# OCTE Annual Conference Agenda
## OCTE  Agenda Conférence annuelle

**May 11th – 13th, 2017**

**Du 11 au 13 mai 2017**

Hilton Meadowvale, Mississauga, Ontario

# AGENDA

**OCTE Conference | May 11th - 13th, 2017**
Hilton Meadowvale, Mississauga ON

## THURSDAY MAY 11, 2017

| Time | Agenda Item | Location |
|---|---|---|
| 9:00am to 12:00pm | **OCTE Board Leads Meeting  (Coffee 8:30am, 11:30am lunch provided for Board Leads)** | Britannia Room |
| 11:00am to 9:00pm | **Conference Registration Open** | |
| 11:30am to 1:00pm | **Lunch (not provided)** | Graydon Ballroom |

### Session A          1:00pm to 3:30pm

**Session A  Renewed Math and Technological Education - English & French Plenary**

The Ministry of Education's Renewed Math Strategy (RMS) is designed to ensure Ontario schools are supporting all students with the acquisition of mathematical knowledge and skills that are necessary in order for students to live and work in a rapidly changing, highly skilled and technology- driven economy. This plenary session will: 1) Provide a high level overview of the Renewed Math Strategy 2) Broadly discuss how key mathematical concepts can be taught through the use of technology education, 3) Assemble a panel of speakers that includes: industry representatives who will identify the current and future need for math competencies in order to compete in a global, knowledge-based economy; Secondary and post-secondary educators who will showcase an array of teaching strategies / pedagogical models that integrate mathematics and technology; Students who will provide personal testimonials that speak to the advantages of using applied /project-based learning environments to reinforce mathematical concepts and theories. Table and large group discussions will follow allowing delegates to explore and identify how technological education teachers and the curriculum they deliver can be further leveraged to support the key objectives of the RMS.

*Catherine Montreuil, Assistant Deputy Minister and Chief Student Achievement Officer,  Ministry of Education*

**Graydon Ballroom**
*Maximum capacity 500*

### Hotel Registration and Travel Time

### Session B          5:00pm to 6:00pm

**Session B -1  Leadership Presentation - Preparing to Lead**

This multimedia presentation will provide an overview of current leadership frameworks and discuss the importance of Emotional Intelligence (E.I.) when serving as a leader. This session will also hope to raise delegate awareness of leadership and competency practices, identify leadership development tools and identify suggested leadership-related resources. An overview of the Ontario Leadership Framework (OLF) will be presented and how the OLF can be used as a "blueprint" to guide leadership practices for current, new or aspiring leaders will also be discussed.

*Rob DeRubeis, Education Officer, Ministry of Education*

**Greenwich Room**
*Maximum capacity 40*
English

**Session B - 2  Long Range Planning for Technological Education Programs**

In this session we will outline the critical elements of school and board level plans required to support and revitalize Technological Education programs. The goal of this workshop is to enable you to begin or continue to work toward developing school and board level plans to support the enhancement of Technological Education programs in your board and across Ontario. A variety of provincial initiatives such as the Specialist High Skills Majors and Student Injury Prevention Initiative along with other required board planning processes will be shared to help outline the key components of your plans. Attendees will be provided with examples of success stories of how multi-year planning has resulted in enhanced opportunities for Technological Education programs in a variety of school boards. Attendees will also be provided with templates to assist in their planning.

*Aldo Cianfrini and Robert Emptage*

**Britannia Room**
*Maximum capacity 40*
English

**Session B - 3  Marketing Technological Education Programs**

Communication with students, parents and business in the community is changing rapidly. This workshop looks at ways that traditional print, social media, email, and web can work in conjunction to keep stakeholders informed. We will look at what other boards are doing to market their programs and share idea's to ensure that students, parents and community partners are all excited about your classroom and what is being taught. Specifics of this program will revolve around awareness, messaging and tools available.

*Clarke Perry, Blueprint Agencies and Kevin Graham, DSBN*

**South Studio 2**
*Maximum capacity 40*
English

**Session B - 4  Former la main-d'œuvre de demain / Le cadre de leadership de l'Ontario**

Cette présentation donne un aperçu de certains thèmes et recommandations du rapport Former la main-d'œuvre de demain : une responsabilité partagée. On parle comment le rapport peut influencer les programmes de technologie dans les écoles.  Nous avons besoin d'un leadership robuste de la part des gestionnaires au niveau de l'école et du conseil scolaire. En ajoutant le  cadre de leadership de l'Ontario, les participants à la session pourront obtenir des pistes pour une planification à court et à long terme, tant pour le programme de technologie, autant pour parler des meilleures pratiques de développement des compétences identifiées dans le cadre.  Dans les recommandations du rapport, on cible le besoin de leaders pédagogiques habiles et compétents.  Le cadre de leadership est une toile de fond pour guider les pratiques de leadership pour les leaders d'aujourd'hui, de demain et de ceux qui aspirent à un poste de leadership/gestionnaire.   *Nancy Gilbert, Ministère d'Éducation*

**South Studio 3**
*Maximum capacity 40*
French

| Time | Agenda Item | Location |
|---|---|---|

**Session B - 5  Earning a University Degree for Technological Education Teachers**

A provincial team of colleges, universities and OCTE are working together to develop academic and skill enhancement opportunities for Technological Education teachers. We have developed online degree completion pathways for those with an apprenticeship or diploma background. These are designed to give recognition for your academic, work, and teaching experience to help you earn your degree. Colleges are planning to offer AQ and ABQ courses in a college setting to enhance relationships between the secondary and college sectors. The focus of this workshop will be to provide an update of the project activities and discuss how best to support OCTE and its membership to navigate these exciting opportunities.

*Tracy Gedies, Fanshawe College and Tony Dipetta, Brock University*

South Studio 1
*Maximum capacity*
English

| Time | Agenda Item | Location |
|---|---|---|
| 6:30pm  to 7:15pm | Meet and Greet Hospitality Room for College Teachers to meet OCTE Executive | Compass Room |
| 7:00pm to 10:00pm | Vendor Display and Networking | |
| 7:00pm | Hazel McCallion Meet the Vendors Wine and Cheese | |

## FRIDAY MAY 12, 2017

| Time | Agenda Item | Location |
|---|---|---|
| 7:00am to 9:00am | **Conference Registration open** | |
| 7:00am to 9:00am | **Breakfast and Conference Opening** | |
| | **Session C          9:00am to 10:10am** | |

**Session C - 1  Using Ministry Documents to Strengthen Technological Education**

Learn how the School Effectiveness Framework and Achieving Excellence, strengthen a Technological Education program and prepare educators to lead into the 21st century.

*Mike Sewell, Limestone District School Board, retired*

Club Studio 2
*Maximum capacity 40*
English

**Session C - 2  Building SHSM Programs in the area of Technological Education**

This Ministry of Education session provides an overview of enrolment and student achievement data for technological education related SHSM programs. GIS mapping technology will visually demonstrate where SHSM programs based in technological education exist across school boards, and attendees will be able to utilize their local technological education data to make informed decisions regarding SHSM program opportunities.

