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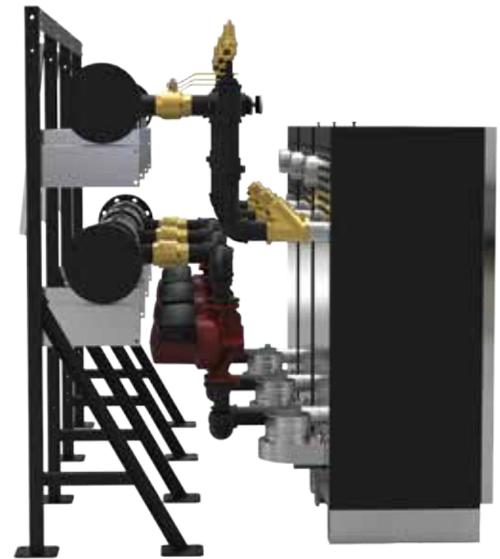
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ON THE COVER

The Hagwilget Bridge crosses the Bulkley River as you leave New Hazelton heading to Old Hazelton. The original bridge was constructed by the Wet'suwet'en First Nation and was a wobbly structure of wooden poles. Two additional crossings were constructed before this bridge was built in 1931. Many of us travel various parts of the school districts throughout B.C. Some short but others can range from three to six hours in one direction. Use these times to enjoy what you see around each corner. PHOTO COURTESY OF CHUCK MORRIS.



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MESSAGE FROM THE EFMA PRESIDENT

Archie Stogianos



Thanks to all for the support received this year. I look forward to my second year as EFMA President and the ongoing collaboration ahead. The energy was electric at the 57th EFMA Conference! From a bustling crowd to a fully booked exhibition space, the anticipation leading up to the event was just a glimpse of the incredible turnout we witnessed. Every exhibitor spot was snapped up, creating a vibrant hub of activity and innovation. The courses and sessions were nothing short of impressive, offering valuable insights and knowledge to a diverse group of delegates, including a significant number of first-time members.

The evolving ambition of our association is a positive reflection of increased member engagement in zone meetings and workshops. This year’s workshops offer valuable learning opportunities for both new and seasoned members. One key insight is that the future of education involves not only reimagining physical spaces, but it also requires a blend of creativity and precision to integrate innovative designs, such as collaborative learning environments, into the traditional structures of schools.

Considering the future of our educational spaces demands both ingenuity and exactitude. While some experimentation with “open-air” designs has occurred, the fundamental physical structure of schools has remained relatively unchanged for decades. It’s inspiring to note that some innovative schools are now integrating traditional classroom designs with dynamic outdoor learning environments, fostering a holistic approach to education that embraces the benefits of nature and collaborative spaces.

Active involvement of students, teachers, administration, and parents right from the initiation of the planning process is vital. Collaborating with all key contributors guarantees a wealth of ideas and perspectives, facilitating the development of a universal design that resonates with the entire community.

This year has seen an outstanding effort from our executive team. Amidst busy work schedules and family commitments, each member has contributed significantly to ensuring smooth operations. My heartfelt thanks to everyone for their unwavering commitment and hard work.

Looking ahead, I’m eager to witness the unfolding of an inspiring conference and the opportunities it will bring for learning, collaboration, and collectively shaping the future of education. Here’s to continued growth and success for the EFMA community. ■

