



SPECIAL FEATURE

Nov 26, 2021

SKILLS TRAINING & CONTINUING EDUCATION

Daily Commercial News
by ConstructConnect®

www.dailycommercialnews.com

Haliburton high school co-op builds future workforce



SHUTTERSTOCK

GRANT CAMERON
CORRESPONDENT

A co-op education program at Haliburton Highlands Secondary School enables senior students to put down their pens and paper and try out the skilled trades while earning credits towards their academic studies.

Students in Grades 11 and 12 who are interested in learning more about the trades are connected with potential employers in the region so they can learn more about a trade before making a commitment. In the program, employers show them some of the ins and outs of pursuing such a career.

Those who participate in the program earn elective credits which count towards their high school diplomas.

“COVID has been awful but the one benefit is that the economy here in terms of the trades and the building industry has exploded,” explains Jason Morissette, co-operative education and social science teacher at the school who quarterbacked the program. “It has really created an opportunity for a program like this.

“It has allowed us to go out to employers and say, ‘Hey, if you’re looking for students that might be interested in a potential career or a summer job, we have them.’”

A lot of people have been moving from urban areas to Haliburton and it has added to the demand for services, explains Morissette. As a result, there has been exponential growth in construction and an increase in demand for skilled trades workers in construction as well as professionals in

other types of industries.

While co-op education has been a part of school programs for the better part of 30 years, it has become increasingly more popular because of the skilled trades shortage and the attention the issue is receiving. Indeed, reports indicate that

“What I say to students is that it’s like a tryout. You’re trying out this job to see if it would be a good profession or career, and the employer is trying you out, too,”

Jason Morissette

Co-operative education and social science teacher

more than 100,000 workers will be needed in Ontario’s construction industry over the next decade. Many of the jobs are in the residential construction sector.

According to Morissette, it’s important for schools to partner with employers to help get youths into the trades.

“In my opinion, we really have to look at it as a social responsibility to help our youth out because a high school can’t train all these young students and let them know what it’s really be like to become an electrician or a plumber.”

Through the program, students earn elective high school credits towards their Ontario Secondary School Diploma by combining course curriculum with a work placement that teaches a skilled trade. Students are not paid for the work. They can earn one credit for one period of co-op work, two credits for a half day of co-op, and four for a full day of co-op. All insurance for the students is fully covered by the Trillium Lakelands District School Board while the students are working at their placement with an employer.

The program is especially helpful for those senior students who are interested in apprenticeships, a college diploma, university degree, or intend to enter the workforce after they graduate from high school.

The co-op gives students an opportunity to gain hands-on experience with employers and learn more about a trade before committing to a full-time training program, says Morissette. He tries to make sure a student is a good fit for an employer and that the candidate also has the maturity and proper work ethic.

“That’s important for employers. They have to be able to trust that I’m going to help them to make sure that the fit is right. They don’t really know the student, they’re not sure if I’m linking them to a student that has the aptitude to do the job, so we’re trying to do a good job of ensuring a student is ready for a co-op.

“What I say to students is that it’s like a tryout. You’re trying out this job to see if it would be a good profession or career, and the employer is trying you out, too, to see whether you have the aptitude or skill sets.”

“What the employer thinks is, ‘I have to take them on as an apprentice.’ But that’s not true,”

Jason Morissette

Co-operative education and social science teacher

Although there is a labour shortage, Morissette says it can still be a tough sell getting employers to take on a co-op student. However, he maintains that is often due to misunderstandings about the program and usually those initial apprehensions are alleviated once he explains how the system works.

Some employers, for example, are worried that hiring a co-op student will mean they can’t bring on as many apprentices but that is not the case, he says.

“What the employer thinks is, ‘I have to take them on as an apprentice.’ But that’s not true. It has been quite a challenge to get a lot of the trades employers to take on a young person and give them an opportunity. I try to express all the incentives because the student isn’t paid and they are fully insured by the school board.”

While the experience helps the students, Morissette notes it’s also in the best interests of employers to get more youth into the trades because they are the workforce of the future.

“I think the only way for us to help is to do it together.”

Morissette says any initial hesitation that some employers have at the beginning of the program often melts away by the end.