*Ministry SHSM Team*

Patio Studio #1
*Maximum capacity 40*
English

**Session C - 3  Increasing Board and Community support in the delivery of Technological Education and Science and Technology programs**

This session follows up on a discussion at the OCTE Leadership Conference in May 2016 where it was identified that many teachers struggle to access the resources required to support the delivery of their Technological Education programs. Participants will learn about the various processes by which boards and schools fund the delivery of programs. In addition, participants will share their innovative methods to ensure students have access to the required learning resources for engaging practical projects and activities.

*Aldo Cianfrini and Bob Emptage*

North Studio #3
*Maximum capacity 40*
English

**Session C - 4  Building the Workforce of Tomorrow:**

This presentation will provide a high level overview of some of the themes and recommendations found in the report "Building the Workforce of Tomorrow" brought forward by the Premier's Highly Skilled Workforce Expert Panel. The presentation will also explore what possible opportunities this report could have on technology education programs and the need for strong leadership at the school and system level in order to usher in several of the recommendations made in the report. Delegates will be asked to consider how the main findings of this report can be integrated into short and long range plans for technological education at the school and system level.  This workshop will also provide an overview of the Teacher Learning and Leadership Program (TLLP), an annual project-based professional learning opportunity for experienced classroom teachers and/or aspiring/current school leaders.  The program funds proposals from classroom teachers seeking peer leadership roles in curriculum, instructional practice or supporting other teachers. The program has three goals: Create and support opportunities for teacher professional learning, foster teacher / school leadership; and facilitate the sharing of exemplary practices with others for the broader benefit of Ontario's students.  Funding is available each year.

*Robert DeRubeis, Nick Zacharopoulos, Ministry of Education*

North Studio #1
*Maximum capacity 40*
English

| Time | Agenda Item | Location |
|------|-------------|----------|
| | **Session C**    9:00am to 10:10am | |

### Session C - 5  Les nouveautés de la MHS et l'éducation coopérative/PAJO

Cet atelier, animé par le ministère de l'Éducation, a pour but de partager les données provinciales, les nouveautés ainsi que les tendances relatives au programme de la MHS et l'éducation coopérative/PAJO.  Nous allons prévoir une période de discussion et de partage.

*Francine Bouchard et Lise Paulin, Ministère d'Éducation*

**Location:** Compass Room
*Maximum capacity 35*
French

### Session C - 6  "Ontario Agriculture – Technology's Playground"

As the province's largest economic sector, the agriculture and food industry also has one of the fastest rates of technology adoption. An exciting opportunity Given the world's hunger for Ontario's agricultural products, including both food and bio-products this industry is poised for significant growth. Our primary producers and processing businesses within the agricultural industry are rising to unique challenges of increasing labour costs, shortage of skilled workers, improving operational efficiency, optimizing production inputs and output for maximum profitability while producing agricultural products in an environmentally sustainable system with technology. As the average farm business size continues to grow, our producers have been rapidly integrating technologies into their operations including smart phones, robotics, GPS, environmental sensors, biometric tags, drones and autonomous field equipment to name just a few. The future of Ontario Agriculture is extremely exciting and technology will play an integral role in ensuring our industry remains competitive and achieves the growth targets within a global marketplace. The tech-related career opportunities for our youth within the agriculture industry are beyond belief.

*Eric Richter, Agronomic Sales Representative, Syngenta Canada*

**Location:** Club Studio #2
Maximum capacity 40
English

### Session C - 7  Geomatics and Land Surveying: An opportunity for Technological Education and SHSM programs

In this workshop participants will receive an introduction to the field of Geomatics and Land surveying with an emphasis on emerging labour market trends and future opportunities for students. This session will also demonstrate the real world application of mathematics and will expose participants to basic field equipment and how this industry can be leveraged to support experiential learning and community connections. The Association of Ontario Land surveyors will be sharing resources they have developed which align with Technological Education Curriculum for Construction Technology and Technological Design as well as SHSM certifications for the Construction sector.

*AOLS and Chris Tucker, YRDSB*

**Location:** Garden Studio 1
*Maximum capacity 40*
Language

### Session C - 9  Digital Learning For Construction Technology

D2L (Brightspace) is a learning management system available to all teachers in the Province of Ontario. Digital Learning For Construction Technology, Upload course content (original, board and Ministry developed), Conduct safety quizzes, Collect Assignments, Communicate with Students, Learn how to build a course and reuse and refine it each time you teach it.

*Reg Ellis, BHNCDSB*

**Location:** Garden Studio #3
*Maximum capacity 40*
English

### Session C - 10  Connecting Elementary and Secondary Curriculums

Both elementary and secondary teachers have a hard time making the connections between the Science & Technology (S&T) and Secondary curriculums due to awareness or lack of time to name a couple. This "hands on" workshop is designed to look at both the Elementary and Secondary curriculum documents and find ways to connect student engagement from the elementary panel to the secondary technological education. An in-depth look at aligning expectations will be reviewed as well as determining ways to host some S&T workshops between both panels.

*Kevin Shea, OCDSB*

**Location:** Patio Studio #2
*Maximum capacity 40*
English

### Session C - 11  New Age Manufacturing- Mastercam/OCTOPUZ

An in-depth look at emerging industry trends comparing classic machining tool pathing with   new dynamic tool pathing, review of solids creation, helpful programming tips and an introduction to the innovative robotic software OCTOPUZ.

*Kevin Allan, In-House Solutions*

**Location:** Greenwich Room
*Maximum capacity 40*
English

### Session C - 12  Identifix - Online Tools – Free!

Identifix – Find Fixer Faster. Receive training on using this popular industry tool. Troubleshoot, diagnose, repair, import and domestic vehicles. OEM wiring diagram and OEM repair manuals – online and free for transportation teachers attending this session. Bring your laptop, phone, tablet.

*Clark Chernak, BHWCDSB*

**Location:** South Studio #1
*Maximum capacity 40*
English

| | **Session C**    9:00am to 10:10am | |
|------|-------------|----------|

### Session C - 13  Colour, Cut and Style: Part 1 double session

Debbie Web will lead you through a session that will focus on colour placement, current trend haircuts and style.

