

WELDING -EDUCATORS CONFERENCE 2023



Agenda at a Glance

COLLABORATION IN WELDING EDUCATION

JUNE 6-8, 2023 | MOHAWK COLLEGE CAMPUS | HAMILTON, ONTARIO

Day 1: Monday, June 5th			
6:00-8:00 pm	CWB Educators Conference Reception: Registration and Networking evening, <i>Sandman Hotel</i>		
Day 2: Tuesday, June 6th			
7:30-8:30 am	Registration and Networking Breakfast, <i>Mohawk Cafeteria</i>		
8:30-8:45 am	Welcome and Introductions: Trent Konrad and Mary Fuke- AUDITORIUM		
8:45-9:10 am	Welcome: David Santi, Dean Marshall School of Skilled Trades and Apprenticeship, <i>Mohawk College</i> AUDITORIUM		
9:20-9:50 am	Plenary Session: Bridging the Classroom to the Industry AUDITORIUM		
9:50-10:00 am	BREAK		
10:00-10:50 am	Speed Knowledge Sessions: Attendees will rotate through 5 workshops (each session approx. 50 min) 1. Miller presents: Welding Simulation: Advancements in Education, Simulation Product Advancements A209 2. ABB presents: COBOTS; Integrating Automation into Welding Educational Programs- B110 3. Liburdi presents: Orbital Welding to Address the Shortage of Skilled Welders- A142 4. 3M presents: CWB WeldSAFE™- Improving Safety in Secondary School Weld Shops, Opportunities to Improve Safety in the Classroom, Value of CWB Audit process- AUDITORIUM 5. CWB Education presents: Practical Visual Inspection- CWB Education, A210		
10:50-11:40 am	Speed Knowledge Sessions: Attendees will rotate through 5 workshops (Rotation #2)		
11:40-12:30 pm	Speed Knowledge Sessions: Attendees will rotate through 5 workshops (Rotation #3)		
12:30-1:30 pm	LUNCH		
1:30-2:20 pm	Speed Knowledge Sessions: Attendees will rotate through 5 workshops (Rotation #4)		
2:20-3:10 pm	Speed Knowledge Sessions: Attendees will rotate through 5 workshops (Rotation #5)		
3:10-3:30 pm	BREAK		
3:30-4:15 pm	Keynote Speaker: An Executive Perspective on the Value of Industry Education Partnerships AUDITORIUM		
7:00-10:00 pm	<i>Educators Social: CWB Welding Foundation 10 Year Anniversary Celebration- Clifford Brewery</i>		
Day 3: Wednesday, June 7th			
7:30-8:30 am	Networking Breakfast, <i>Mohawk Cafeteria</i>		
8:30-9:30 am	Building Awareness in Welding through Community Initiatives AUDITORIUM		
9:30-10:00 am	Filling the Gap: Addressing the Shortage of Pressure Welders in Canada. Outcomes, Success and Challenges AUDITORIUM		
10:00-10:15 am	BREAK		
Secondary School Stream		Post Secondary School Stream	
10:15-10:45 am	Curriculum Support Workshop AUDITORIUM	Writing Exam Questions like the Red Seal A209	
10:45-11:15 am		Developing & Implementing a Maritime Welding Program A209	
11:15-11:30 am	Sparking Success AUDITORIUM	BREAK	
11:30 am-12:00 pm		Accommodating Diverse Learners A209	
12:00-1:00 pm	LUNCH		
1:00-2:00 pm	Igniting Bright Futures AUDITORIUM	Successes and Techniques to Run a Successful Metal Fabrication Program A209	
2:00-2:30 pm	Learning By Doing-This is how we roll in my class AUDITORIUM	Integrating WPDS, WPS & PQR's into Teaching A209	
2:30-3:30 pm	Panel Discussion: Changing Landscape of Apprenticeship in Canada AUDITORIUM		
Day 4: Thursday, June 8th (OPTIONAL, Limited Seating)			
7:30-8:30 am	Networking Breakfast		
8:30-10:00 am	Bus travel to EWI (Edison Welding Institute), https://ewi.org		
10:00-11:10 am	Welcome and Intro Video, Training Lab, Cold Spray Equipment, Automation Lab, CT Lab		
11:10-11:30 am	Overview into Training Courses		
11:30-12:30 pm	LUNCH		
12:30-2:30 pm	Hands On Sessions: Tele Welding, Robotics with Michael, UR - Vectis/Robotic Welding, Northland Training Center - Welding		
2:30 pm-4:00 pm	Bus travel to Sandman Hotel		

PLEASE NOTE: This schedule is subject to change at any point from now until the event start date.