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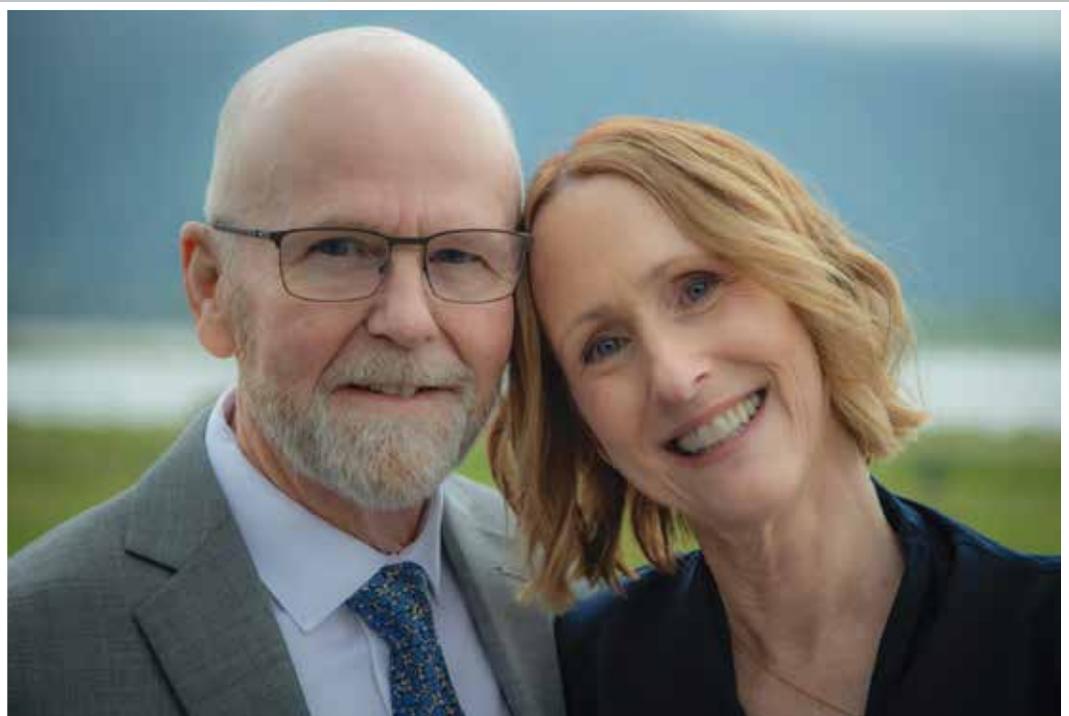
Happy Retirement 2022/2023

A huge congratulations and best wishes to our EFMA members retiring this year!

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MESSAGE FROM THE MINISTER OF EDUCATION AND CHILD CARE

Rachna Singh

It's that time of year again when families, staff, students, and all of us in the education sector are excited and busy with various projects and assignments. This Thanksgiving weekend I am incredibly grateful for the work you do every day to ensure students enjoy a safe and welcoming learning environment in our B.C. schools.

I want to acknowledge those impacted by the recent wildfires that devastated parts of the province over the spring and summer and for some of you, even into the beginning of the school year. Your tireless work, resilience,

cooperation, and partnership has been an example of true leadership in our communities and within your school districts. I know that both emergency preparedness and building a sustainable future are on the minds of many school district leaders, and I look forward to collaborating with you to advance that work.

B.C. is booming, which brings both exciting opportunities and some challenges. In the past two and half years, nearly 350,000 new people have moved to the province. Visiting schools throughout the province and in my home

community of Surrey, I understand there are enormous demands placed on some school districts and facility staff to manage the influx of families and students.

To meet these demands, we are partnering with local municipalities and districts to find ways to innovate. We have taken several actions to deliver classrooms faster. This includes shortening the business case for major school projects by one year; acquiring urgently needed land for schools early; and helping school districts establish project offices to further help manage multiple capital projects, resulting



in timesaving efficiencies, especially in fast growing school districts.

With the Province's \$3.4 billion in designated funding over the next three years, school districts also have an opportunity to build and improve schools that help support 'CleanBC' climate targets, manage extreme weather events, and address the needs of local communities with built-in services, such as child care.

Our government is expanding new spaces for much needed child care, including focusing on child care on school grounds and helping with the cost of before- and after-school child care.

Since the introduction of ChildCareBC in 2018, the Province has invested \$585 million to support the creation of new licensed child-care spaces. Through space creation initiatives, including the ChildCareBC New Spaces Fund, more than 32,000 new licensed spaces are funded with more than 13,000 already operational.

All these investments will dramatically improve the lives of families, as we strive to make B.C. a better and more affordable place to live for us all. Schools are the centre of our communities, and school

districts are playing a lead role in integrating child-care spaces on school grounds - it just makes good sense for families and kids.

I want to end with a note about how thankful we are for the work school districts are doing to expand existing school meal programs this year, or build new ones where needed. Our government's Feeding Futures program is a historic investment in B.C. school foods, and I am so proud of our partnership with you, your boards of education, your

staff, and communities. Together, we will ensure that all students are well fed and ready to learn.