“It’s amazing when employers give me feedback and say, ‘In the start-up we had to teach them some things for the first few weeks, but then the student kind of knew what they were doing and really helped a lot.’”

Economic Snapshot

Fraser River flooding to dampen, but not drown, Vancouver’s economy



John Clinkard

The major flooding in the Fraser Valley and the southern interior of British Columbia will exacerbate the pre-existing supply chain issues which have weighed on economic activity in the province as a whole and, to a lesser extent, Vancouver for the past several months. Further, the severing of roads and railroads supplying the city will temporarily dampen the CMA’s goods-producing industries by restricting their ability to import essential inputs.

It is worth noting, however that, due in part to more than 90% of Vancouverites being fully vaccinated, the latest (October) employment numbers indicate the city’s economic pulse is the second most vigorous among Canada’s 35 census metro areas (CMAs). Since the beginning of 2021, the city has added +83,300 jobs, all full-time. Almost all the new hiring or rehiring has occurred in the service sector, led by ‘wholesale and retail trade’ (+40k jobs), followed by ‘health care and social assistance’ (+27K), then ‘public administration’ (+15k).

Hiring in the goods-producing sector year to date has been negligible (+1k jobs), with gains in manufacturing (+6k) largely offset by declines in utilities (-1.5k) and construction (-2.3k). Vancouver’s unemployment rate, currently 6.5%, is not yet back to its pre-coronavirus low of 4.3%.

Expect consumers to fuel growth in 2022 and 2023

Fuelled by the combination of robust gains in employment, plus rising consumer confidence and record low-interest rates, consumer spending in Vancouver, as reflected by retail sales, recently posted a year-to-date increase of +20.5%, the second-best performance among Canada’s nine major metro areas. Sales of motor vehicles and parts, up by +50%, made the major contribution to the year-to-date gain, followed by gasoline stations, where the price of petrol has increased by +23% since the beginning of this year. The +23% for B.C. is well under the average price jump of +36% for the whole country.

Going forward, the combination of persisting relatively low interest rates, sustained net in-migration of residents and ongoing healthy hiring plans should underpin consumer spending throughout 2022 and into 2023.

After a record high in 2021, expect home sales to cool in 2022

After posting a solid +18% y/y gain in home sales in 2020, Vancouver’s housing market has gone into orbit this year. Year-to-date sales of existing homes are up by +56% to a 10-month record of 46,000 units.

The three key factors driving this acceleration include a record +105% year-to-date (through September) increase in admissions of permanent residents, the already mentioned hearty full-time jobs growth, and record low-interest rates.

The slowdown in applications to build both single-family and multi-family dwellings year to date suggests that residential construction will cool in 2022. At the same time, the effects of a significant deterioration in affordability in the third quarter, reflected by the Royal Bank’s *Housing Affordability Measure*, together with expected hikes in mortgage rates, will contribute to a softening in demand. This erosion of demand, combined with slower growth of supply, will cause B.C. housing to start to slow from an estimated 25,000 units in 2021 to 23,000 in 2022 and 22,000 in 2023.

Non-residential construction to pick up in 2022 and 2023

The lingering impact of the COVID-driven drop in office-based employment in 2020 and the accompanying rise in office vacancy rates are largely responsible for investment in non-residential building construction taking a tumble year to date in 2021 of -21% (i.e., through September), on the heels of a -8% drop in 2020.

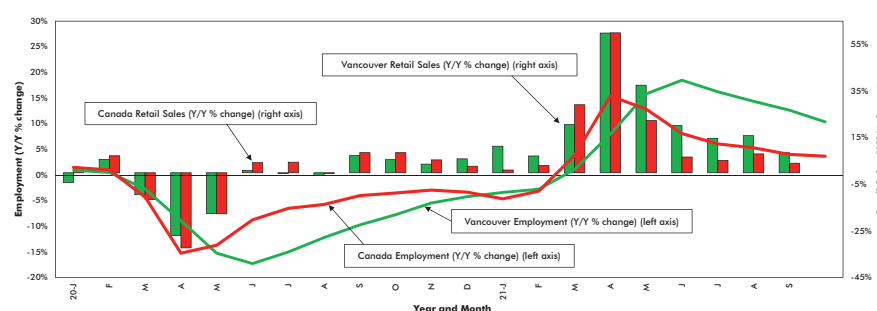
Several indicators suggest the pace of non-residential construction in Vancouver will accelerate in 2022 and 2023. First, the high level of vaccination in the metro area significantly reduces the risk of infection for workers, as more firms encourage their staff to return to the office. After a period of almost steady shrinkage from the second quarter of 2020 on, the absorption of vacant office space increased in the third quarter of this year and the vacancy rate declined in Vancouver Central Area.