*Farouk Systems, Hair Styling and Aesthetics*

**Location:** Britannia Room
*Maximum capacity 40*
English

| Time | Agenda Item | Location |
|------|-------------|----------|
| **Session C - 14  HOAE – Helping Students Prepare in Health Care**<br><br>Colleges throughout Ontario are using HOAE as a component of their admissions requirements. As college students prepare their applications, they also need to prepare for this. How can health care teachers assist their students in succeeding with HOAE?<br><br>*Lilla Richardson, HDSB* | | South Studio #3<br>*Maximum capacity 40*<br>English |
| **Session C - 15  Construction Technology - Virtual Reality for Construction Technology**<br><br>Virtual reality training and augmented training systems are quickly being recognized by educators across Canada as a highly effective, motivating and engaging instructional resource in all areas of technology education. Progressive Educational Systems is proud to be the exclusive provider of all the leading VR producers in Canada. In this session we will be demonstrating solutions for VR Software Residential Construction, CNC Router/Laser Engraver/3D Printer Combo Machine and VR for Equipment Operatorlike Backhoe, Bull Dozer, Wheel Loader, Excavator and Dump Truck. Following the session participants are welcome to wander around the virtual construction site and check their skills at framing, window installation or other residential construction tasks. As well as test their abilities on a VR Dozer!!<br><br>*Paul Riddell, Progressive Educational Systems* | | Club Studio #3<br>Maximum capacity 40<br>English |
| **Session C - 16  Hospitality Technology and the Ontario Skills Competition in Toronto**<br><br>The Ontario Skills Competition has been a strong presence for many years. How can we help to keep it relevant and up to date with today's' industry standards, The Ontario Skills competition has moved to Toronto Congress Centre in 2017. If you are interested in joining us for a constructive conversation and how we, as hospitality educators, can provide positive feedback with regard to the success of the inclusiveness of all our students, please attend this session.<br><br>*Karen Linehan-Caulfield, BHNCDSB* | | South Studio #2<br>*Maximum capacity 40*<br>English |
| 10:10am to 10:50 am | **Coffee Break in Hazel MacCallion Room** | |
| **Session D**         10:50am to 12:00pm | | |
| **Session D - 1  Using Ministry Documents to Strengthen Technological Education**<br><br>Learn how the School Effectiveness Framework and Achieving Excellence, strengthen a Technological Education program and prepare educators to lead into the 21st century.<br><br>*Mike Sewell, Limestone District School Board, retired* | | Club Studio 2<br>*Maximum capacity 40*<br>English |
| **Session D - 2  Building SHSM Programs in the area of Technological Education**<br><br>This Ministry of Education session provides an overview of enrolment and student achievement data for technological education related SHSM programs. GIS mapping technology will visually demonstrate where SHSM programs based in technological education exist across school boards, and attendees will be able to utilize their local technological education data to make informed decisions regarding SHSM program opportunities.<br><br>*Ministry SHSM Team* | | Patio Studio #1<br>*Maximum capacity 40*<br>English |
| **Session D - 3  Increasing Board and Community support in the delivery of Technological Education and Science and Technology programs**<br><br>This session follows up on a discussion at the OCTE Leadership Conference in May 16 where it was identified that many teachers struggle to access the resources required to support the delivery of their Technological Education programs. Participants will learn about the various processes by which boards and schools fund the delivery of programs. In addition, participants will share their innovative methods to ensure students have access to the required learning resources for engaging practical projects and activities.<br><br>*Aldo Cianfrini and Bob Emptage* | | North Studio #3<br>*Maximum capacity 40*<br>English |
| **Session D**         10:50am to 12:00pm | | |

| Time | Agenda Item | Location |
|---|---|---|
| | **Session D - 4  Building the Workforce of Tomorrow:** <br><br>This presentation will provide a high level overview of some of the themes and recommendations found in the report "Building the Workforce of Tomorrow" brought forward by the Premier's Highly Skilled Workforce Expert Panel. The presentation will also explore what possible opportunities this report could have on technology education programs and the need for strong leadership at the school and system level in order to usher in several of the recommendations made in the report. Delegates will be asked to consider how the main findings of this report can be integrated into short and long range plans for technological education at the school and system level.  This workshop will also provide an overview of the Teacher Learning and Leadership Program (TLLP), an annual project-based professional learning opportunity for experienced classroom teachers and/or aspiring/current school leaders.  The program funds proposals from classroom teachers seeking peer leadership roles in curriculum, instructional practice or supporting other teachers. The program has three goals: Create and support opportunities for teacher professional learning, foster teacher / school leadership; and facilitate the sharing of exemplary practices with others for the broader benefit of Ontario's students.  Funding is available each year. <br><br>*Rob DeRubeis, Nick Zacharopoulos, Ministry of Education* | North Studio #1 <br> *Maximum capacity 40* <br> English |
| | **Session D - 5  La robotique avec MBOT en utilisant le langage Scratch** <br><br>Une démonstration des robots MBOT qui sont très abordables. Cet atelier démontrera comment il est facile de programmer avec le logiciel MBlock en utilisant le langage Scratch. Les robots MBot conçus à partir d'une plateforme Arduino peuvent être contrôlés et programmer à l'aide d'ordinateur portable, tablette et/ou téléphone. Ses robots et logiciels peuvent être utilisés au palier élémentaire et secondaire. <br><br>*Mario Blouin,  CSCDGR* | Compass Room <br> *Maximum capacity 35* <br> French |
| | **Session D - 6  "Ontario Agriculture – Technology's Playground"** <br><br>As the province's largest economic sector, the agriculture and food industry also has one of the fastest rates of technology adoption. An exciting opportunity Given the world's hunger for Ontario's agricultural products, including both food and bio-products this industry is poised for significant growth. Our primary producers and processing businesses within the agricultural industry are rising to unique challenges of increasing labour costs, shortage of skilled workers, improving operational efficiency, optimizing production inputs and output for maximum profitability while producing agricultural products in an environmentally sustainable system with technology. As the average farm business size continues to grow, our producers have been rapidly integrating technologies into their operations including smart phones, robotics, GPS, environmental sensors, biometric tags, drones and autonomous field equipment to name just a few. The future of Ontario Agriculture is extremely exciting and technology will play an integral role in ensuring our industry remains competitive and achieves the growth targets within a global marketplace. The tech-related career opportunities for our youth within the agriculture industry are beyond belief. <br><br>*Eric Richter, Agronomic Sales Representative, Syngenta Canada* | Club Studio #2 <br> *Maximum capacity 40* <br> English |
| | **Session D - 7  Geomatics and Land Surveying: An opportunity for Technological Education and SHSM programs** <br><br>In this workshop participants will receive an introduction to the field of Geomatics and Land surveying with an emphasis on emerging labour market trends and future opportunities for students. This session will also demonstrate the real world application of mathematics and will expose participants to basic field equipment and how this industry can be leveraged to support experiential learning and community connections. The Association of Ontario Land surveyors will be sharing resources they have developed which align with Technological Education Curriculum for Construction Technology and Technological Design as well as SHSM certifications for the Construction sector. <br><br>*AOLS and Chris Tucker, YRDSB* | Garden Studio 1 <br> 40 <br> English |
| | **Session D - 8  Communications Technology - Animation Open Toonz** <br><br>Participants will explore animation options that support the Ministry of Education outcomes. Cross panel options will also be explored. <br><br>*Studica* | Club Studio #1 <br> *Maximum capacity 40* <br> English |
| | **Session D - 9  Digital Learning For Construction Technology** <br><br>D2L (Brightspace) is a learning management system available to all teachers in the Province of Ontario. Digital Learning For Construction Technology, Upload course content (original, board and Ministry developed), Conduct safety quizzes, Collect Assignments, Communicate with Students, Learn how to build a course and reuse and refine it each time you teach it. <br><br>*Reg Ellis, BHNCDSB* | Garden Studio #3 <br> *Maximum capacity 40* <br> English |

| Time | Agenda Item | Location |
|------|-------------|----------|
| | **Session D**　　10:50am to 12:00pm | |

