virtual reality (VR) implementation and explore its potential benefits and challenges within the educational system. The immersive Technology has become an integral part of our daily lives, revolutionizing various industries including agriculture, business, research, and education. Immersive technology refers to a set of technological tools and techniques that create highly realistic and immersive digital experiences for users (Jain & Werth, 2019). These experiences often involve virtual reality, augmented reality, and mixed reality technologies, which combine computer-generated visuals, audio, and sometimes haptic feedback to create a sense of presence and immersion in a virtual environment. Virtual Reality (VR) has the potential to revolutionize education, particularly in developing countries like Morocco where the digitalization of education is a top priority. By integrating VR technology into the education system, Moroccan students can experience immersive learning environments that go beyond traditional classroom settings. This is particularly beneficial in areas where access to resources and educational facilities is limited. Despite some initiatives, VR remains underutilized in Moroccan schools. Our study delves into the factors hindering its integration and suggests strategies to overcome these barriers, aiming to facilitate the effective use of VR as a valuable teaching tool in Moroccan higher education.

### *Challenging AI, How Reliable is it?*

AHMAD HEMAMI (Concordia University)

Artificial Intelligence (AI) can be advantageous or can show to imply disadvantages, with negative effects. This depends on what the context is and for what purpose it may be used. This is also true in the case of training and education, as can be heard from educators in different disciplines. In this study I carried out some evaluation of AI by observing the answers/solutions to various technical and nontechnical questions/problems. Interesting to see the results!

### *Developing Deep Learning in the Blended Classroom*

TRACY MCDUGALL (Université Sherbrooke)

Blended learning, combining traditional classroom methods with online resources, offers educators greater flexibility in reaching students. This study investigates whether blended learning environments promote deep learning in college settings. Through a quasi-experimental design involving 60 students as their own matched pairs, the research aims to explore the connection between blended learning and deep learning. Students' reactions and perceptions in both traditional and blended learning settings will be examined to inform pedagogical approaches for higher education.

### *Empowering Biochemistry Education: Introducing VIRTmac - A Digital Model for Engaging Student Thinking*

LORIE MILLS (Nova Scotia Community College),  
JOHN MACLELLAN (Carleton University)

Introducing VIRTmac, a unique web-based teaching tool designed to enhance the understanding of complex biochemical structures and processes. Developed by veteran Biology teacher John MacLellan over nearly two decades of classroom experience, VIRTmac has evolved from practical origins into a promising modern educational tool. In 2005, while teaching in London, Ontario, John faced the challenge of limited instructional resources for his biology course. Frustrated by the lack of engaging materials and static diagrams, he took an innovative approach, creating physical models of biological molecules using simple materials that included laminated construction paper and magnets. Over the next 20 years, John refined more than 250 physical models as well as accompanying lessons for a wide range of topics including the origins of life in the Ancient Sea, cellular respiration, photosynthesis, DNA replication and protein synthesis. His innovative approach has been described as a "daring departure from mainstream teaching" and has received praise from both students and educators including recognition of teaching excellence with the prestigious Prime Minister Award for Teaching Achievement.

### *Facilitating Fun-autonomy in PBL: The Halo Effect*

PINAR SEKMEN

Who would want to be involved in a boring class? Would putting the funniest meme or adding the latest app lead to a meaningful outcome in a project in our language classes? My presentation aims to enhance educators' awareness in avoiding educational biases while building fun and autonomy together in our language classes.

### *Implementation of the Project-Based Approach to Teaching Statistics: Students-Success and Learned Lessons*

INDIKA WICKRAMASINGHE

This study reports the success obtained and lessons learned with implementing Project-Based Learning (PBL) in a college-level statistics course. The study was conducted in the spring 2022 and fall 2022 semesters. We implemented the PBL approach in three sections of this course and compared it with the performances of the four sections that implemented the traditional teaching approach. Based on the outcomes, students exposed to PBL approach showed significantly improved performance compared to control group.

### *Integrating Generative AI and Augmented Reality: Enhancing Art from Personal Practice to Elementary Education*

JIHANE MOSSALIM (Concordia University)

This research investigates the process and potential results of merging traditional art-making media with generative artificial intelligence and augmented reality. By exploring these tools used in a personal art practice coupled with my experience as an elementary art teacher, I play and speculate on how these tools could become integral parts of the elementary art classroom, fostering accessibility and inclusivity.

### *Interpreting Motivationally Supportive Instruction: What Counts and Why?*

JESSICA HUNTER, CHELSEA KISIL, FLORENCE LESSARD,  
SANHEETA SHANKAR, SO YEON LEE, KRISTY A. ROBINSON  
(McGill University)

This study investigates how observers, despite similar training, differently interpret motivationally supportive instructional practices in undergraduate STEM classrooms. We apply multi-methods to explore patterns of agreement/disagreement between observers as they coded for instructor-made relevance statements across six courses. Chi square was employed to detect non-random differences between observers and qualitative content analysis was used to generate potential explanations for sources of variance in rater judgment. We present findings with implications for theory, research, and practice.

### *Jumping in the Shallow End: Simulation-Based Training Prior to Critical Care Nursing Practicum*

CATHERINE LEBLANC, MARTYNA REMBISZ, MARIA DAMIAN  
(McGill University)

Bachelor of Science in Nursing students report feeling unprepared for their critical care rotations. A formative day-long simulation was developed with debriefing using the PEARLS framework. This simulation-based experience enhanced student readiness for clinical rotation by addressing the gap between theory and practice, providing a safe learning environment, and fostering reflective practice. Conducting rigorous research to assess the effectiveness of this simulation compared to traditional teaching methods can provide evidence to guide future educational practices.

### *Mathematics Attitudes and Perceptions Survey: Development and Results in Measuring a Variety of Contexts for Over Ten Years*

WARREN CODE (University of British Columbia)

The Mathematics Attitudes and Perceptions Survey (MAPS) is a short, validated Likert-scale instrument that measures confidence, interest, relation of mathematics to the real world, persistence in problem solving, growth mindset, use of sense-making behaviours, and the extent of other novice attitudes towards mathematics. In this poster, we share the complete instrument and its categories, a brief summary of the development process, and some examples of scores across different populations and contexts measured so far.

### *Pioneering Technological Innovations in Education: Crafting Opportunities, Mitigating Pitfalls*

MOHAMMAD HANNAN MIA (Universiti Kebangsaan Malaysia),  
MAHADI MOKBUL ALI (Mohammadpur Government High School, Dhaka)

Technological innovations in education offer transformative opportunities, employing personalized learning algorithms and immersive realities to enhance student engagement. However, embracing these advancements requires addressing challenges such as equity gaps and data privacy concerns. A strategic approach is essential, balancing benefits and risks. Stakeholders navigating this landscape must ensure positive transformation, recognizing the need for thoughtfulness to craft bespoke learning experiences without compromising core values.

### *Predicting Academic Performance in First-Year STEM Courses: How a Peer Collaboration Space Informs Strategies for Student Success*

CLEO HUANG, ARMIN ALEX YAZDANI, KIRA SMITH  
(McGill University)

The Office of Science Education at McGill University launched the SciLearn Peer Collaboration in Fall 2021 to provide students with a collaborative learning environment including support from course staff. This project aims to evaluate how peer learning impacts student performance through its effect on cognitive load. In Fall 2023, we collected qualitative and quantitative data of students' experiences at the Peer Collaboration space, including engagement and attendance metrics, field notes observations, interviews, and survey responses.