Also, the steady rise in business openings since mid-2020 will lead to an increase in demand for industrial and commercial space.

Third, in its April budget, the provincial government announced plans to increase infrastructure investment by \$3.5 billion, a significant amount of which will flow to the Vancouver CMA. Major projects in the pipeline include the extension of the Millennium SkyTrain line, the replacement of the St Paul’s Acute Care Hospital, the Broadway Subway project, and the King George Station mixed-use development.

John Clinkard has over 35 years’ experience as an economist in international, national and regional research and analysis with leading financial institutions and media outlets in Canada.

Retail Sales and Employment (Year-over-Year % change) – Vancouver vs Canada



Data Source: Statistics Canada/Chart: ConstructConnect — CanaData.

©2021 CanaData. All rights reserved.

Vol. 19, Issue 22

DEWALT®

250+ 20V MAX*™ PRODUCTS AND GROWING™



TAKE CHARGE™ WITH 20V MAX*

CREATING INNOVATIVE CORDLESS SOLUTIONS FOR THE JOBSITE.
OUR LARGEST CORDLESS PLATFORM CONTINUES TO EXPAND MAKING
20V MAX* A SYSTEM YOU CAN BUILD ON.

GUARANTEED TOUGH.®

www.DEWALT.ca



Copyright ©2021 DEWALT. The following are examples of trademarks for one or more DEWALT power tools and accessories: The yellow and black color scheme; the "D"-shaped air intake grill; the array of pyramids on the handgrip; the kit box configuration; and the array of lozenge-shaped humps on the surface of the tool. *With respect to the DEWALT 20V MAX*: Maximum initial battery voltage (measured without a workload) is 20 volts. Nominal voltage is 18

Augmented reality a potential remote trades training tool

DON PROCTER
CORRESPONDENT

An augmented reality (AR) provider is hoping to make inroads into trades training in some of the most remote locations in Canada.

“Our goal is to accelerate the time to competency for the apprentice, the new guy on the site...” says Charlie Neagoy, senior vice-president of customer success, Librestream.

The AR provider incorporates a platform called digital work instruction that allows

workers to install or deal with a problem through interactive guided instruction from another location. It is done from a knowledge network platform that integrates artificial intelligence and AR technology, explains Neagoy.

“We are focused on getting the right information to the person who needs it, the moment they need it, where ever they are.”

Ted Polzer, product and customer support for CASE Construction Equipment, a division of CNH Industrial, sees the merits of the Librestream tool.

With dealerships throughout Canada – from Newfoundland to B.C. – CASE faces “a big challenge” having a capable technician on some of its more isolated sites when equipment breaks down.

“Canada is a massive territory for us,” Polzer says.

Prior to using Librestream, CASE looked to various companies with video capability to connect to remote field locations to diagnose problems but video connectivity was poor to many areas because of weak WiFi signals.

Librestream’s platform gets around the problem by requiring less bandwidth to transmit high-definition images and videos, Polzer says.

“We started a pilot with them (Librestream) in Canada just to see how well it connects in areas that don’t have good cellular coverage and we

were really blow away by the connectivity.”

Polzer says one of CASE’s objectives is to get all of its equipment dealerships operating with the tool.

The tool fits into the content of CASE’s curriculum for its three-tier training certification program open to dealers and technicians throughout North America.

“If you are able to connect an experienced technician to

an inexperienced technician on a repair and then perform some types of training close to that repair, the educational value is very high,” explains Polzer.