WELDING EDUCATORS CONFERENCE 2023



CWB Welding Foundation

Mary Fuke | Program Manager

We are excited to welcome you to the 11th Annual Educators Conference in Stoney Creek, Ontario, nestled in the beauty of the Niagara Escarpment.

This year the CWB Welding Foundation is celebrating its 10th Anniversary, and we are thrilled to have you here to share in the celebration as part of this conference. When I reflect on the success of the Foundation, it is the forging of partnerships with Educators, Industry and Government that have helped us deliver on our mission to provide Canadians with a gateway to many exciting and much-needed occupations in trades and technology. With investments totalling over \$14 million, which includes 200+ camps and workshops and more than 4,000 graduates from our many programs, we are incredibly proud of what we have accomplished and excited about the opportunities to grow our programs in collaboration with our partners in the years ahead.

Together, we can work together to reduce the stigma attached to occupations in trades and technology. By acting as an impartial advocate, increasing accessibility and promoting best practices in safe educational environments, we can support a future-focused curriculum. This will allow students to enhance their skills while exploring existing and emerging career opportunities.

Fittingly, the conference theme is Collaboration in Welding Education. The fast-paced agenda has great workshops, panel discussions, and keynote speakers. Our team looks forward to meeting you and sharing experiences and insights.

Thank you for joining us. Let's continue to forge ahead together.

CWB Education and Development

Trent Konrad | Director- Education, Learning and Development

On behalf of CWB Education, we are thrilled to welcome you to the 11th annual Welding Educators Conference. This conference allows us the opportunity to meet, mingle and learn from each other. With the theme of "Collaborating in Welding Education," what better way than through a conference dedicated solely to education and learning resources in our wonderful industry.

This year, we are proud to host a new and improved event focused on best practices and the future of welding education for secondary and post-secondary educators. Hosting the conference on a virtual platform for the past few years has given us a profound respect for in-person events. Our goal with each forum is to maximize our time with industry members and create a safe environment to engage with one another. This year's Educators Conference is being led by CWB Education and the CWB Welding Foundation, giving attendees a deep dive into how to improve the future of welding education by some of the best in the industry.

CWB Education has had a busy year with CWB Learning Resources supporting thousands of welders, metal fabricators, educators, inspectors, and supervisors in achieving their educational goals. We aim to provide top-tier knowledge resources to ensure the success of the welding industry, and our attendees will benefit from that for the next few days.

With speaker and supplier series on the theme of welding education, the event will provide knowledge resources on the latest innovations and practices impacting the industry today. We are so excited to host the welding industry at this year's event, and we promise a great time for all!

WELDING EDUCATORS CONFERENCE 2023

Tuesday, June 6
9:20 a.m. – 9:50 a.m.

Tuesday, June 6
10:00 a.m. – 3:10 p.m.

Sessions

Bridging the Classroom to the Industry

DERRICK DERRINGER, Welding Instructor | Saskatchewan Polytech

While there are many interesting and relevant topics for discussion in the field of welding education, student success is at the forefront of every instructor's concern. During this session, the speaker will discuss bridging the classroom to the industry. Throughout 7 years of teaching, the speaker has noticed characteristics that lead to student success upon graduation as well as things that have presented hurdles for our students. While the recipe for success can be as diverse as our learners, there are some constants that could be considered.