### *Predicting Secondary Students' Reading Literacy Across Cultures Using Machine Learning: A Case Study*

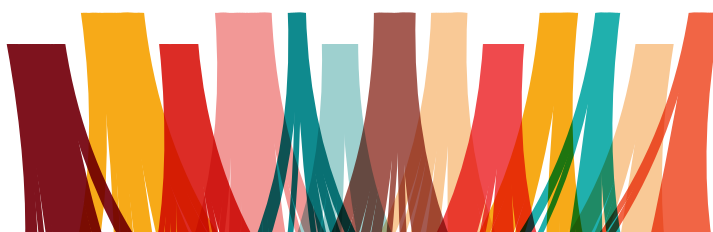
YIMEI ZHANG, YAJIE SONG, MARIA CUTUMISU  
(McGill University)

Reading literacy is a critical literacy for lifelong learning in many domains. This study predicts secondary students' reading literacy using two supervised machine learning algorithms, lasso regression (LR) and random forest (RF), based on the Japan and Ireland data from PISA 2022. Findings indicated that: (1) RF outperformed LR; (2) both models performed better on the Ireland data than on the Japan data; (3) joy of reading played an important role in predicting reading literacy.

### *Students Speak on Sleep: Coping Strategies for Parasomnias*

YUXUAN QIN (McGill University), CATHERINE FICHTEN  
(Dawson College), ALICE HAVEL, (McGill University,  
Dawson College)

What do you do to cope with your nightmares? Do you calm yourself down or do you just do nothing? For some disturbing sleep disorders, are you looking for non-pharmacological ways to deal with this? We surveyed students who reported experiencing sleep disorders and found out about their coping strategies. We will also discuss some clinical treatments from scientific articles.





### *Students Speak on Sleep: Parasomnias Prevalence and Implications*

HUANAN LIAO, EVA LIBMAN (McGill University),  
MARY JORGENSEN (Dawson College)

Parasomnias are sleep disorders involving abnormal events occurring during sleep. We investigated the prevalence of parasomnias in the post-secondary student population. Ninety-three percent of students reported at least one parasomnia. The most prevalent one was nightmares followed by hypnic jerks, sleep-talking, and bruxism. We found that there was a significant relationship between nightmares frequency and psychological distress and neuroticism. Additionally, the overall frequency of parasomnias had a strong relationship with psychological distress and neuroticism.

### *The Integration of Technology into English Second Language Teaching for International Students*

LIHUA TANG (Université du Québec à Montréal (UQAM))

The integration of technology into the teaching and learning environment is playing an increasingly important role. In my context of teaching ESL, an issue arises as to how this integration could be used to improve English communication skills for international students learning English as a second language. In this research paper, I will explore how the integration of technology can improve English communication skills. Specifically, I am interested in how to help students find interactive, interesting, and original English learning materials and methods through online audiovisual content and social media. I'm going to use Instagram as an example of social media and see opportunities to use it to improve students' English skills, allowing them to easily follow their topics of interest, leave comments, and share opinions. I will then explore the potential ability of artificial intelligence (AI) to provide instant and accessible feedback to help students identify their strengths and areas for improvement. Students can ask AI (e.g., Chat GPT) to correct their documents, articles, and expressions, providing instant feedback and making it easier to acquire English language skills more effectively. The expected outcomes will then be evaluated based on the grades in the International English Language Testing system (IELTS), especially the speaking and listening section and self-evaluated level of motivation and confidence.

### *Using Large Language Models to Observe Motivationally Supportive Teaching Practices*

SANHEETA SHANKAR, KRISTY A. ROBINSON (McGill University), LAASYA KANURU, MICHAEL VICTOR (Communitatus)

This study explores the efficacy of using large language models (LLM's) to identify motivationally supportive instruction in STEM classrooms. Drawing on self-determination theory, we focused on three support strategies: providing rationales, linking content to real life, and demonstrating enthusiasm. Initial coding and analysis of agreement between models and human raters revealed challenges and possible enhancements for LLMs to record supportive instruction. Pursuing these improvements could greatly enhance the efficiency of classroom observation in educational research.

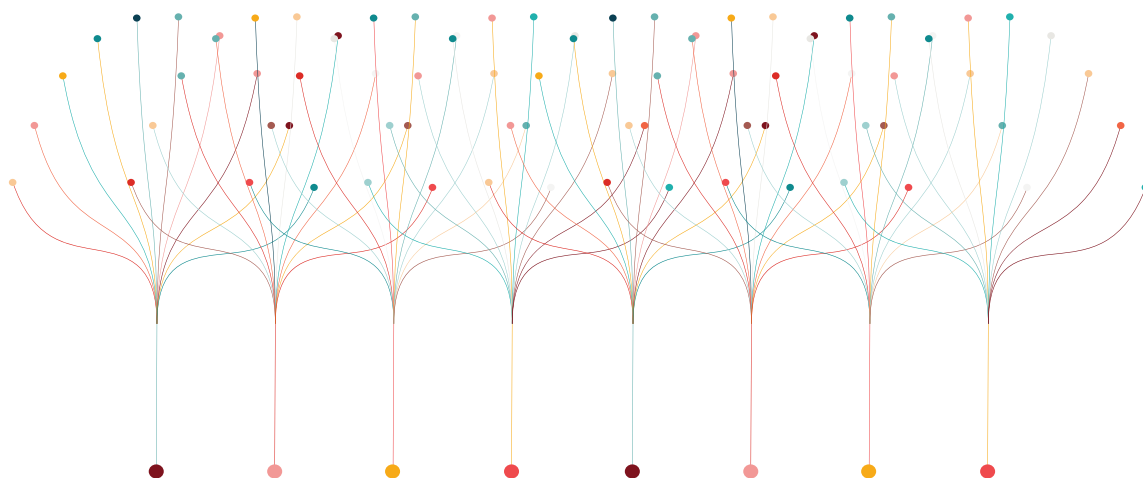
15:45 - 17:00

## **IS4 Interactive Session - Exploring and expanding the use of AI**

### *Enhancing Transversal Skills with AI: A New Path for Collaboration*

AVERY RUEB (Vanier College, Université de Montréal),  
NEERUSHA BAURHOO GOKOOL (Université de Montréal)

Explore the transformative potential of AI in nurturing essential skills such as collaboration, decision-making, and communication. This interactive workshop invites participants to engage with ChatGPT AI tutor bot, designed to assess and enhance your proficiency in a chosen transversal skill as well as to show you ways to improve these same skills for academic, professional, and personal success. Join us to unlock new resources for developing vital skills both in and beyond the classroom.



## *Enhancing Moodle with Generative AI: Transforming Educational Experiences*

RAFAEL SCAPIN (Dawson College), CAMERON CAMPBELL (Dawson College)

This workshop is designed to provide a basic overview of the transformative potential of merging Generative AI technologies (such as ChatGPT, Copilot, Gemini) with Moodle's educational platform. Attendees will discover innovative methods to harness Generative AI for crafting dynamic, personalized learning experiences that include quizzes, assignments, and engaging discussions. Through practical demonstrations, participants will see firsthand how Generative AI can support educators by generating diverse questions, assessing student comprehension, and delivering tailored feedback. Join us for a basic introduction to the synergy between Generative AI and Moodle, and learn how to elevate the educational journey for both teachers and students. This 35-minute presentation aims to provide a foundational understanding suitable for all participants.