Facility managers and operational staff play a crucial role in making new and improved schools a reality for communities, in addition to the daily work done to help make our schools safe places where every student feels accepted and can thrive. Thank you for your efforts. I look forward to continuing this work with you, this year and in the future. ■

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2023 CONFERENCE IN REVIEW

Honouring the past, treasuring the present, shaping the future

BY GLENN MILLER, EFMA BC EXECUTIVE DIRECTOR



EFMA Executive 2023.

I think it is fair to say that over the past 57 years there have been numerous changes in many peoples' work life, and more specifically, our EFMA members' work life. However, one thing that has not changed over the last five decades is the absolute commitment, support, and recognition of our work as Educational Facility Managers here in British Columbia.

On May 31, 2023, we commenced our 57th Annual Conference and Trade Show once again held in Penticton, B.C. With 186 Delegates, five Life members and 247 Associate members it was time to go to work.

And here is what we did!

As part of our Educational Program, the first two days of the conference represented two days of Professional Development workshops designed for EFMA

members and SSABC professionals.

The topics at this year's Professional Development sessions were: Attendance Management presented by Harris & Co., Psychological Health and Safety Certification Program, Wellness Works Canada.

In developing our Pro D program this year, our Conference Planning Committee and Executive looked closely at the members feedback and comments on what was important and relevant to them in their everyday work. As a result, they created a program that really hit the mark with our members this year especially as it relates to post-COVID challenges and the realities of today.

Tuesday evening was the President Reception held in the Penticton Conference Centre. President Archie Stogianos welcomed a full room of

EFMA members and partners, and SSABC members and guests. Archie expressed his appreciation to all our members for their extra efforts and patients over the past year in keeping our schools safe, clean, and in good repair. WELL DONE! In keeping with honouring our past, President Stogianos introduced our EFMA Life Members that were in attendance that evening and throughout the conference. Archie introduced our current Executive Members, Molly Shipowich, Executive Assistant, and myself.

Bright and early on Wednesday morning began with registration for Members and Exhibitors followed by our Zone meetings and the election of a Zone Chair for each of the six Zones within B.C. A huge THANK YOU to all our Zone Reps for all the work you do and the effort you take

in keeping our Zones active and our members informed.

A very important part of our conference is the new member orientation. Of the 33 new members for the 2023 year, 18 members attended this year's new member orientation. Each new member was given a copy of our Code of Conduct which outlines what is expected of them as an active member of EFMABC. This session continues to be a great opportunity to introduce many of our Past Presidents and Life Members who each take a few minutes to share their stories and insight on how EFMA can help support and assist our members through Professional Development programs, workshops, zone meetings, Ministry-sponsored round tables, and working groups, etc. We also encourage our new members to feel free to contact any of our members and Executive anytime they have questions about the work that they do in their districts everyday. This really helps new members feel much more confident as they learn their new roles in school districts. Welcome all NEW MEMBERS and best of luck to each of you.

The fundamental purpose of our Annual Conference is to hold our Annual General Meeting and elections as required of us by the Societies Act of British Columbia. With a quorum established, our members conducted the business of our Association. To conclude our AGM was the election of the Executive for the 2023/2024 year. It was my honour to swear in our new Executive for the upcoming year. Congratulations!!!

The conference wrapped up on Friday afternoon with the always popular and appreciated Ministry



update. Our Ministry of Education Capital Management Branch has for many years provided our members with necessary updates and information that the Ministry has been working on and supporting districts with. It was particularly important this year that our Ministry partners made the time and effort to join us as our school districts and Ministry officials have faced many staffing changes over the past year(s) within the Ministry Branch and School District Facilities Departments. Your presentation

and our discussions were most valuable. Thank you kindly for your solid and continued support.

Our 2023-2024 Executive Planning Committee is now working on the 2024 Annual Conference and Trade show to be held in Penticton, B.C.

If you have any questions on becoming an active member of EFMABC please contact myself or view our website for details.

Mark your calendars for June 3 - 7, 2024, Penticton, B.C. See you all there. This will be "ONE FOR THE BOOKS"! ■

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BY ROD SWARTZENBERGER, PRESIDENT AEFAA

As I am writing this, another September has flown by. I am sure everyone else is likely feeling the same way!