Speed Knowledge Sessions

Attendees will rotate through 5 workshops (each session approx. 50 min)

Workshop #1. Miller presents: Helping Prepare the Workforce of Tomorrow

Join Miller and the CWB Welding Foundation to experience the world of welding simulation. Learn about Miller welding simulators and explore the different ways they can be used in the classroom to enhance the learning experience and provide hands-on skill building. The CWB Welding Foundation will also discuss their new simulator program being piloted across Canada and how educators can take advantage of this unique opportunity for their students.

Workshop #2. ABB presents: COBOTS: Integrating Automation into Welding Educational Programs

Join ABB Robotics to discover how they are helping prepare the workforce of tomorrow through education of robots and automation. This knowledge session is a hands-on experience featuring the ABB GoFa™ Arc Welding Package, a collaborative robot welding solution that reduces the complexity of robotic welding and lowers the barriers to automation for first time users. Become a part of the conversation and solution to help tackle the shortage of welders in Canada.

Workshop #3. Liburdi presents: Augmenting the Modern Welder Using AI

In this session, we'll explore how artificial intelligence is reshaping the field of welding and offering solutions to the current welder shortage in Canada. We'll examine how Liburdi CoPilot is increasing the productivity and precision of welders, allowing them to accomplish more in the same timeframe, while also increasing the quality of the weld. This session ultimately highlights how AI is not merely a tool for the future, but a necessary instrument for addressing present challenges in the industry.

Workshop #4. 3M & CWB Group presents: CWB WeldSAFE™ - Improving Safety in Secondary School Weld Shops

The most significant benefit of having a safety audit conducted in schools is to prevent any potential danger to students who are not familiar with welding safety practices. Through observations and reviews, CWB Consulting can identify potential risks present in the shop and outline guidelines to ensure that students are being exposed to a safe training environment.

Workshop #5. CWB Education presents: Practical Visual Inspection

Visual weld inspection is by far the most used form of weld inspection. W59.1 requires all welds to be visually inspected. Using a few tools we can evaluate the soundness of a weld, if acceptance criteria has been met and a part of ensuring a quality product. We will evaluate weld samples, using a generic standard (CSA 178.2) to determine acceptance criteria, use common weld measuring tools and have some fun evaluating welds.

Tuesday, June 6
3:30 p.m. – 4:15 p.m.

An Executive Perspective on the Value of Industry Education Partnerships

BILL CHISHOLM, CEO | Samuel, Son & Co.

This session will review the following: How education partnerships can provide critical training support to advance industry objectives. How shareholders and the market reflect highly on industries that have strong education and research partnerships. How government funding is dependent on education partnerships. How education partnerships can drive research and industry innovation. The need for talent management strategies, career advancement through job training, micro credentials and continuing education. The rapid pace of change, the challenges ahead and how education partnerships can help ensure as a country we stay ahead of the curve.

Wednesday, June 7
8:30 a.m. – 9:30 a.m.

Building Awareness in Welding through Community Initiatives

IAN HOWCROFT, CEO- Skills Ontario | KAYLA VANDERMOLEN, Pre-Apprentice Instructor & ABSA Certified Welding Examiner- Boilermakers Lodge 146 | STEPHAN DELOOF, CEO- Executive Director of Operations, FrancoSud School District | VIRGIL GRAHAM, Learning Specialist- Skilled Trades, Government of New Brunswick

Shifting the narrative around welding and skilled trades takes a village. Join us for a deep dive into three community-based initiatives actively engaging students and addressing the unique needs of various regions across Canada. Learn more about the Welding on Wheels project in New Brunswick, Welding Rodeo in Alberta and the Skills Ontario Tech and Trades Truck in Ontario and explore how working with your community can ignite bright futures for your students.

Wednesday, June 7
9:30 a.m. – 10:00 a.m.