## **S2 Symposium - Skills of the Future**

### *Enriched Learning with 21st Century Transferable Skills*

STEVEN HENLE (Concordia University), MEGAN MARCOUX (Concordia University), JANETTE BARRINGTON (Concordia University), SUSAN T. DINAN (Concordia University), SANDRA GABRIELE (Concordia University)

A diverse Scholarship of Teaching and Learning (SoTL) supported implementation of the FUSION Skills Development Curriculum in two capstone internship courses. Online learning modules focused on three 21st century transferable skills (metacognition, problem solving, and communications). The SoTL-team also used the ORID Focused Conversation Method to explore best teaching practices. This resulted in a model that support internship learning, integrating the FUSION Curriculum, Kolb's experiential learning cycle, ORID, and five motivational design principles.

## **IL2 Interactive Session - AL Best Practices**

### *Best practices for group work, self- and peer-assessment and self-reflection*

HÉLÈNE NADEAU (Dawson College), SYLVIA COX (Dawson College)

Group work and project work are attracting more and more interest in our courses. But many teachers feel ill-equipped when time comes to grade these types of work. We propose to address some of these concerns through an interactive session focussing on grading group work equitably, designing meaningful peer-assessments and facilitating self-reflection. Drs. Cox and Nadeau will briefly introduce each topic and facilitate a conversation where colleagues will share novel strategies they developed.

## **IS5 Interactive Session - Teaching with technology (bilingual)**

### *Plateformes électroniques à distance (PEAD) pour les cours en génie électrique*

MAMANE MOUSTAPHA DODO AMADOU, MUSTAPHA RAFAF, LYNE WOODWARD, RICHARD AL HADI, MAAROUF SAAD, VAHE NERGUIZIAN (École de technologie supérieure (ÉTS))

Grâce au développement et à l'accessibilité de l'informatique, des applications logicielles sont utilisées dans tous les domaines d'activité de génie. Ainsi, des laboratoires virtuels permettent de réaliser des expérimentations à l'aide des simulations et des laboratoires à distance avec des équipements réels dans le but d'aider le futur ingénieur à mieux comprendre les concepts théoriques. Les plateformes électroniques accessibles à distance sont des outils indispensables dans une formation technique à distance.

L'utilisation de cette plateforme permettra aux étudiant(e)s de consolider et d'assimiler des sujets traités en classe et au laboratoire pour un système électrique et électronique. L'enseignant(e) pourra aussi démontrer la notion de la sensibilité d'un circuit à l'aide d'un système de kit/PCB physique en classe ou bien à l'aide d'un système kit/PCB à distance. L'enseignant(e) pourra choisir d'utiliser le kit/PCB en présentiel ou à distance. Les plateformes peuvent être utilisées par les étudiants(e)s sans contraintes d'espace et de temps, ce qui accroît considérablement leur flexibilité d'apprentissage.

### *Empowering Climate Change Education with En-ROADS*

ERIC FRANCOEUR (École de technologie supérieure (ÉTS))

En-ROADS is a powerful, freely available, and easy to use online simulation that allows its users to explore the effects of different policies on climate change while keeping track of dozens of factors, such as GHG emissions, air quality and energy prices. In this session, participants will be introduced to this tool through the interactive creation and exploration of climate scenarios. Its use in the classroom as a stimulating, interactive learning tool will be discussed.

## **IS6 Interactive Session - Deepening in-class discussions**

### *Building Class Communities*

CAROLYN SEALFON (Minerva University, Ronin Institute)

In this interactive session, we will experiment with applied improvisation activities to cultivate community and belonging in our classrooms. Applied improv offers a powerful toolbox to foster listening, co-creativity, playful curiosity, and acceptance of mistakes. We will engage in some of these improv games together, and discuss how we can adapt them to our unique class contexts. Expect to play, laugh, discuss in small groups, and build with each other's ideas.

### *Designing a faculty learning community to foster equitable and inclusive classroom discussions*

JENNIE FERRIS (McGill University), MITHURA SANMUGALINGAM (McGill University)

In this session, we describe the design and implementation of a faculty learning community in Fall 2023 focused on promoting equitable, inclusive discussions in university classrooms. We share our approach and lessons learned. Session attendees will draw on the lessons learned (including a set of guiding questions) to brainstorm how they could plan a learning community to meet a pedagogical need in their local context.

## **T8 Insights from Current Research**

### *Rethinking the makerspace ethos in K-12 educational spaces: Implementing the makingspace to promote active learning*

LYNDA YEARWOOD (University of Toronto)

The traditional makerspace can be a daunting space that is not always inclusive. The long shadow of the maker as championed by Doherty places too much emphasis on having a specific identity in the makerspace to which many K-12 students are not likely to connect. We have run multiple short sessions with Grade 7 students designed to shift the emphasis to the process of making and promote inclusivity in an active learning space.

### *An Exploration of Students' Course Interest in EFL Flipped Classrooms*

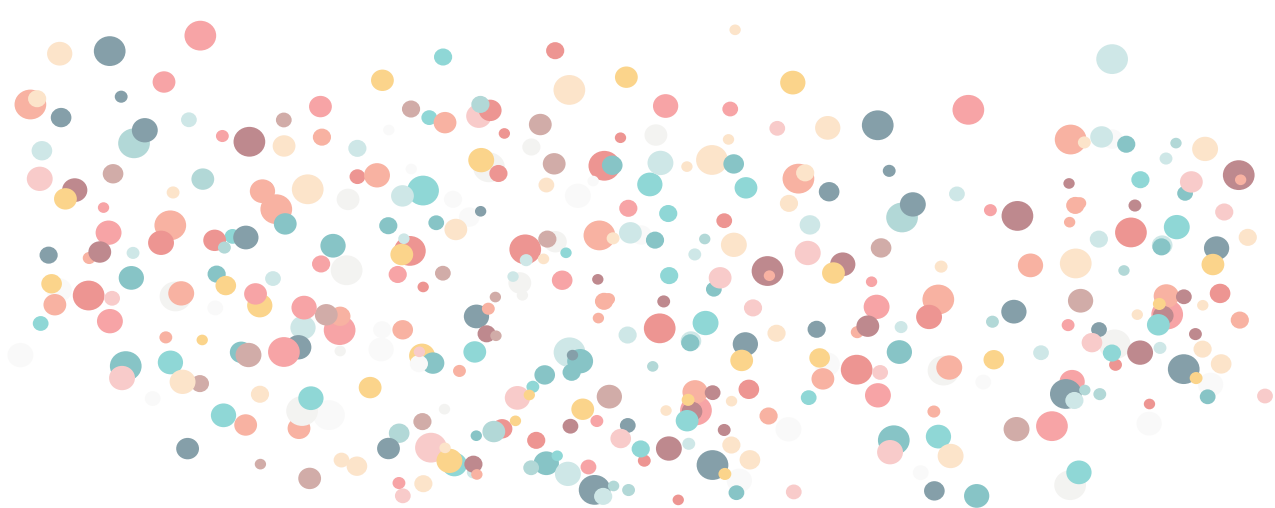
SARA DJAMÀA (Université du Québec à Montréal)

This study adopted a true experimental pretest-posttest control group design to assess the impact of flipped instruction on EFL (English as a foreign language) students' course interest at the university level. Empirical findings proved that flipped students (n=192) scored significantly higher than their non-flipped counterparts (n=192) in all four dimensions of course interest, namely in attention, relevance, confidence, and satisfaction. Conventional instruction proved a less effective classroom design in nurturing students' interest in instructor-led instruction.