At our spring conference I became President of AEFAA. I was then able to attend the EFMA Spring Conference representing AEFAA and it was a great experience. I was able to meet many new people and learn more about your organization. As we each work in our provinces, there is one thing in common and that is to have safe and well-maintained buildings to create a great teaching environment for students. Both organizations put in a lot of time and effort to host events that help all of us to grow

professionally. PD sessions, trade shows, round table discussions, and networking provides us all with the tools necessary to succeed.

This success is apparent in our organizations as we have been collaborating since the early 1980s to grow. We have built strong communication and networking together so that we may both succeed and learn from each other; therefore having the opportunity to pass that along onto our members.

AEFAA will be holding its 50th Spring Conference in May 2024. This is a great accomplishment and things like this don't happen without 50 years of member dedication. I was able to see that same level of

dedication and pride in EFMA when I attended the conference. From the friendships that were made, the table displaying all the pictures and history, and the stories I heard when in discussion with various members and the Executive team - there is pride in being part of our organizations. This is apparent by the dedication of our Executive teams, members, and vendors that attend our events.

I cannot express in words all the things that AEFAA has done for me, but I can say that the learning, networking, and friendships has allowed me to succeed. Being able to attend the EFMA Spring Conference only strengthened all three of those.

We all are dedicated to our jobs and organizations, and I am proud to be representing AEFAA as President going into our 50th year of our Spring Conference. It is great to be part of AEFAA but it is also great to see two organizations being able to collaborate and learn from each other as we all work to build and maintain schools for students and to provide great learning environments.

I want to wish the EFMA Executive Team, members, and all the vendors of your organization all the best and a successful 2023-2024 school year. ■

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Ian Heselgrave

Director of Operations, Comox Valley School District

The significance of adaptability, the strength of community, and the thrill of adventure. Ian Heselgrave, Director of Operations at the Comox Valley School District, draws from his aviation and operations backgrounds where he believes that success hinges on understanding people.

Before arriving in the Comox Valley, Heselgrave spent the initial two decades of his professional life in the air force, diving headfirst into the world of aviation immediately after high school. Those years were a whirlwind of excitement, but after twenty years he felt it was time for a change of pace. “It was great fun as a young person to live all over the country and travel all over the



world, but it’s a challenging life for a family.”

Seeking more stability, Heselgrave and his family settled in Comox in 1995 where he assumed the role of Operations Manager at the Comox Airport, arriving at a pivotal juncture in its history. “It was an interesting position because at that time, the airport was undergoing significant dynamic expansion and growth,” he says. “It was an exciting time to be a part of commercial aviation.” The expansion featured the introduction of new commercial flights from West Jet and the construction of a 40,000-square-foot terminal.

As Heselgrave was approaching nearly a decade in this role, he found himself again yearning for a change of pace when an opportunity in school districts opened its doors. “I remember thinking that the position looked interesting,” he says. “I had a conversation with a friend who is a school principal and soon after I found myself at the school board office having interviews.”

Embracing the shift from aviation to education, Heselgrave took on the position of Director of Operations at the Comox Valley School District in 2012. The Comox Valley School District is located on central Vancouver Island and includes schools on the Northern Gulf Islands. The district has 15



elementary schools, one middle school, three high schools, and two alternate schools that service more than 10,000 students.

He says it marked a remarkable transition from the fast-paced aviation industry to the nuanced, ever-evolving world of education. “The education world is its own unique animal; it adapts and shifts to the needs of the community,” he says. “While aviation focuses on providing an unforgettable traveler experience, our mission in education is to provide the best possible facilities for students to learn and teachers to teach.”

Beginning work at the school district presented some unique challenges and opportunities at the time. In 2012, the school district had a declining enrollment, a stark contrast to the growth Heselgrave witnessed in aviation. Then, from 2016 onwards, the district experienced a surge in student numbers, placing pressure on existing infrastructure where his team had to work tirelessly to accommodate this frantic expansion.

“We’re now in the top of growth in B.C. behind Surrey, Sooke, and Langley,” he says. “So, we

were converting spaces, adding portables, and working with our ministry partners surrounding expansions.”

Amidst these challenges, his team accomplished remarkable feats, including two large seismic upgrades and the construction of a new school that had burned down on Hornby Island in 2018.