Librestream’s product can also be tailored to a specific dealership’s needs because it is built on an “open architecture” platform. A mounted camera with flash control, zoom control and thermal imaging is an example of how far it can go, he points out.

“It has found a lot of issues that would

have taken a lot longer to diagnose for our customers,” Neagoy adds.

He says a GC travelling from one jobsite to another can have “eyes on a problem” virtually and provide a solution quickly.

Up to five percent of all service problems can be solved remotely by talking a user through the solution, according to Neagoy. Alternatively, a service technician can often resolve the issue if he has seen the problem online and has access to the right tools and parts to make the repair in-situ.

Neagoy adds the technology can be installed on almost any modern electronic device – including smart phones, PCs or wearable tablets.

Polzer, who is unaware of other OEMs using the tool, says CASE evaluated three products before choosing Librestream largely because of its focus on customer service and its need for minimal bandwidth.

The big equipment manufacturer plans to integrate the tool in its online training curriculum for all of its dealerships over the next few months.

Neagoy says the tool is not limited to use in heavy equipment. It can assist users on how to do installations such as liquid-applied



LIBRESTREAM

Augmented reality (AR) provider Librestream incorporates digital work instruction that allows workers to install or deal with a problem through interactive guided instruction from another location. It is done from a knowledge network platform that integrates artificial intelligence and AR technology

membranes for a ceiling or how to build a product such as ZIP System wall sheathing.

“It gives you the ability to have an expert do (inspect) that immediately so you can go on to the next procedure,” he adds. “I can imagine guys hanging out a shingle and creating a virtual inspection business on the build-out of stuff.”

While the technology is not new for Librestream (it has been retained by hundreds of companies for years), up until recently it has largely been marketed primarily to large companies. “We’re now starting to see it working its way down to smaller companies, smaller industries.”

“This whole idea of knowledge augmentation is absolutely crucial. I see more ubiquity coming along,” says Neagoy.