### *Studying the interaction between academic performance and student motivation profiles, metacognition, and learning strategies with machine learning*

EMMA TOMIUK (McGill University), ARMIN YAZDANI (McGill University)

Student motivation has been shown to be an important predictor of academic success in undergraduate university courses. However, it is impossible to study motivation in isolation from other factors that contribute to a student's experience in their courses, such as demographics, self-efficacy, learning strategies, mindset, and metacognition. To better understand these interactions and changes in motivation, we used a regression model to predict student grades in undergraduate chemistry and mathematics courses based on these factors.



### Keynote Panel

10:30 - 11:45 AM

**SPECIAL plenary session: A panel discussion on “Emerging Technologies in Education: Shaping Potential, Managing Pitfalls”**

From artificial intelligence and virtual reality to adaptive learning systems, rapid technological advancements promise to unlock boundless educational potentials. However, significant challenges such as digital equity, privacy concerns, information overload, and the need for critical digital literacy must be addressed. This special plenary session features a panel of various stakeholders (practitioners and researchers), each discussing these issues from their area of expertise. Each panelist will provide insights, from their perspective, on the important opportunities and challenges arising from the question of how new technologies can/should redefine the education landscape. We expect a lively and provocative discussion that will enrich us as we prepare for the next advancements in teaching and learning.

#### Panelists:

TERESA HERNÁNDEZ GONZÁLEZ (TESL Program Director, Concordia University)

MARCO LUNA BARAHONA (Faculty member Mel Hoppenheim School of Cinema, Technologist at Milieux)

KORAH WILEY (STEAM educator and researcher)

JOEL P. WIEBE (PhD candidate at OISE, University of Toronto)

JOEL TRUDEAU (Faculty member Dawson College, co-lead DawsonAI Artificial Intelligence initiative)

#### Moderators:

PREETI RAMAN (Assistant Professor Computer Science, Toronto Metropolitan University)

REMI ARORA (Manager - Lab for Innovation in Teaching and Learning (LITL), Concordia University)

## SESSIONS

9:00 - 10:15

### IL3 Interactive Session - Roboethics

*Learn Roboethics: Introducing a non-technical interactive teaching module designed for all*

RAHATUL AMIN ANANTO (McGill University), SHALALEH RISMANI (McGill University), CHRISTOPHER YEE WONG (McGill University), LIXIAO ZHU (McGill University), AJUNG MOON (McGill University)

We developed a teaching module designed to introduce high-level AI/robot ethics concepts to K-12 students and beyond in a non-technical manner. This interactive session aims to introduce the teaching module while having the participants experience the teaching module themselves. The module is made publicly available with the goal of having others to host their own roboethics workshops as a teaching activity integrated into other courses. No AI or robotics knowledge is required.

### T9 Harnessing Generative AI

*Future-Ready Education: Highlights from Dawson College's AI Curriculum Toolkit*

JOEL TRUDEAU (Dawson College), ROBERT STEPHENS (Dawson College)

This presentation highlights insights from Dawson College's pioneering project to integrate an AI curriculum across CÉGEP programs. It focuses on the development of an AI curriculum toolkit designed to bridge the gap to more advanced resources and programs in higher education. Key challenges and recommendations for future-ready strategies from the toolkit are offered as signposts for navigating the complexities of AI education at the college level.

*Using chatbots in a discussion board assignment*

ELIZABETH HIRST (McGill University)

Students in a Public Relations course were challenged to provide an answer to an ethical dilemma, using a chatbot. On the LMS discussion board, they posted three prompts and the bot's responses, followed by their own polished version of the final response. They were graded on effectiveness of prompts, understanding of issues and audience, and quality of the final version. The exercise, worth a total of five points, yielded both expected and unexpected results.



## *Transforming Education in the Age of Generative AI*

MAHA DAOUD (McGill University)

In the last couple of years, technology has evolved rapidly. As educators, we need to adapt and change accordingly. Putting learning into practice makes it fun, increases the involvement from participants and provide them chances to use what they have learned in a more applied manner. It is interesting to apply the experiential learning for students based on generative AI. It is time to change our assessments strategies to leverage generative AI as a learning tool. This talk is about the practitioner experience of including a property of generative AI in the classroom coupled with an experiment of comparing a task performed by students with the same task performed by AI. The collection of student feedback provides for an opportunity to share from a learned experience.

### **T10 Integrating New Technologies**

*Experiential and immersive learning at the Library:  
Navigating opportunities of course-integrated VR*

MELISSA RIVOSECCHI (Concordia University),  
HÉLÈNE BROUSSEAU (Concordia University)

This talk focuses on the implementation of a pilot project making a course-integrated VR work available to 136 students for viewing through Concordia Library. The educational benefits of this experiential and immersive learning opportunity will be discussed, as well as accessibility issues encountered through feedback received from user experience surveys. This talk will highlight the need to consider accessible design for VR service offerings, adapted spaces, and curated VR content when integrated as course material.

*Discord, Modded Minecraft and Pedagogy in the  
Flipped Classroom*

DARREN WERSHLER (Concordia University), BART SIMON  
(Concordia University)

Notoriously, many of the platforms we use for digital pedagogy at the university level are not very good. But are there pedagogical advantages to teaching with ramshackle platforms? Drawing on our SSHRC-funded research into the use of Minecraft and Discord with custom, student-built software to connect and modify them, we argue that ramshackle tools are *\*better\** for teaching because they defeat consumerist expectations; allow for rethinking; and for emergent phenomena to occur.

## *Virtual Reality as a Pedagogical Tool in Science:*

### *Implementation of Educational Games at Dawson College*

ANNIE-HÉLÈNE SAMSON (Dawson College), JEAN-FRANÇOIS BRIÈRE (Dawson College), YANN BROUILLETTE (Dawson College), CHRISTINE MARQUIS (Cégep de Saint-Jérôme), SÉBASTIEN WALL-LACELLE (Cégep de Saint-Jérôme)

Virtual Reality (VR) can offer many advantages in science education. Three different pedagogical VR games were implemented in biology, chemistry, and physics courses at Dawson College. Teachers involved will introduce the games and discuss the benefits as well as the hurdles they observed in the classroom. They will describe the pedagogical scripts and strategies used to integrate the games in a purposeful learning environment. Preliminary students survey results will also be presented.

### **IL4 Interactive Session - Active Learning in STEM**

*Diving into Interactive Learning: Playing Tailored Educational  
Video Games in College Physics and Biology Courses*

NADIM BOUKHIRA (Dawson College), NEERUSHA BAURHOO  
GOKOOL (Université de Montréal)

This session immerses participants in interactive gameplay with tailored educational video games for college-level electricity and magnetism physics courses and general biology courses. Designed with diverse game mechanics, these games aim to captivate and motivate learners. Following gameplay, attendees will partake in scholarly discussions exploring their experiences, integration strategies, and the potential benefits and limitations of these digital tools in fostering student learning and engagement within the sciences.