### Session D - 10  Connecting Elementary and Secondary Curriculums

Both elementary and secondary teachers have a hard time making the connections between the Science & Technology (S&T) and Secondary curriculums due to awareness or lack of time to name a couple. This "hands on" workshop is designed to look at both the Elementary and Secondary curriculum documents and find ways to connect student engagement from the elementary panel to the secondary technological education. An in-depth look at aligning expectations will be reviewed as well as determining ways to host some S&T workshops between both panels.

*Kevin Shea, OCDSB*

Patio Studio #2
*Maximum capacity 40*
English

### Session D - 11  ELECTUDE: Engaging Interactive elearning for Transportation Technology Student Success

ElectudeTM is the most innovative e-learning platform for students in transportation technology programs and the most effective in helping them gain the knowledge they need to succeed.  ElectudeTM has proven more effective than books, PDF and videos.  Conducted in conjunction with teachers currently using ElectudeTM, this workshop will introduce teachers to engaging simulation based learning in a format encouraging dialog and audience participation. With ElectudeTM, students have access to curriculum that covers the technology from bumper to bumper, an engaging means of learning at their pace, prepare for lectures, and access via web from their laptop, tablet, or phone.

Teachers will also see how easy it is to provide courses and modules to groups of students, how student data can be easily accessed in real-time to quickly assess student performance and progress. Teachers will learn on how easy it is to make their own course, lessons, certificates, and material, and publish them.

Come and see why an ever growing number of Ontario schools and school boards are adopting ElectudeTM

Greenwich Room
*Maximum capacity 45*
English

### Session D - 12  Introduction, setup and use of the DSO (Digital Storage Oscilloscope)

The DSO is rapidly becoming an essential tool for automotive systems diagnosis due to the speed of many signals on vehicles today. The DMM (Digital Multi-Meter) can only do so much. This class covers the basic setup and use of a DSO to capture wave forms. Even if you have never had a scope in your hands or classroom this is the class for you. Attendees will have scopes to work with and you will be able to capture wave forms sent by the instructor. Class provides ideas and strategies for teaching DSO in your classroom. A full colour hand out is included.

*Dick Krieger, ConsuLab Educatech*

South Studio #1
*Maximum capacity 40*
English

### Session D - 13  Colour, Cut and Style: Part 2 double session

Debbie Web will lead you through a session that will focus on colour placement, current trend haircuts and style.

*Farouk Systems, Hair Styling and Aesthetics*

Britannia Room
*Maximum capacity 40*
English

### Session D - 15  Integrating Cisco courses into the Computer Technology Curriculum

The computer technology curriculum requires continual revision to keep pace with exponential technological advances. A robust Computer Technology curriculum aligns industry standard certifications and post- secondary programs. Cisco's Networking Academy provides worldwide online training in a variety of IT topics (some providing student certification), that can be seamlessly integrated into Ontario's Secondary Curriculum. This presentation will outline the effective integration of multiple Cisco courses into the grades 10-12 Computer Technology curriculum, based on 10 years delivering these courses to 1200 students. Also included will be a detailed mapping of the Cisco courses to Ontario's curriculum, thereby ensuring Ministry compliance.

*Susan Monachino, HWCDSB*

Club Studio #3
*Maximum capacity 40*
English

### Session D - 16  Fanshawe College Baking Workshop

Baking workshop hosted by Fanshawe College. Hands on demonstration and interactive workshop geared towards senior hospitality. Designed for classroom application.

*Fanshawe College*

South Studio #2
*Maximum capacity 35*
English

| Time | Agenda Item | Location |
|------|-------------|----------|
| 12:00pm to 1:10pm | **Lunch (OCTE Executive Speeches)**<br>**Demetra Saldaris, Director, Teaching Policy and Standards Branch,**<br>**Ministry of Education** | Gradon Ballroom |

| Time | Agenda Item | Location |
|------|-------------|----------|
| | **Session E**      1:20pm to 3:00pm | |

### Session E - 1  Communications Technology Subject Round Table

Have an opportunity to meet with Communication Technology teachers from across the province and discuss issues and hear innovative ideas related to Communications Technology. A facilitator will lead the group through topics which could include; renewed math concepts related to Communications, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area.

North Studio 3
*Maximum capacity 40*
English

### Session E - 2  Computer Technology Subject Round Table

Have an opportunity to meet with Computer Technology teachers from across the province and discuss issues and hear innovative ideas related to Computer Technology. A facilitator will lead the group through topics which could include; renewed math concepts related to Computer Technology, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area.

Patio Studio 1
*Maximum capacity 40*
English

### Session E - 3  Construction Technology Subject Round Table

Have an opportunity to meet with Construction Technology teachers from across the province and discuss issues and hear innovative ideas related to Construction Technology. A facilitator will lead the group through topics which could include; renewed math concepts related to Construction, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area.

Club Studio 2
*Maximum capacity 40*
English

### Session E - 4  Table ronde sur la technologie en français

Prendre l'occasion pour échanger des projets et des idées. Mettre les gens à jour sur les nouveautés au niveau du ministère. Période de questionnement et de réflexion sur la santé des programmes technologiques en province. Mettre en perspective les besoins futurs des Franco-ontariens en technologie au sein de l'organisme OCTE. Profitez de l'occasion pour améliorer le réseau de communication. Présentation sur l'occasion de participer à des activités francophones durant l'année scolaire. Accès et disponibilité des documents de sécurité en français. Un ordinateur sera disponible pour ceux qui ont des ressources à présenter, s.v.p. apporter sur clé usb

Compass Room
*Maximum capacity 30*
French

### Session E - 5  Green Industries Subject Round Table

Have an opportunity to meet with Green Industries teachers from across the province and discuss issues and hear innovative ideas related to Green Industries. A facilitator will lead the group through topics which could include; renewed math concepts related to Green Industries, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area.

South Studio 2
*Maximum capacity 40*
English

### Session E - 6  Hairstyling Subject Round Table

Have an opportunity to meet with Hairstyling teachers from across the province and discuss issues and hear innovative ideas related to Hairstyling. A facilitator will lead the group through topics which could include; renewed math concepts related to Hairstyling, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area.