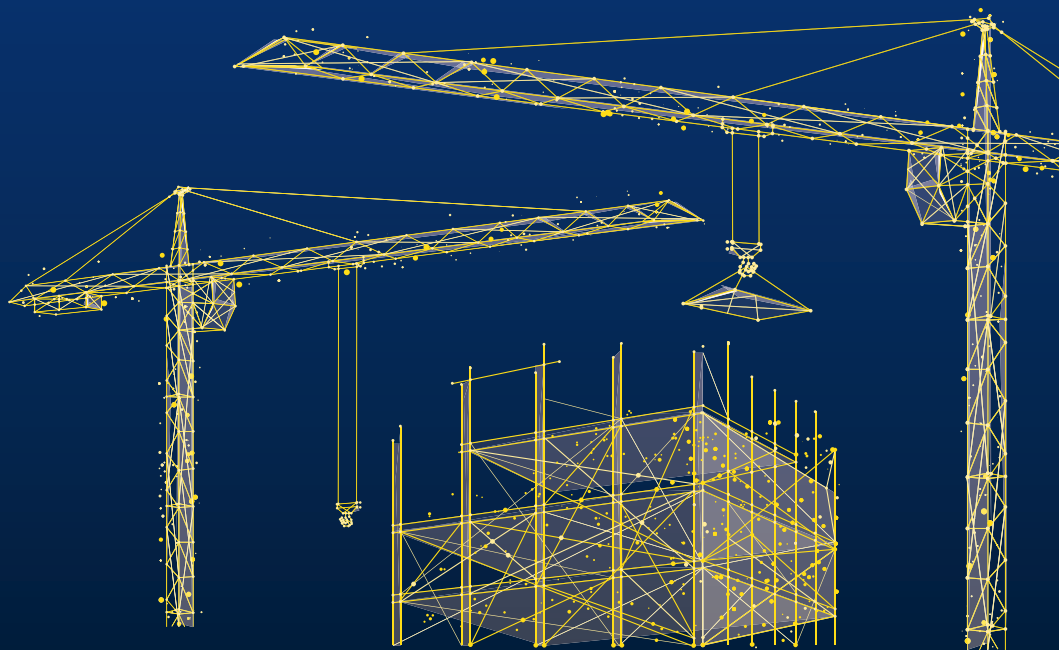
GLOBAL
CORPORATE
SPECIALTY

A partner you can trust

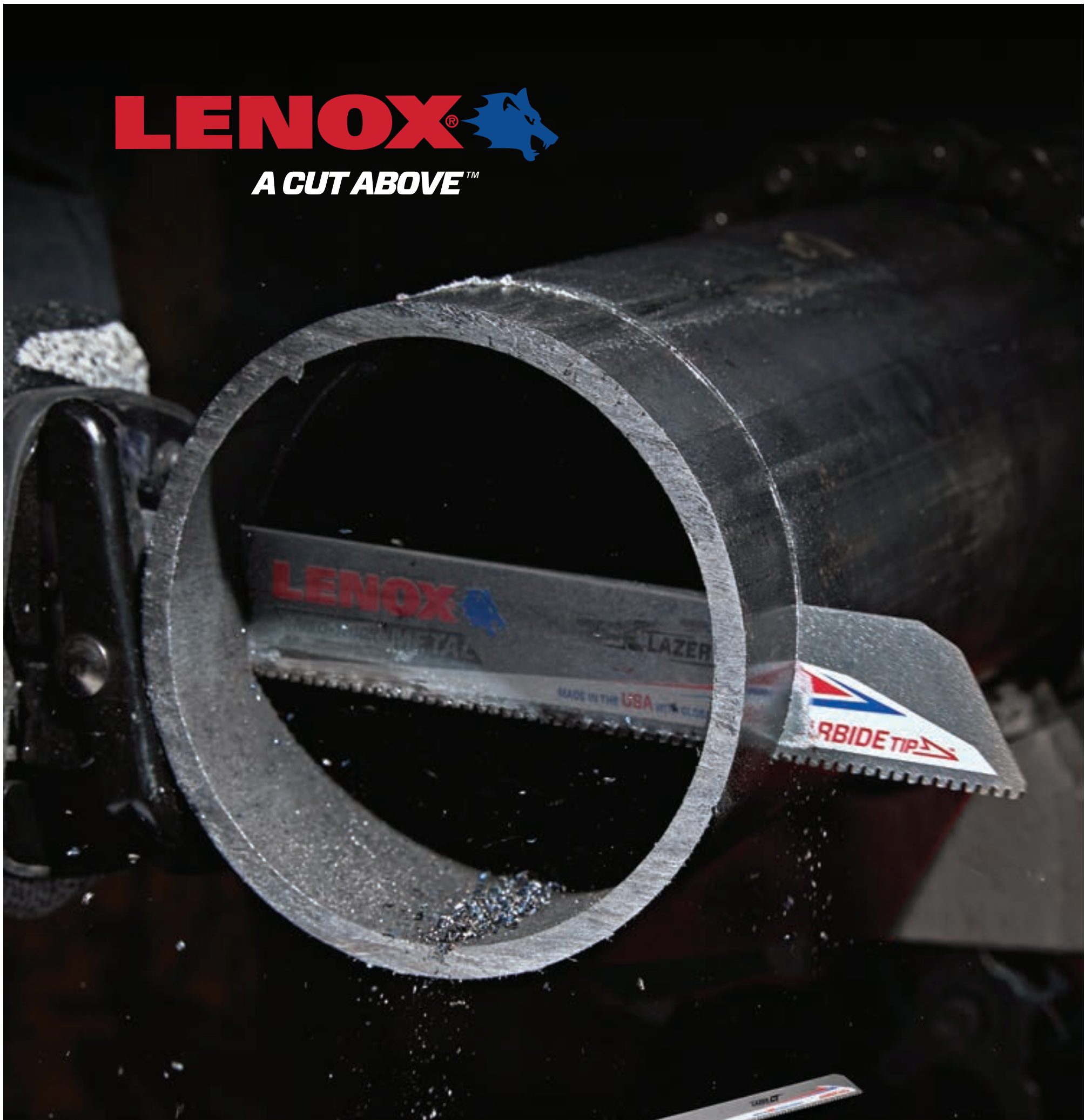
Managing the success of your construction business can be challenging in today’s evolving marketplace. When you partner with Aviva you can count on us to provide you with strategic surety bond solutions, backed by extensive knowledge, expertise and strong partnerships focused on the long-term. We are committed to helping you meet your business goals.