**Laptops will be available in limited quantity. If able, bring your own laptop. Computer mouse recommended.**

### **T11 Student Well-being, Participation, and Performance**

*Benefits of Improved Self-Efficacy in Recreation Activity  
Leadership Students*

HEATHER MARTIN (Dawson College)

Recreation leaders must be creative and adaptable to lead in today's evolving communities. Thematic reviews of reflections on a video-recorded leadership activity highlighted differences in self-efficacy between being prepared to lead an activity and being prepared as a recreation activity leader. Study variables, including prior experience, self-efficacy and preparedness, influenced both the focus and impact of student learning. Educator use of authentic in-class activities to build preparatory self-efficacy increased self-confidence, reduced anxiety and improved adaptability.

### ***Champlain College Millennium Certificate Program: Technology Supported Pedagogical Expansion***

AMANDA PERRY (Champlain College, Saint-Lambert),  
GABRIEL FLACKS (Champlain College, Saint-Lambert)

The Champlain College Millennium Certificate Program invites interested students to have a positive impact on a critical issue of our time. This program operates outside of the standard academic calendar and involves many faculty mentors and experiential projects. The administration of the program was a challenge until the implementation of an independent platform, powered by Linkr, enabling participants to easily collaborate and share and making facilitation easy for mentors and program administrators.

### ***The Relationship between Chinese Students' Well-being and Mathematics in PISA 2018***

YAJIE SONG (McGill University), YIMEI ZHANG (McGill University), MARIA CUTUMISU (McGill University)

This study investigates how student well-being affects mathematics achievement in Chinese students in the Programme for International Student Assessment (PISA) 2018. This study used the forced-entry multiple linear regression to explore the variance in mathematics achievement. It found that 18% of the variance in mathematics achievement could be explained by the model consisting of well-being indicators. The results could inform the development of student well-being models and provide insights for improving student learning outcomes.

## **T12 From Student-Centered to Program-Driven Approaches**

### ***Enhancing Educational Gaming through Design Sprints: Insights from University Classroom on Collaboration, Cooperation, Growth, and Failure***

GIULIANA CUCINELLI (Concordia University)

This presentation presents 10 important lessons learned when implementing design sprints in an Educational Technology Masters-level course on educational gaming. The results show case examples of collaboration, cooperation, success, failure, and the constraints of time and access to material. Overall, applying a design thinking process to designing and developing educational games holds great promise as a learning experience.

### ***Unlocking the connection between motivation and achievement: enhancing students' engagement with STEM education***

NEIL MACINTOSH (McGill University), ANILA ASGHAR (McGill University)

Canadian science teachers face students with decreased motivation, lower achievement levels and decreased enrolment in post-secondary science programs. They ask themselves: How do I motivate my students to achieve? Using student-centred pedagogies, such as the problem-based learning approach informed by the Self-Determination Theory (SDT), can improve

student motivation by acknowledging students' basic psychological needs of autonomy, competency, and relatedness. This work will highlight effective examples of PBL supported by SDT to improve students' science learning.

### ***Using CourseFlow to (Re)vision Programmes Aligning to Professional Competencies: Benefits and Challenges***

EVA MARY BURES (Bishop's University)

This presentation focuses on using CourseFlow to support collaborative visioning of programmes in alignment with professional competencies. The benefits of the tool will be demonstrated and some challenges discussed. Fifteen faculty members in education are engaging in collaborative curriculum (re)visioning in light of the recent new framework of professional teaching competencies of the MEQ. CourseFlow is supporting us in this process, visioning how our education programmes support the development of professional teaching competencies.

13:15 - 14:30

## **IS7 Interactive Session - Tools for Deeper Learning (bilingual)**

### ***La Triade: un projet interdisciplinaire dans le programme Arts, lettres et communication***

HÉLÈNE ROMPRÉ (Collégial international Sainte-Anne), YVAN TÉTREAU (Collégial international Sainte-Anne), MARC ANDRÉ BARSALOU (Collégial international Sainte-Anne)

La Triade est un projet interdisciplinaire où trois enseignants (de philosophie, de photographie et de communication) ont décidé d'offrir leurs cours en format interdisciplinaire pour les étudiants du programme Arts, lettres et communication. Cette combinaison permettait de sortir du collège une journée par semaine pour offrir un enseignement axé sur la pratique dans divers lieux culturels montréalais. Un objectif de ce projet était de permettre aux étudiants de visiter des expositions artistiques.

### ***Bridging Classroom and Co-Curricular Learning with Arduino***

JOEL TRUDEAU (Dawson College), ANDREW STEWART (Dawson College)

We will share recent outcomes from the Dawson College MakerSPACE initiative, which foregrounds the integration of Arduino-based projects in academic and co-curricular frameworks. The session highlights the development of open-access resources for use in the revised CEGEP Science Program with a special focus on a proposed design for a new Integrative Project course. Participants are invited to engage with projects created by student interns and to conceive of their own potential use cases.

### T13 AI Integration in College Education

*Exploring college students' errors in derivatives to construct an AI-based support system for calculus courses*

JONATHAN MORCOS (Université de Montréal), NEERUSHA BAURHOO GOKOOL (Université de Montréal)

This project's objective is to analyze students' errors in calculus to train and program a calculus tutoring system. First-year CEGEP students' (n=14) errors on derivative tasks were analyzed using Siyepu's (2013) framework. The analysis revealed several errors regarding the application of derivative rules (e.g., power rule and chain rule). With these findings, the AI-based tutoring system will be programmed to analyze students' answers, detect errors and offer strategies to students in problem solving.

*Transparency in AI Integration: Sharing AI-Prompts to Enhance Learning*

BOBBY CONNOLLY (Champlain College Saint-Lambert)

The integration of artificial intelligence (AI) in teaching materials often remains unseen by students. This proposal suggests that educators should share the AI prompts with students to enhance transparency. A survey revealed that 78-85% of students are unaware of AI's role in their course materials. Making the AI interaction process visible to students can significantly benefit their understanding of content origins and encourage critical thinking.

*Learning groups with professionals in a community of practice to apprehend the emergence of AI: A case study of the model at the Réseau REPTIC*

MARCO GUILBAULT (Fédération des cégeps), NATHALIE BASTIEN (Fédération des cégeps)

We delve into the process of establishing and managing learning groups within the Community of Practice (CoP) of Réseau REPTIC, at the Fédération des cégeps. Drawing from a real-world example—our first AI learning group—we explore each of the five steps in the annual cycle. Our discussion encompasses the context that led to the development of this framework, an analysis of its advantages and disadvantages, and an examination of its suitability for various participants.

### T14 Teaching and Learning Strategies (bilingual)

*De la classe inversée à la classe redressée*

RADHI MHIRI (McGill University), FATEN M'HIRI (Université du Québec en Outaouais)

La classe inversée a connu une popularité remarquable mais elle a constitué aussi un mode atypique du processus d'apprentissage traditionnel dont la pérennité n'est pas garantie. Nous présentons un ensemble de recommandations qui feront de ce modèle inversé un choix incontournable et pérenne avec la «Classe Redressée». Ces recommandations renforcent la responsabilité de l'apprenant qui pourra adapter son apprentissage à son rythme mais qui sera aussi accompagné par l'enseignant grâce aux technologies et l'évaluation formative.

*Innovation within ancient tradition: experiments in Latin teaching*

LAUREN KAPLOW (Concordia University)

This presentation describes the result of experimentation with new strategies teaching classical Latin, particularly the surprising negative results of using cheat sheets to address the increasing difficulty students have with memorization. Other methods, including online resources and labour-based grading, demonstrate the utility of new technologies as well as the continuing relevance of old strategies in fields (e.g. Latin, lacking many of the tools available in modern language learning) requiring both memorization and analytical thinking.