Britannia Room
*Maximum capacity 40*
English

| Time | Agenda Item | Location |
|------|-------------|----------|
| | **Session E          1:20pm to 3:00pm** | |
| | **Session E - 7  Health Care Technology Subject Round Table** <br><br> Have an opportunity to meet with Health Care teachers from across the province and discuss issues and hear innovative ideas related to Health Care. A facilitator will lead the group through topics which could include; renewed math concepts related to Health Care, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area. | South Studio 1 <br> *Maximum capacity 40* <br> English |
| | **Session E - 8  Hospitality Services Subject Round Table** <br><br> Have an opportunity to meet with Hospitality teachers from across the province and discuss issues and hear innovative ideas related to Hospitality. A facilitator will lead the group through topics which could include; renewed math concepts related to Hospitality, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area. | Club Studio 1 <br> *Maximum capacity 40* <br> English |
| | **Session E - 9  Manufacturing Technology Subject Round Table** <br><br> Have an opportunity to meet with Manufacturing Technology teachers from across the province and discuss issues and hear innovative ideas related to Manufacturing Technology. A facilitator will lead the group through topics which could include; renewed math concepts related to Manufacturing, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area. | South Studio 3 <br> *Maximum capacity 40* <br> English |
| | **Session E - 10  School Administrators Round Table Discussion** <br><br> Have an opportunity to meet with School Administrators and Board Leads from across the province and discuss issues and hear innovative ideas related to Ministry and Board Initiatives related to Technological Education. A facilitator will lead the group through topics which could include; renewed math concepts related to Manufacturing, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area. | North Studio 2 <br> *Maximum capacity* <br> English |
| | **Session E - 11  Technological Design Subject Round Table** <br><br> Have an opportunity to meet with Technological Design teachers from across the province and discuss issues and hear innovative ideas related to Technological Design. A facilitator will lead the group through topics which could include; renewed math concepts related to Technological Design, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area. | Club Studio 3 <br> *Maximum capacity 40* <br> English |
| | **Session E - 12  Transportation Technology Subject Round Table** <br><br> Have an opportunity to meet with Transportation Technology teachers from across the province and discuss issues and hear innovative ideas related to Transportation Technology. A facilitator will lead the group through topics which could include; renewed math concepts related to Transportation, innovative projects, course content, equipment issues, safety practices, new project ideas, marketing ideas, SHSM, Dual Credit and OYAP programs, ICE training, problems and solutions in your subject area and more. Share your ideas and projects that are meaningful, support current technologies and engage students. Be prepared to share all the good things you do and help solve issues in your area. | North Studio 1 <br> *Maximum capacity 40* <br> English |
| 3:00pm to 3:15pm | **Break and Travel to AGM** | |
| 3:15pm to 4:30pm | **OCTE Annual General Meeting - All Members to attend** | Graydon Ballroom |
| 5:30pm to 10:30pm | **Cocktail Reception - Bar open outside Graydon** | Graydon Ballroom |
| 6:30pm to 11:30pm | **OCTE Awards Dinner with Live Entertainment** <br> **(DJ and Hockey game to be shown on large screens after awards/dinner)** | Graydon Ballroom |

## SATURDAY MAY 13, 2017

| Time | Agenda Item | Location |
|------|-------------|----------|
| 7:00am to 9:00am | **Breakfast** | Graydon Ballroom |
| 7:00am to 9:30am | **Conference Registration Open** | |
| **Session F          9:00am to 12:00pm** | | |

### Session F - 1  Programming VEX Robots using ROBOTC

Introduction to Programming VEX Robots using ROBOTC – ROBOTC is a cross-robotics-platform programming language for popular educational robotics systems. ROBOTC is the premiere robotics programming language for educational robotics and competitions. ROBOTC is a C-Based Programming Language with an Easy-to-Use Development Environment. Workshop will cover: basic configuration of ROBOTC, basic programming code,  downloading program to VEX robot, programming the robot to navigate a maze.

*Presenter*

Patio Studio 1
*Maximum capacity20*
English

### Session F - 2  Plug and Drive – Electric Vehicles

"Major cities across the world such as Paris, London and Beijing are choking on smog from gas and diesel transportation to the point that vehicles powered by fossil fuel are starting to be banned from the downtown cores. The world is quickly realizing the way forward in transportation must be with a fuel that does not pollute, cause health issues and is renewable. In Canada over 80% of our electricity is produced with hydro, nuclear and renewables and is distributed into every home and business, up and down every street, coast to coast to coast. Find out how electricity can be the new transportation fuel at this workshop presented by Plug'n Drive. This workshop will start with a presentation on how this electric revolution is starting to benefit society today and what the future will hold for those who make the switch to electric drive. Following a question and answer discussion, participants will participate in a ride'n drive of a selection of electric vehicles from manufacturers such as Chevrolet, BMW, Mitsubishi, and Nissan. All participants will receive a copy of Plug'n Drives handy reference booklet entitled "Electrify Your Ride". Don't miss this exciting opportunity to learn about and drive the electric cars of the future, today."

*Ron Groves, Plug and Drive*

Club Studio 1
*Maximum capacity 30*
English

### Session F - 3  Xeriscaping: Selecting Drought-Tolerant Plants for Landscape Projects

Drought-tolerance is fast becoming an important issue in our society. Creating a generation who understands the issue, it's causes and also it's possible solutions is important for our future. This workshop is for those who wish to incorporate water-saving in their lessons. Participants will learn which plants are drought-tolerant as well as what steps can be taken to reduce irrigation and how to use water more efficiently. Discussions will involve matching plants to soil and exposure, along with creative ways to capture water such as rainwater harvesting, and a discussion of the benefits of xeriscaping. We will touch on the value of native plants and how, with them, xeriscaping can help pollinators and biodiversity."
*Sean James*

Club Studio 2
*Maximum capacity 40*
English

### Session F - 4  Hands On Welding training at the CWB in Milton

The Canadian Welding Association Foundation (CWAF) is pleased to offer a one day training session at the Canadian Welding Bureau (CWB) training facility in Milton Ontario on Saturday, May 13, 2017 from 9AM to 4PM. Lunch will be provided. Topics to be covered include: Introduction to acorn curriculum, resource for use in the classroom, Hands-on shielded metal arc welding (SMAW), Use of inspection tools, Evaluation of weldments, Lunch will be provided session runs 9:00am to 4:00pm.

*Presenter*

CWB Main Office, 8260 Parkhill Dr., Milton ON
*Maximum capacity 15*
English

### Session F - 5  Enriched Teaching and Learning in Healthcare programs through Simulation

Participants will learn about using simulation to support the teaching and learning process in Healthcare programs. Simulation is based on computer software, some using anatomical or physiological models, some involving specialized high- or low-fidelity equipment (e.g. manikins), and some incorporating the use of actors and patients from the community who share their stories and interact with students. This presentation lead by SIM-one (the Ontario Simulation Network) and supported by Emptage and Associates, will help to connect the healthcare simulation community through training, equipment, facilities, resources, and services across the province of Ontario. SIM-one is supported in part by the Ontario Ministry of Health and Long-term Care (MOHLTC) and has the vision is to further position Ontario as the global leader in healthcare simulation.