Contact your broker to learn more.

[Aviva.ca/gcs](https://www.aviva.ca/gcs)



LENOX 
A CUT ABOVE™



LAZER CT™

RECIPROCATING SAW BLADES

*Carbide tipped thick metal blades for the highest performance
In cutting cast iron & stainless steel and demolition carbide tipped
blades for highest performance in nail embedded wood.*

www.lenoxtools.com

* vs. 10TPI Standard LENOX Bi-Metal reciprocating saw blades cutting cast iron and rebar



**UP TO
50x
LIFE™**

Careers in Construction video series bridges engagement gap

DAN O'REILLY
CORRESPONDENT

Two recently released educational videos intended to attract young people into the construction industry may not win any prestigious film industry awards. But that's not the point.

Rather than Hollywood-style sound and lighting effects, the five- to 10-minute-long videos capture the work of the drywall, painting, and finishing trades, explaining exactly what those trades do.

They were filmed on actual high rise construction sites in Toronto by Bill Hawryschuk, professor at the centre for Construction and Engineering at George Brown College. A construction industry veteran, he also provided the narration.

Produced by the BOLT Charitable Foundation, whose mission is to assist under-resourced youth connect to careers in construction, the videos are part of a series titled Careers in Construction profiling 10 different careers in the residential sector. Three other videos on forming, building systems, and site management trades are scheduled to be released before the end of the year.

The series is sponsored by BMO, RESCON, Tridel, and the Ontario Government, which provided financial support, access to construction sites for filming, commentary on the content, and assistance with the distribution, says BOLT executive director Raly Chakarova.



BILL HAWRYSCHUK PHOTOS

George Brown College professor Bill Hawryschuk scouting vantage points for filming sequences about the work of forming crews and crane operators.

"When talking to youth about the different career opportunities available in the industry, we noticed a clear gap. There were no short, technical, engaging videos that we can share with them to tell them 'this is what a drywall installer does, or this is what a trim carpenter does,'" says Chakarova, in explaining the origins of the videos.

When the pandemic was in full swing in the fall of 2020, the foundation realized it would be a good idea to create educational videos as a resource its community and employment partners, plus schools and parents could use and share with youth, she says.

Determining which trades should be profiled was a decision the BOLT executive team made in consultation with its founding sponsor Tridel and its community and government partners.

Those partners shared their frustrations over labour shortages and a general lack of awareness about some of the careers available, says Chakarova.

"Stereotypes about the industry and lack of information on the career options and how to get started are the main reasons why not enough young people are not considering these in-demand and well-compensated careers."

Creating the videos is a way to shine a light on lesser-known professions in the industry and spark an interest to learn more about them, she explains.

As for the content and format, that was also determined by BOLT in consultation with Hawryschuk and its employment partners.

"We wanted to make sure that the videos were very visual, interesting, and short in order to keep young people's attention, provide the basic information, and plant that seed to find out more about and, ideally, pursue a profiled career."

Rather than hire a professional videographer, the foundation asked Hawryschuk to film and narrate the videos based on his teaching and industry experience, in-depth knowledge of the role of each trade, and awareness of health and safety practices. Then there was the believability factor.

"We wanted the videos to feel more real and be more authentic."

As Canada's largest condominium developer and BOLT's founding sponsor, Tridel allowed Hawryschuk access to several construction sites to ensure he could film the



BILL HAWRYSCHUK PHOTOS

Rebar work in progress at a construction site. The Careers in Construction video for this trade shows what reinforcing rod workers do in their daily routine.

videos at different stages in the construction process, she points out.

Using a GoPro digital camera, Hawryschuk took what he describes as "shoulder to shoulder" images of the trade workers, while making every effort not to interfere with their work or that of the other site workers. The goal was to show what they do and illustrate the complexities in the construction process.

In an interview, he acknowledged the onsite help extended by construction members, such as George Brown graduate Deltera site coordinator Adrian Castellani, to obtain up close images. It wasn't all clear sailing, however. Some trades didn't want to be filmed and there were days he couldn't obtain the images needed and would leave sites empty-handed.