*Skill Bridge: Integrating Rich Skills Descriptors (RSD) into Active Learning for Enhanced Employability*

AMINE RAHJ

This proof of concept aims to align active learning with skill-based hiring demands by integrating Rich Skills Descriptors (RSD) into course designs. Educators can enhance learning experiences, facilitate students' market integration, and contribute to Linked Open Data that informs technopedagogical advances. Our approach involves: (1) Creating RSDs from existing syllabi to reflect pedagogy and acquired skills. (2) Adapting pedagogies using industry RSDs. This method bridges education and industry, fostering skill alignment and enhancing students' employability.

## IL5 Interactive Session - Problem-Based Learning

*Using socio-constructivist pedagogical approaches to integrate science and health education: empowering youth to promote their wellbeing through problem-based learning*

ANILA ASGHAR (McGill University), NEIL MACINTOSH (McGill University)

Developing students' understanding of the prevalent health issues that may significantly impact their academic achievement and social development is crucial to empower them to deal with such issues to promote their wellbeing. The problem-based learning approach serves as a useful pedagogy to this end. Drawing on the socio-constructivist concepts, this presentation will share effective examples of PBL activities that will facilitate students' learning and engagement with health issues in onsite and online science learning environments.

## IL6 Interactive Session - Designing for Sustainability

*Integrating principles of environmental and sustainability education into curriculum design*

STEPHANIE LEITE (McGill University), JESSICA LATUS (McGill University)

The United Nations has identified education as key to achieving the 17 Sustainable Development Goals. In response, McGill University launched a Fellows program for instructors, who, paired with students, work collaboratively to infuse their courses with pedagogical strategies that promote sustainability. This interactive session will share resources, curriculum design approaches, and lessons learned from the SEF program. Participants will be equipped with strategies for integrating sustainability into their teaching and learning practices.

## T15 Connecting Theory to Practice

*Using 3D Printing to Foster Self-Directed Learning in Adolescents: Initial Insights from School-Based Research*

HEATHER A. PEARSON (McGill University), ADAM DUBÉ (McGill University)

Adolescents in grades 7-9 and 11 ( $n = 56$ ) at an all-girls private high school participated in a 6-day 3D-printing activity designed to enhance their self-directed learning. Pre-and-post-test questionnaires and a Design Process Notebook, which also served as a scaffold, were used to assess their use of self-directed learning constructs (e.g., metacognitive evaluation, goal setting). A description of the project model and initial insights on the effectiveness of the activity will be discussed.

*Enhancing equity across foundational science courses.*

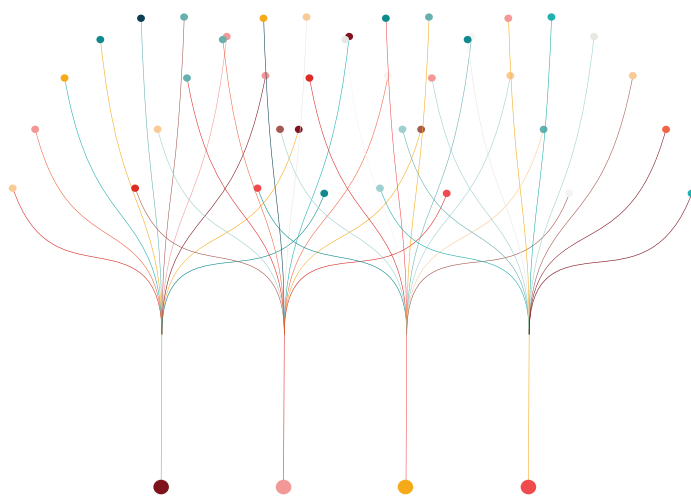
MARTHA MULLALLY (Carleton University), IAIN MCKINNELL (Carleton University)

The Canadian Consortium of Science Equity Scholars is a group dedicated to improving equity in university science courses to better support all students. Our study, which is part of this consortium, aims to evaluate the relationships between student perspectives of course climate in large introductory classes, and affective experience and cognitive outcomes. We will report initial study findings, impact on instructor practices, and describe plans for scale-up across first-year science courses on our campus.

*Analyzing and Addressing Students' Conceptual Understanding of Uncertainty in Experimental Physics Laboratory Courses*

REBECCA BROSEAU (McGill University), MATHEUS AZEVEDO SILVA PESSOA (McGill University), ARMIN YAZDANI (McGill University), JACK SANKEY (McGill University), MARCY SLAPCOFF (McGill University)

Over the last five years, McGill University's Office of Science Education (OSE) has partnered with the Physics Department to form a PER working group to chart the progression of students' conceptual understanding of uncertainties across their undergraduate degrees. Through an analysis of Concise Data Processing Assessment (CDPA) test responses from 2019-2021, the research conducted by this group provides insight into common misconceptions in experimental physics and proposes strategies to address gaps in student understanding.





## IL7 Interactive Session - Exploring AI

*Tinkering with AI with Scratch and the Micro:Bit*

CHRIS COLLEY (LEARN), CHRISTINE TRUESDALE (LEARN),  
LEXI TUCKER (LEARN)

Learn by doing how artificial intelligence really works by using a Micro:bit, Scratch and Machine Learning. This is a hands-on exploration of how we train machines to learn from us humans.

## IL8 Interactive Session - Virtual Reality

*Jumping the Barrier: Using Virtual Reality to Teach Science*

YANN BROUILLETTE (Dawson College), JEAN-FRANÇOIS  
BRIÈRE (Dawson College), ANNIE-HÉLÈNE SAMSON (Dawson  
College), SÉBASTIEN WALL-LACELLE (Cégep Saint-Jérôme),  
CHRISTINE MARQUIS (Cégep Saint-Jérôme)

Using virtual reality (VR) in the classroom, sounds scary... This bilingual interactive session will allow you to experience three VR games designed for the learning of biology, chemistry, and physics. Teachers who implemented these games in the classroom will go over the roadblocks they faced and the advantages they observed. After the session, participants will have first-hand experience with the games and an overview of the steps required to successfully use VR in the classroom.

## S3 SALTISE Fellows Symposium

*Supporting instructors teaching en français in multi-level classrooms*

MAXIM SALONINE (Vanier College), VALERIE BHERER (John  
Abbott College), SELMA HAMDANI (Dawson College), KARINE  
GUAY (Champlain Regional College, Saint Lambert), CATHY  
ROY (Dawson College), BETH ACTON (John Abbott College),  
PHOEBE JACKSON (John Abbott College), NICK PARK (Vanier  
College)

In this Q&A session, participants are invited to discuss best-practice strategies and pedagogical concerns related to the multilingual environment created by the new requirements set by Law 14. In addition to teaching in French themselves, teachers will have to interact with heterogeneous groups of students who have varying levels of French proficiency. This session will allow teachers embarking on this new pedagogical journey to ask questions, share strategies, and reflect on how principles of active learning and Universal Design for Learning can make teaching in French a meaningful experience for both their students and themselves.