*Presenter*

Patio Studio 2
*Maximum capacity 40*
Language

| Time | Agenda Item | Location |
|------|-------------|----------|
| 9:45am to 10:30am | **Coffee Break** | North and South Studio Tower |

| Time | Agenda Item | Location |
|------|-------------|----------|
| | Session F          9:00am to 12:00pm | |

### Session F - 6  MOL Construction Safety

The Ministry of Labour Prevention Office and Aldo Cianfrini will outline the intent of the proposed Construction Health And Safety Awareness Training (CHSAT). There are two components to this "still in proposal stage" training – a standard for those who will provide the training, and a standard for the training itself. If CHSAT is brought into force, it may be mandatory for all co-op students, technology students and teachers, and all pre-apprentices.  Due to the possibility that this will be mandatory for some or all workers who perform construction work the Ministry of Labour Prevention Office is also currently investigating potential delivery partners to help build capacity for a large number of workers. Included in this investigation is the possibility of delivering training through high schools, skills training agencies and other agencies that deal with settlement issues for new Ontarians.  We will also be asking for feedback from the attendees on the content of the standards.

*Presenter*

**Location:** Greenwich room
*Maximum capacity40*
Language

### Session F - 7  Using the Ontario Leadership Framework (OLF) to "Re-image" Your Professional CV

Suggested Audience: Elementary & Secondary teachers; division leaders; department heads; board / curriculum / program leads and aspiring leaders. This interactive and "hands-on" workshop will highlight how the Ontario Leadership Framework (OLF) can be used to structure and develop a "re-imaged" version of a professional Curriculum Vitae (CV). A sample CV developed using this process will be shared and delegates will have an opportunity to begin to develop his/her CV using the process discussed. Delegates are asked to bring copy of his/her current CV and a computer notebook/laptop will be required. A copy of the Ontario Leadership Framework will be provided for each participant.

*Robert De Rubeis, Ministry of Education, Jeff Piro, Avon Maitland District School Board*

**Location:** Garden Studio 1
*Maximum capacity 40*
English

### Session F - 8  Introduction to STEM Robotics Certification

Using a combination of mechanical, electrical and software engineering, learn how to design, assemble and program a robot using the PRIZM Arduino™ based robotics controller. In this workshop, you will learn about the robot platform, DC and Servo motors, sensors, and actuators. You will learn how it's all connected to the PRIZM controller and how you can control using the Arduino programming language. This workshop aims to make participants well-equipped with new tools for the Skills Canada Robotic Challenge. Teachers will achieve a certification on the Skills Canada Mobile Robotics Platform. The certification will provide an official and public recognition of your competencies and capabilities to teach, program, and troubleshoot educational robots.

*Presenter*

**Location:** Studica Robotics Hub
7220 Pacific Circle,
Mississauga, ON
*Maximum capacity 20*
English

### Session F - 9  SolidWorks Training

Javelin Technologies is Canada's leading provider of 3D technology solutions and is a preferred SOLIDWORKS Educational Reseller. SOLIDWORKS is used by over 3 million students to gain the skills necessary to achieve the best careers. Whether you are teaching students to create single components or incredibly complex equipment, SOLIDWORKS Education Edition delivers easy-to-use tools to help students turn ideas into higher quality products. During this workshop, Javelin's Technical Solutions Manager; Scott Lidgey will present a live demonstration of some of the key capabilities and solutions included in the release of SOLIDWORKS® Education Edition 2016-2017. These capabilities include; Simulation & Analysis, Electrical Design, Technical Documentation and Advanced Rendering. With this complete package, SOLIDWORKS is easier than ever to teach design, mechatronics, and robotics all in one simple interface.

*Presenter*

**Location:** Club Studio 3
*Maximum capacity 40*
English

### Session F - 10  Nouvelles ressources en Sciences et Technologies

Cette session débutera avec une activité pratique provenant de la nouvelle ressource « Sciences on explore! » Suite à cette activité, les participantes et les participants auront l'occasion de découvrir la nouvelle série « Mission sciences! » pour la 4e, 5e et 6e année. La session terminera avec une discussion ouverte où les participantes et participants pourront partager des idées de besoins à combler pour appuyer leur enseignement des sciences et technologie à l'élémentaire.

*Francis Cronier-Thériault, Ministère d'Éducation*

**Location:** Garden Studio 3
*Maximum capacity*
French

### Session F - 11  Hairstyling: BVP Curl Patterns

We're hairstylists, designers and innovators passionate about creating beauty with a purpose. We have a unique tool that allows you to provide clients with beautiful bouncy curls and various patterns. These patterns will be taught to allow you to provide future clients with a value added service. To compliment this, we have designed products that put luxury within reach. With Beauty &Pin-ups you are free to create, experiment and bring to life your own individual style.

*Beauty and Pin-Ups, Heather Roetman*

**Location:** Britannia
*Maximum capacity 35*
English

| 11:45am to 1:00pm | **Lunch** | Graydon Ballroom |

# AGENDA

**OCTE Elementary Day | May 13th, 2017**
Hilton, Mississauga, Meadowvale

## SATURDAY MAY 13, 2017

| Time | Agenda Item | Location |
|------|-------------|----------|
| 7:00am to 9:00am | **Registration** | |
| 7:30am to 9:00am | **Breakfast** | Graydon Ballroom |

### Session 1        9:00am to 10:15am

**Session 1A  Primary Session Group:  Inquiry Through Technology 1**

Participants will learn how to use technology to bring inquiry to life in their primary classrooms. Safety, technology techniques, and STEM connections will be the focus of this hands-on workshop with a highlight on activities that can be used immediately with students. Participants will use storybooks to launch the inquiry-based learning with building opportunities that can easily be connected to their curriculum areas in meaningful ways that enhance student engagement.

*Sue Philip, HDSB and Kerry Langer, PVNCCDSB*

South Studio #1
*Max Number 24*
English

**Session 1B  Junior Session Group Beginning Builds-Introductory Tech. Skills That Support Inquiry Based Learning in Grades 4-6**

Participants will complete hands-on builds that address basic tool use and introductory making skills. Attendees will have the opportunity to work collaboratively with other teachers as they continue learning how to build technology and inquiry into their classrooms. Topics will include safety, classroom management, efficient use of materials & equipment, assessment and evaluation, resources and planning technological inquiry units.