Filling the Gap- Addressing the shortage of pressure welders in Canada

J'AMEY BEVAN, Director of National Training | Boilermaker NTTF

Canada requires many more skilled pressure welders to fill the current skills gap and mismatch across the country. The International Brotherhood of Boilermakers (IBB), the CWB Welding Foundation, and the CWB Group, with the support of Employment and Social Development Canada's - Union Training and Innovation Program (UTIP) have developed a program to upgrade apprentices and welders across Canada. In the two years of the existence of the program we have designed, developed, and implemented the National Pressure Welder Training Program - "Filling the Gap", and we would like to share our learnings and successes. This session will discuss the challenges in this area of the industry, student experiences, successes, and the importance of our partnerships.

Wednesday, June 7
10:15 a.m. – 11:15 a.m.

Curriculum Support Workshop

MARY FUKE, Program Manager | CWB Welding Foundation

Are you ready to bring CWB's Welding Curriculum into your classroom in an easy, interactive and accessible way? Join CWB Education, CWB Welding Foundation and D2L to learn more about what you can expect from this curriculum, how it can further support your students' welding skills, and how to integrate the Brightspace platform with your current teaching methods

Wednesday, June 7
10:15 a.m. – 10:45 a.m.

Writing Exam Questions like the Red Seal

JIM GALLOWAY, Professor & Coordinator of Welding Programs | Conestoga College

The goal for most of our students is to ultimately earn an interprovincial Red Seal Certificate of Qualification as a Metal Fabricator (Fitter), Welder, or related trade. The final exam for this qualification is a written test developed from a bank of questions prepared under the guidance of HRSDC/Service Canada by experts from across the country. There are strict rules for the formatting, content, and taxonomy for these exam bank questions. This presentation will inform educators of the specific format of the questions used by so that they can prepare practice questions to the same standards, and on the subject matter specified by the National Occupational Analysis (NOA) for the trade.

Wednesday, June 7
10:45 a.m. – 11:15 a.m.

Developing and Implementing a Maritime Welding Program

MATT SCOTT, Welding Instructor and Department Chair | Portland Community College

SUSAN WATSON, Curriculum Coordinator | Portland Community College

TODD BARNETT, Maritime Welding Instructor | Portland Community College

Portland Community College's Welding program created two short-term certificates in Maritime Welding in 2022 in response to industry needs and demand. The program is currently working on three more short-term certificates that extend the Maritime welding curriculum. Presenters will share the content of the certificates, opportunities for students upon completion, and highlights of projects and assignments. The certificates include Maritime Welding Career Pathway Certificate, Maritime Shipfitter and Welder Career Pathway Certificate, Maritime Aluminum Welding and Ship Fitting Career Pathway Certificate, Maritime Pipe Welding Less Than One-Year Career Pathway Certificate, Maritime Pipe Fitting Less Than One-Year Career Pathway Certificate, and Maritime Welding Two-Year Certificate.

Wednesday, June 7
11:15 a.m. – 12:00 p.m.

Sparking Success

JOE SAUNDERCOOK, Manager- Fund Development | CWB Welding Foundation

JOSH FORTIN, Technical Education Specialist | CWB Welding Foundation

MIKE McCORMICK, Manufacturing Technology & Design Technology | Sacred Heart High School

At this session you will learn about an innovative industry, education, organized labour and CWB Welding Foundation partnership model called 'Sparking Success' designed and implemented to increase the skills, knowledge and confidence levels of students in preparation for post-secondary education pathways or careers in welding and welding related trades. Despite obstacles that emerged as a result of the pandemic, the program was fully implemented in 2022 resulting in a high degree of success that will be described by an experienced manufacturing technical educator with a long history of working with the CWB Welding Foundation. Participants at this session will be invited to share information on initiatives involving partners that improved welding programs and positively impacted students.

Wednesday, June 7
11:30 a.m. – 12:00 p.m.

Accommodating diverse learners through accessible content

TRENT KONRAD, Director- Education, Learning & Development | CWB Education

GORD ELSON, Sr. Director of Alliances, Corporate Solutions | RedShelf

Having accessible learning resources for welding students is vital to enhance learning experiences, promoting equal opportunities, supporting remote learning, and meeting diverse learning needs. The CWB group has partnered with Redshelf to ensure that students enrolled in welding programs have access to fully accessible and engaging content. This presentation will cover the importance of accessibility and showcase the features of Redshelf e-books.