## IL9 Interactive Session - Case Studies

*Taking case studies to new heights: Empowering students to create case studies as an assessment tool for enhanced learning*

LAURA PICKELL (Carleton University), KARINA HAMILTON  
(Carleton University), NICOLA LEPPINEN (Carleton University),  
KAYLA RANGLES (Carleton University), NALINI BROADBELT  
(Massachusetts College of Pharmacy and Health Sciences)

In this interactive session, participants will experience an alternative assessment that enhances the practice of teaching science with case studies. Unlike conventional methods, this assessment empowers students to craft their own case studies. Led by students who have completed this project, participants from any science discipline will be taken through the writing process, learning practical strategies for integrating this assessment into their own courses and leaving with a preliminary case ready for classroom implementation.

## IL10 Interactive Session - Classroom Challenges

*Empathy-based Approaches to Dealing with Challenging Moments in the Classroom*

NAJ SUMAR (Concordia University)

This experiential workshop will provide effective techniques for handling challenging classroom moments in a manner that promotes learning, strengthens the classroom community, and fosters inclusivity. We will explore and experience the dynamics of group learning and the use of dialogical tools. By the end of the session, participants will be able to recognize different types of challenging moments and apply practical strategies to navigate them.

## S4 Symposium - Gamifying Science Education

*Gamifying CEGEP Science Education: Exploring Tailored Educational Video Games for Enhanced Classroom Learning in Physics, Biology and Chemistry*

NEERUSHA BAURHOO GOKOOL (Université de Montréal),  
NADIM BOUKHIRA (Dawson College), TANIA PERES (John  
Abbott College)

The objective of this study was to conceptualize and implement three educational video games in biology, chemistry, and physics CEGEP classes to meet the needs of diverse science learners. As such, this presentation will focus on three teachers' process of designing their video games by drawing on key educational theories (e.g., Bruner's theory of instruction). The presentation will also discuss the effects of the video games on CEGEP students' learning experiences and academic achievement.

# Communities of Practice

## ***SALTISE Parea Team***

The Programme d'aide à la recherche sur l'enseignement et l'apprentissage (PAREA) is a funding initiative offered by the Québec Ministry of Higher Education. It awards grants to support research projects aimed at enhancing college education. The program's goal is to expand and strengthen research on teaching and learning within the college network.

PAREA is an important resource for SALTISE because sharing teaching practices alone is insufficient for effective teaching; these practices must be supported by rigorous evidence, preferably from research conducted in local contexts. This ensures that our practice is informed by research, and research remains responsive to practice. PAREA grants provide practitioners with release time to both advance pedagogical research and explore the literature. The concept of bridging research and practice is known in the literature as Researcher-Practitioner Partnerships (RPPs) (e.g., Penuel, et al., 2015). RPPs represent a novel approach to knowledge mobilization, promoting co-design and collaboration between researchers and practitioners, characterized by mediating tools and the development of new practices.

Since at least 2007, members of SALTISE have been particularly successful in securing PAREA grants, thereby building a core of expertise in literature, methodologies, and data analysis within the community.

### ***Some of these grants are:***

2023 to present - Co-conception et collaboration interdisciplinaires : Aider les éducateurs à concrétiser le plein potentiel du nouveau programme de sciences de la nature / Co-design and Interdisciplinary Collaboration: Helping Educators Realize the Full Potential of the New Science Program

2020 to 2023– Étayage des connaissances en contexte d'apprentissage par enquête en sciences: favoriser l'apprentissage de la démarche scientifique/ Building Knowledge in the Context of Inquiry-Based Learning in Science: Fostering the learning of the scientific process 2017 to 2020 – Gestion et régulation du flux d'information en apprentissage actif/ Managing and Regulating the Flow of Information in Active Learning 2014 to 2017 – investigating the pedagogical ecosystems created by innovative learning spaces and the outcomes of the student engagement.

In Saltise, RPPs are often mediated through the Saltise Communities of Practice.

## ***SALTISE S4 - Biology Educators Community of Practice***

The Biology Educators Community of Practice (BECOP) first met in the fall of 2021, with the goal of promoting discussion, a sharing of ideas, and collaboration between post-secondary Biology teachers. Members present at that initial meeting were from Anglophone CÉGEPs on the island of Montreal, but the

community has expanded since then to include members from other Anglophone and Francophone CÉGEPs, from universities, and graduate students with an interest in education. The community is growing, and we're always interested in welcoming new members!

Meetings to date have been reasonably informal, occurring approximately once per month, online through Microsoft Teams. However, there are plans to occasionally organize hybrid meetings during the 2022-2023 academic year, allowing members in the Montreal area to meet in-person while still accommodating members outside of this area. Topics of discussion have included the Science program revision and new Biology competencies, inquiry labs in Biology, assessment strategies, and presentations on innovative pedagogical approaches. We often don't get through all of the planned topics for a meeting... there's just so much to discuss and share!

The online CoP has recently moved to a new home within the sharing platform Linkr. This site is very much still under construction, but you can already find several shared resources, including documents relating to the program revision, novel pedagogical tools, and recordings of all the meetings-to-date. If you are interested in joining us, navigate to the following link and sign up for Linkr:

<https://app.linkrededucation.com/gp-WCPFVHW>

This link will also bring you to the site in the future. You should also send a message to Karl Laroche (larochek@vaniercollege.qc.ca) to indicate your interest, as we're still sorting out the communication channels for the group. Look forward to seeing you at BECoP!

## ***SALTISE S4- Physics Educators Community of Practice***

The SALTISE community of physics educators is composed mostly of physics educators from anglophone colleges, but is open to anyone who cares about physics education. The group meets virtually two or three times per semester. The topics discussed are varied but focus on innovative pedagogical practices. During the last year, a fair portion of the meeting time was devoted to the pre-university Science Program revision. We also touched on the role of labs, awareness of student workload, validity of assessment questions, and included a few sessions of show-and-tell.

Physics educators interested in joining the community of practice can contact Jean-François Brière at [jfbriere@dawsconcollege.qc.ca](mailto:jfbriere@dawsconcollege.qc.ca).

# Communities of Practice (cont.)

## ***SALTISE S4-Chemistry Community of Practice***

The SALTISE S4-Chemistry team started out as a small group of educators and researchers in 2018, mainly from Quebec's anglophone post-secondary institutions. Since then, the team has grown into a community of practice (CoP) and includes members from anglo- and francophone Cégeps, as well as Concordia and McGill University. The community has developed activities, resources and tools to support active learning in various chemistry courses. This includes General Chemistry and Organic Chemistry, with class sizes ranging from 12 to 1200 students! Members have also found support through the CoP when exploring different pedagogical practices (i.e. two-stage exams, flipped classroom approach, at-home experiments) or educational technologies (i.e. Visual Classrooms, Lightboards, myDALITE).

The S4-Chemistry team aims to meet bimonthly during the academic year to exchange ideas, share experiences, and discuss innovative pedagogical practices. More recently, meetings have also included discussions around the Cégep Science program revision, opening up the communication channel between Cégep and university faculty members. Meetings are usually in a hybrid format to allow for in-person and online attendance.

Chemistry educators and researchers interested in joining the SALTISE S4-Chemistry CoP can contact Carmen Leung at [cleung@dawsoncollege.qc.ca](mailto:cleung@dawsoncollege.qc.ca).

## ***SALTISE Educational Developer's Special Interest Group (Ed Dev SIG):***

The SALTISE Educational Developer's Special Interest Group (Ed Dev SIG) was created to provide a forum for exchange among professionals working in pedagogical support roles (Instructional Designer, Curriculum Developer, Educational Counsellor, Educational Technologist, etc.) at higher education institutes across Montreal.

The group meets once each semester via Zoom.