*Darren Foy, RDSB*

South Studio #2
*Max Number 24*
English

**Session 1C  Intermediate Session Group The Basics of Building**

Participants will safely learn how to use technology to bring inquiry to life in their intermediate classrooms. Safety, technological problem-solving, technology techniques and STEM connections will be the focus in this hands-on workshop with a highlight on skill builders that can be used immediately with students.

*Ingrid Munson HDSB*

South Studio #3
*Max Number 24*
English

**Session 1D  Primary Session Mentor Group Tinker Building Primary**

Participants will have a discussion surrounding leadership and mentorship and how to support innovation in Science and Technology education. Participants will have an opportunity to explore the use of tinkering to jump start the inquiry process in their classroom. Ideas on how to evolve those basic projects into more in-depth projects using hand tools will be the primary focus

*Greg Burke, Paula Walker, OCDSB, Kidder*

North Studio #1
*Max Number 24*
English

**Session 1E  Junior Session Group (mentors) Shuffle Bug Boogie: Understanding Matter and Energy: Electricity and Electrical Devices.**

Tinkering with variables will be strongly encouraged in their hands-on investigation. Using a minimum amount of materials, workshop participants will construct a simple circuit, then design, build and test a simple vibrobot that transforms electrical energy into movement. Curriculum connections and extensions will be identified.

*Ian Darling, DSBN*

North Studio #2
*Max Number 24*
English

**Session 1F  Intermediate Session Mentor Group: Explore Design Thinking with the MakerMobile! Introduction to 3-d Printing**

Come explore how 3D printing fits into the design model. Learn about this great new technology, how to design in 3D and use it! See how uOttawa Makermobile could support your classroom by providing workshops, materials and creativity! See how teachers across Ottawa are using these technologies to create multidisciplinary challenges that support the art, math and history curriculums in hands on dynamic ways. The uOttawa Maker Mobile is a Makerspace on wheels. Using the latest technologies, it travels to schools, libraries and community centers to deliver fun, hands-on workshops to encourage creativity, problem solving and interest in technology! We offer workshops mostly in the Ottawa Gatineau region for K-12 including 3D printing, laser cutting Arduino microcontrollers, robotics , programming, electricity and green engineering

*uOttawa Maker Mobile Team*

North Studio #3
*Max Number 24*
English

| Time | Agenda Item | Location |
|------|-------------|----------|
| **Session 1G  Nouvelles ressources en Sciences et Technologies**<br><br>Cette session débutera avec une activité pratique provenant de la nouvelle ressource « Sciences on explore! » Suite à cette activité, les participantes et les participants auront l'occasion de découvrir la nouvelle série « Mission sciences! » pour la 4e, 5e et 6e année. La session terminera avec une discussion ouverte où les participants et participants pourront partager des idées de besoins à combler pour appuyer leur enseignement des sciences et technologie à l'élémentaire.<br><br>*Francis Cronier-Thériault, Ministère d'Éducation* | | *Max Number 24*<br>French |
| 10:15am to 10:30am | **Break and Travel Time** | |
| | **Session 2**      10:30am to 11:45am | |
| **Session 2A  Primary Session 2 Inquiry Through Technology 2 "Stay Calm & Build On"**<br><br>Participants will have an opportunity to work collaboratively with other teachers to support each other as they continue their journey in building technology and inquiry into their classrooms. Topics will include safety considerations, classroom management strategies, efficient material/equipment usage, assessment & evaluation, resources and technological inquiry activity planning.<br><br>*Sue Philip, HDSB and Kerry Langer, PVNCCDSB* | | South Studio #1<br>*Max Number 24*<br>English |
| **Session 2B  Junior Session 2 Bigger Builds- Extensions For Basic Tech. Skills That Support Inquiry Based Learning in Grades 4-6**<br><br>Participants will complete hands on builds that extend basic tool use and introductory making skills. Attendees will have the opportunity to work collaboratively with other teachers as they continue learning how to build technology and inquiry into their classrooms. Topics will include safety, classroom management, efficient use of materials & equipment, assessment and evaluation, resources and planning technological inquiry units.<br><br>*Darren Foy, RDSB* | | South Studio #2<br>*Max Number 24*<br>English |
| **Session 2C  Intermediate  Session 2 Build It Further**<br><br>Participants will have an opportunity to work collaboratively with other teachers to support each other as they continue their journey in building technology and inquiry into their classrooms. Topics will include safety considerations, classroom management strategies, efficient material/equipment usage, assessment & evaluation, resources and technological inquiry activity planning.<br><br>*Ingrid Munson HDSB* | | South Studio #3<br>*Max Number 24*<br>English |
| **Session 2D  Primary Session: Wandering and Wondering about the Natural World**<br><br>Participants will discover how to use nature walks in their community as a basis for teaching and learning about Science and Technology through discussions and building projects. These hands-on projects are meaningful and inspired by observations and experiences that students have in their outdoor surroundings. Interactions between students and nature will serve as a catalyst for sparking curiosity, developing "habits of mind", and strengthening numeracy and literacy skills through technological problem-solving and practice-based learning. Participants will have an opportunity to build samples at their grade level to take with them to use in their classrooms. Topics will include safety, classroom management strategies, efficient use of natural and human-made materials, assessment & evaluation and resources<br><br>*Greg Burke, Paula Walker, OCDSB, Kidder* | | North Studio #1<br>*Max Number 24*<br>English |
| **Session 2E  Mining Matters How to Integrate Minerals Education into 4-6 Classroom**<br><br>Part 1. Looking Inside ROCKS: The study of mineral properties is fundamental to the identification of rocks and the interpretation of the environment in which rocks are formed. A Smart Device Microscope is designed to look inside rocks using polarized films will be used to explore minerals and textures of various types of rocks. Learn about rock types and BYOD to take some memorable pictures. Part 2. Headframe Challenge: A headframe is a structural frame above an underground mine shaft. A mine shaft transports workers, materials, and mobile equipment and is used for ventilation. They provide the height needed to access the mined ore when it is hoisted out of the ground. Participants will investigate the engineering behind headframes and underground mines, and collaboratively work to build a headframe that can hoist the most weight from "underground" to the surface.<br><br>*Kelly Mcbride (Mining Matters)* | | North Studio #2<br>*Max Number 24*<br>English |
| **Session 2F  Cyber Arts STEAM Your Class Today…and Tomorrow**<br><br>Join Shaun Grant and Ray Mercer as they share the different ways they promote and integrate STEM?STEAM and Design Thinking within their classroom and library learning commons. Through dialogue and hands-on play, participants will explore robotics, problem based learning and lots of ideas. | | North Studio #3<br>*Max Number 24*<br>English |

| Time | Agenda Item | Location |
|------|-------------|----------|
| 11:45am to 1:00pm | **Lunch** | Graydon Ballroom |
| | **Session 3**     1:00pm to 2:15pm | |

### Session 3A  Primary Session 3 Inquiry Through Technology 2 "Stay Calm & Build On"

Participants will have an opportunity to work collaboratively with other teachers to support each other as they continue their journey in building technology and inquiry into their classrooms. Topics will include safety considerations, classroom management strategies, efficient material/equipment usage, assessment & evaluation, resources and technological inquiry activity planning.