The whole process from first filming to final editing took about a year, says Hawryschuk, whose passion for photography began in high school when he had a part-time job editing 16-mm film for the Toronto Public Library.

Before going 'live' with the videos, the foundation shared with them construction industry professionals to obtain their opinions on the content and accuracy, says Chakarova.

"We received unanimous rave reviews, with a popular comment of 'I definitely learned something' about the different trades than their own."

The videos are now available on BOLT's website (boltline.org) and youtube channel and the foundation intends to distribute them as widely as possible, she says.

At some point the foundation will be assessing the success of all five videos and making a determination on whether further videos on other trades should be produced, says Chakarova.

"Research shows that youth with access to good career information make better career decisions. It also shows that youth exposed to construction careers are more likely to pick a career in construction," says Andrew Parisier, vice-president at RESCON, in emphasizing the importance of the videos.

OAA establishes equity, diversity and inclusion education program

DAN O'REILLY
CORRESPONDENT

In what may be a first for any architectural regulatory body in Canada, the Ontario Association of Architects introduced a mandatory equity, diversity, and inclusion education program earlier this year.

Delivered by Turner Consulting Inc., the program is comprised of a set of three independent one-hour education webinars—although members only need to take one to earn a continuing education credit.

Specifically tailored to meet the requirements of the architectural profession, the webinars include one titled Understanding and Minimizing Unconscious Bias in the Hiring Process. The speaker is Turner Consulting owner and principal consultant Tana Turner, a researcher, consultant, and social justice advocate. She is also conducting a seminar on The Business Case for Equity, Diversity, and Inclusion.

The third webinar is on Human Rights in the Workplace and the speaker is Brenda James, a senior practitioner in human resources and employment equity for the past three decades and a former federal government public servant.

Asked to provide a brief outline of the objectives of each, Turner explained that Human Rights in the Workplace covers the obligations of employers and employees under the Ontario Human Rights Code. Understanding and Minimizing Unconscious Bias in the Hiring Process will be of par-

ticular relevance to small practices with small or no human resources departments.

As for the business case webinar, Turner notes some firms may understand that addressing the issues of equity, diversity and inclusion is: "the right thing to do, but not necessarily the smart thing to do."

In a province as diverse as Ontario, it just makes business sense to capitalize on the talents and skill sets of all potential employees, she points out.

Offered every two weeks, the webinars have been attracting a large audience. One webinar peaked at 400 viewers, says Turner.

Every licensed member, and that includes all of the province's architects, non-practising architects, and licensed technologists, must take one of the webinars before June 30 of next year.

"Participating in all three in all three would be even more valuable," says OAA president and Toronto architect Susan Spiegel.

A 2019 membership survey which revealed that 30 per cent of respondents had experienced harassment and bias in the workplace was the genesis for creating the seminars, says Spiegel.

"This number wasn't specific to any gender or any one factor. The issues ran the full spectrum of possibilities from gender bias and sexual harassment, to race and religion, and age and appearance biases."

Similar concerns about discrimination were further

shared by participants in the OAA's Equity, Diversity, and Inclusion Roundtables in late 2020. Examples ranged from aggression to outright harassment, to differences in how people were treated with respect to career advancement or salary, she says.

As the OAA's mandate involves regulating the practice of architecture in Ontario to protect the public interest, it has a duty to investigate disgraceful, dishonourable, or unprofessional conduct that may contravene the Architects Act.

But it can only investigate known incidents, and most harassment and discrimination go unreported because of fears "over potential backlash".

However, one of the ways is trying to address equity, diversity, and inclusion imbalance in the architecture profession is this new requirement for its continuing education program, she says.

As for how the courses were created, Spiegel explains that OAA staff was instructed to search for an educational provider in October 2020 and that search eventually led to signing an agreement with Turner Consulting this past May. The first webinars were launched in June.

Since each session has live question and answer periods, the information disseminated becomes shaped towards the needs of the architecture profession, she says.

Approximately 25 per cent of the OAA membership has met the requirement for participating in at least one hour of the accredited programming. More than 10 webinars have been conducted, with more than 1,200 registrations.