The meetings are an opportunity to explore emerging topics in the field, share and solicit peer feedback on projects members are working on, have candid conversations about all aspects of the work, and much more.

This community is also an opportunity to network, build collective knowledge and create some inter-institutional projects. All ideas and suggestions are welcome! For more information, contact [carol.hawthorne@concordia.ca](mailto:carol.hawthorne@concordia.ca).

## ***Dawson Active Learning Community (DALC)***



At Dawson College, faculty members have been progressively embracing Active Learning as an evidence-based instructional strategy. To bolster this trend,

the college has supported the establishment of Active Learning classrooms and the enhancement of pedagogical resources and expertise through various faculty and researcher-led initiatives. Over the past decade, the Dawson Active Learning Community (DALC) has evolved, adapted, and expanded into a multifaceted community. It has overseen the development of 11 (12) Active Learning classrooms and contributed to half a dozen specialized learning spaces and labs. The community's greatest strength lies in the selfless dedication and camaraderie brought by the 100 teachers who are part of the community.

## ***McGill ELATE***

### ***Enhancing Learning and Teaching in Engineering (ELATE)***



ELATE

Enhancing Learning and Teaching in Engineering    Amélioration de l'apprentissage et de l'enseignement en génie

Enhancing Learning and Teaching in Engineering (ELATE) is an initiative that aims to foster learning communities comprising undergraduate and graduate students, teaching assistants, and academic and non-academic staff with the objective of enhancing and promoting excellence in the learning and teaching experience in the Faculty of Engineering at McGill. ELATE hosts Coffee and Chat gatherings where professors and instructors get together and share their experiences with different teaching and assessment strategies, hosts an annual teaching and learning conference, runs biannual TA orientations, provides pedagogical support for professors and instructors through workshops, consultations, and funding, and supports student learning initiatives. Topics discussed at recent ELATE events have included Generative AI and teaching, fostering students' entrepreneurial mindset, assessment practices, accessibility and inclusion, and enhancing student engagement. If you would like to know more about ELATE, please visit <https://www.mcgill.ca/engineering/initiatives/elate> or write to us at [elate.engineering@mcgill.ca](mailto:elate.engineering@mcgill.ca).

# Intercollegiate Ped Days (IPD)



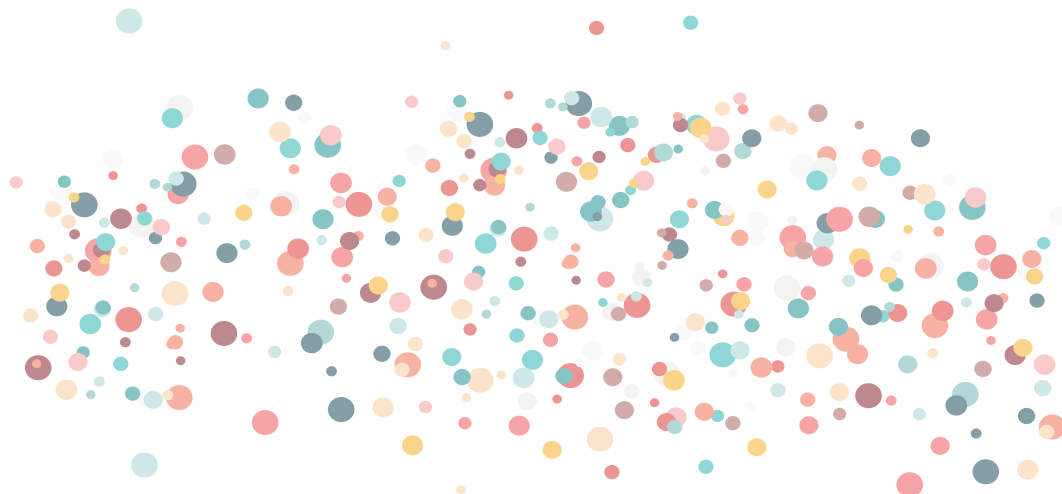
Intercollegiate Ped Days (IPD) is a collective effort of a consortium of English-language CEGEPs to promote sharing between college educators, foster intercollegiate professional development, strengthen collaboration amongst participating colleges, and further relationships with the wider CEGEP community.

IPD provides a virtual space for sharing resources and knowledge by encouraging pedagogical best practices, addressing the collective needs of our faculties and staff, and advancing communities of practice. The vision for this space is to serve as a platform for:

- **Building relationships:** A site for teachers and staff to connect with their intercollegiate colleagues.
- **Promoting collaboration:** An avenue to initiate intercollegiate partnerships focusing on pedagogy and student success.
- **Professional development:** A space to facilitate the exchange of open and accessible educational resources.

IPD also hosts an annual event every January, offering a multitude of sessions with over 500 participants from across the CEGEP network. The intercollegiate pedagogical days occur online over two days, with a renewed theme aligning with the organizing colleges' strategic plan goals and student success action plans.

Considering the grassroots nature of IPD, it will continue to evolve based on the needs of its community members.





# Words of Appreciation | Mots d'appréciation



The 13<sup>th</sup> ANNUAL SALTISE CONFERENCE COMMITTEE wishes to thank the **Entente Canada-Québec pour l'enseignement dans la langue de la minorité et des langues secondes (ECQ)**, managed by Ministère de l'Éducation et de l'Enseignement supérieur, for their funding of the SALTISE service. This support is essential to keeping the SALTISE annual conference a FREE event. We appreciate the confidence they have shown our vision of bringing together the many institutions from both levels of post-secondary education in Quebec. Thank you!

Le COMITÉ D'ORGANISATION DU 13<sup>e</sup> COLLOQUE ANNUEL SALTISE tient à remercier l'**Entente Canada-Québec relative à l'enseignement dans la langue de la minorité et à l'enseignement des langues secondes (ECQ)**, gérée par le ministère de l'Éducation et de l'Enseignement supérieur, pour son financement du service SALTISE. Ce soutien est essentiel pour que le colloque annuel SALTISE demeure un événement GRATUIT. Nous apprécions la confiance qu'ils accordent à notre vision de rassembler les nombreux établissements des deux niveaux d'enseignement postsecondaire au Québec. Merci !



We thank our host, Centre for Teaching and Learning (CTL), Concordia University, for their warm welcome and commitment to ensuring the success of the SALTISE conference. We express our deep appreciation to the Director of CTL, John-Paul Foxe, and his staff, especially Emilie Albert-Toth, as well as members of the Concordia Hospitality service who have played a role in making this event a success.

Nous tenons à exprimer nos sincères remerciements au "Center for Teaching and Learning" (CTL), de l'université Concordia, pour son accueil chaleureux et son engagement déterminant dans le succès du colloque SALTISE. Nous sommes également profondément reconnaissants envers John Paul Foxe, directeur du CTL, ainsi qu'à son équipe, en particulier Emilie Albert-Toth, et les membres de "Concordia Hospitality" pour leur contribution essentielle à la réussite de cet événement.

SALTISE thanks the following for their generous financial support of the conference.  
SALTISE remercie les suivantes pour leur généreux soutien financier à la conférence.





## SALTISE 2024

acknowledges the support of its network partners and looks forward to future collaborations.

## SALTISE 2024

reconnait le soutien de ses partenaires de réseau et anticipe avec enthousiasme de futures collaborations.

### Ministry of Education Networks



### Research Networks



### Institutional / Departmental Partners



### College-level Partners