*Sue Philip, HDSB and Kerry Langer, PVNCCDSB*

**South Studio #1**
*Max Number 24*
English

### Session 3B  Junior Session Bigger Builds- Extensions For Basic Tech. Skills That Support Inquiry Based Learning in Grades 4-6

Participants will complete hands on builds that extend basic tool use and introductory making skills. Attendees will have the opportunity to work collaboratively with other teachers as they continue learning how to build technology and inquiry into their classrooms. Topics will include safety, classroom management, efficient use of materials & equipment, assessment and evaluation, resources and planning technological inquiry units.

*Darren Foy, RDSB*

**South Studio #2**
*Max Number 24*
English

### Session 3C  Intermediate  Session: Build It Further

Participants will have an opportunity to work collaboratively with other teachers to support each other as they continue their journey in building technology and inquiry into their classrooms. Topics will include safety considerations, classroom management strategies, efficient material/equipment usage, assessment & evaluation, resources and technological inquiry activity planning.

*Ingrid Munson HDSB*

**South Studio #3**
*Max Number 24*
English

### Session 3D  Primary Session: Wandering and Wondering about the Natural World:

Participants will discover how to use nature walks in their community as a basis for teaching and learning about Science and Technology through discussions and building projects. These hands-on projects are meaningful and inspired by observations and experiences that students have in their outdoor surroundings. Interactions between students and nature will serve as a catalyst for sparking curiosity, developing "habits of mind", and strengthening numeracy and literacy skills through technological problem-solving and practice-based learning. Participants will have an opportunity to build samples at their grade level to take with them to use in their classrooms. Topics will include safety, classroom management strategies, efficient use of natural and human-made materials, assessment & evaluation and resources,

*Greg Burke, Paula Walker, OCDSB, Kidder*

**North Studio #1**
*Max Number 24*
English

### Session 3E  Mining Matters How to Integrate Minerals Education into 4-6 Classroom

Part 1. Looking Inside ROCKS: The study of mineral properties is fundamental to the identification of rocks and the interpretation of the environment in which rocks are formed. A Smart Device Microscope is designed to look inside rocks using polarized films will be used to explore minerals and textures of various types of rocks. Learn about rock types and BYOD to take some memorable pictures. Part 2. Headframe Challenge: A headframe is a structural frame above an underground mine shaft. A mine shaft transports workers, materials, and mobile equipment and is used for ventilation. They provide the height needed to access the mined ore when it is hoisted out of the ground. Participants will investigate the engineering behind headframes and underground mines, and collaboratively work to build a headframe that can hoist the most weight from "underground" to the surface.

*Kelly Mcbride (Mining Matters)*

**North Studio #2**
*Max Number 24*
English

### Session 3F  Cyber Arts STEAM Your Class Today...and Tomorrow

Join Shaun Grant and Ray Mercer as they share the different ways they promote and integrate STEM? STEAM and Design Thinking within their classroom and library learning commons. Through dialogue and hands-on play, participants will explore robotics, problem based learning and lots of ideas.

**North Studio #3**
*Max Number 24*
English

| Time | Agenda Item | Location |
|------|-------------|----------|
| 2:15pm to 2:30pm | **Break and Travel Time** | |

| Time | Agenda Item | Location |
|------|-------------|----------|
| | **Session 4** 2:30pm to 3:45pm | |

### Session 4A  Junior/Intermediate Session: Skills Ontario

This workshop will include a demonstration of a Technology Challenge run annually at Skills Ontario's Ontario Skills Competition. This challenge generally requires teams of 4 people to complete a task utilizing the tools provided within a specific time frame. Participants will be judged according to a criteria that will be outlined prior to the start of the Challenge. Teachers will be involved in a simulation of this challenge.

*Paula Walker/Skills Ontario*

North Studio #1
*Max Number 24*
English

### Session 4B  Beyond Science How you can use tech in several different subject areas.

Why just use tech when we are teaching Science and Technology? How can we build student skill and capacity more efficiently? How can we make better use of our schools tech resources? Use tech in other subjects! Geared towards intermediate teachers, this workshop will demonstrate how you can use several different subject areas (e.g. history, geography and math), and will provide time to collaborate and brainstorm with other teachers to plan tech use outside of the science classroom.

*Jenn McCoy (HDSB)*

South Studio #2
*Max Number 24*
English

### Session 4C  Primary Stem Engineering Hands on real world problem solving and inquiry

Engage your students with hands-on, real world problem solving and inquiry. Learn how to engage your youngest minds and connect science, math and technology to their every-day lives. Develop thinkers and creators through STEM Engineering and watch your students become engaged citizens and community members. Walk away with concrete ideas and resources that are not only practical, but will also inspire you to take your teaching to the next level.

*Shevaun Ang And Annelies Groen (TDSB)*

South Studio #3
*Max Number 24*
English

### Session 4D  Junior Session Group (mentors) Shuffle Bug Boogie: Understanding Matter and Energy: Electricity and Electrical Devices

Tinkering with variables will be strongly encouraged in their hands-on investigation. Using a minimum amount of materials, workshop participants will construct a simple circuit, then design, build and test a simple vibrobot that transforms electrical energy into movement. Curriculum connections and extensions will be identified.

*Ian Darling, DSBN*

South Studio #1
*Max Number 24*
English

### Session 4E  Mining Matters How to Integrate Minerals Education into 7-8 Classroom

Part 1. What's Yours is Mined: Through the identification of select mineral/rock properties, connect natural resources to the products we use every day. Learn about the processes involved in transforming minerals into products we use. Part 2. Mining Matters in Ontario: Explore the various types of mines (hard Rock):pits, quarries, surface and underground, then compare and contrast each type. Part 3. Power to the People Design Challenge: Investigate green energy generation and the minerals that make it possible. Complete a timed design challenge by working collaboratively to build a windmill that can generate the highest reading on the voltmeter.

*Kelly Mcbride (Mining Matters)*

North Studio #2
*Max Number 24*
English

### Session 4F  Junior and Intermediate Session Getting Hands On with VEX IQ

In this session, attendees will work hands on with VEX IQ pieces. Presenters will walk attendees through a variety of tasks, including one designed specifically to introduce users to the basic of programming the VEX IQ "brain". Some links to curriculum will be made- other tasks may work better in an extra-curricular program. Both presenters have experience in VEX (grades 5-8) and FRC(grades 9-12)robotics and would be happy to answer questions or offer advice on all things robotics related. NOTE: Vex IQ kits and up to 12 laptops loaded with appropriate software will be provided.

*Marcella Fioroni and Tony Lam, Conference of Independent Schools, Crescent School*

North Studio #3
*Max Number 24*
English