Wednesday, June 7
1:00 p.m. – 2:00 p.m.

Igniting Bright Futures- Educator Training Program

DAYTON BLOCK, Technical Education Specialist | CWB Welding Foundation

The CWB Welding Foundation, in partnership with College Boreal, has been hard at work over the last year, developing and delivering Technical Educator training sessions through a grant funded by the Ontario Skills Development Fund. The project was designed to enhance the Foundation's already popular Educator Training program. In this session, you will learn more about the enhanced program, as well as the successes and challenges encountered throughout this project from different perspectives. Anyone who is interested in learning about professional development opportunities should attend this workshop!

Wednesday, June 7
1:00 p.m. – 2:00 p.m.

Successes and techniques to run a successful metal fabrication program

IAN SCHAAN, Head of Welding and Metal Fabrication | Saskatchewan Polytech

This presentation provides an overview of the Metal Fabrication apprenticeship program Saskatchewan Polytechnic that has been running in Saskatoon since 1997. It will also discuss the history of the metal fabrication program over the years, how it was started as a red seal trade in Saskatchewan, an overview of our program structure, with samples of what fabrication projects students work through in the three levels of training. This could be of interest for anyone who is currently running a fabrication program or is interested in starting a program. Also addressed are the types of projects we use in our program, how the theory applies to the labs, what is learned and what the application is on the job.

Wednesday, June 7
2:00 p.m. – 2:30 p.m.

Learn by Doing...this is we roll in my class!

BERNARD GERVAIS, Program Lead for Technology and Arts | Rainbow District School Board

In some manufacturing courses, students work on many different teacher-led projects. These projects are designed to inspire and motivate the student to make and finish the final product to take home. More importantly, the projects grow and reinforce the skills and knowledge that the students need to move on to the next level of learning, which in turn can lead to an apprenticeship and career. These courses start with a prep talk that includes instructions, a demo and/or theory that led to individual project work. The speaker will be sharing teaching techniques and the very interesting projects that have evolved over the last 15 years and have proven successful from the grade 9 course to the grade 12 manufacturing course. These projects are often broken down in photographic steps in Google Slides so that a student can get to the next step when they are ready. Mixing-in many welding procedures and CNC designing skills is the right recipe to keep the students coming back for more!

Wednesday, June 7
2:00 p.m. – 2:30 p.m.

Integrating WPDS, WPS and PQR's into classroom teaching

AL SUMAL, Retired Welding Instructor | Kwantlen Polytechnic University

This presentation will include the following topics: Welding Procedure Specification, Procedure Qualification Record, Welding Procedure Data Sheet Welder Performance Qualification Record. The session's primary focus will be WPS, PQR and WPQ and how to integrate and simplify their use so they are easy to understand and fun to learn. Also, how to encourage students to develop their own WPS training. For every practical welding competency, briefly explain WPS, PQR, WPDS and WPQR throughout and how they are applied in our industry for various welding and fabrication projects.

Wednesday, June 7
2:30 p.m. – 3:30 p.m.

Panel Discussion- Changing Landscape of Apprenticeship in Canada

DAVE MCCUTCHEON- Vice Chair of CCDA and Executive Director | Apprenticeship Manitoba

JOHN SMIT- Assistant Training Director | UA Local 527

KENT MCDONALD- Ironworkers Local 765 | Training and Apprenticeship Coordinator

MELISSA YOUNG- Skilled Trades Ontario | CEO

The past year has brought many changes to the apprenticeship systems across Canada. Join us for an engaging panel discussion about these changes and, from our experts' perspectives, how they have impacted organizations and industries across the country. From unions to government agencies, tap into the future landscape of apprenticeship and explore how to prepare your students for their future careers.

WELDING
-EDUCATORS
CONFERENCE
2023

Conference Sponsors

COLLABORATION IN WELDING EDUCATION

Platinum Sponsor



FORMCOR

Print Management and Promotional Products

Gold Sponsors



Silver Sponsors



Bronze Sponsors