“That school was the heart of the community,” he says. “The experience of working with the community and the Ministry, building a temporary school, and then rebuilding a brand-new school that would serve that community for the next 75 years was a really uplifting experience for as awful as it was.”

Heselgrave emphasizes the importance of community engagement as the district’s facilities serve the students, but they also serve as valuable community resources, hosting various events and programs that enrich people’s lives and well-being.

In his personal time, Heselgrave’s enthusiasm for an active lifestyle reflects his commitment to balance and well-being. He and his family are dedicated advocates for the great outdoors. Comox Valley provides the natural beauty for their adventures, which includes biking (road and mountain), swimming – his wife swims in the ocean year-round, hiking, and team sports such as hockey and soccer. His family also enjoys paddleboarding and kayaking in warmer months, and skiing on Mt. Washington in winter.

In a world dominated by screens, Heselgrave says he finds solace in the vast array of outdoor activities the Comox Valley has to offer. While

he emphasizes the importance of balance between the digital and natural worlds, he appreciates the contrasting experiences as it has helped pave the way for a rewarding career alongside some exceptional individuals.

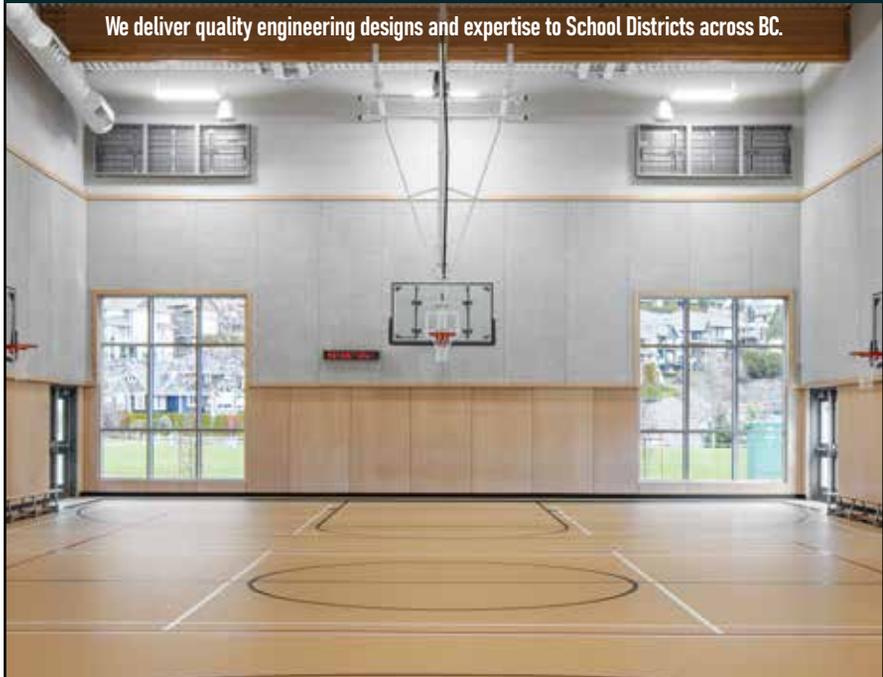
“It’s an interesting job and I feel lucky that I had this opportunity,”

he says. “There are so many interesting, intelligent folks working in the maintenance department with lots of good ideas, and I think it’s that sense of team that brings joy. It’s not all roses, but if we can be student centred, while fostering a culture of common purpose and respect, then it’s magic.” ■

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Aaron Foster

Manager, Minor Capital Sooke School District

Navigating the intricate blueprints of a career in architecture, Aaron Foster is using his experience in planning and design to help support the dynamic expansion of a burgeoning school district on Vancouver Island.

Aaron Foster, Manager, Minor Capital at the Sooke School District, first moved to Victoria after graduating from Carleton University in Ottawa where he studied architecture. He worked at various architecture firms in Victoria and consulted for several years when his two sons were born, opting to be the primary caregiver until they both began school.

When his youngest son entered kindergarten, Foster applied for a building technologist position at the Greater Victoria School District, transitioning from the private sector to the public sector and into a new rewarding field. “The skill set I had acquired in my previous career was very similar with the drafting, design, and project management requirements of this position at SD61” he says. Foster then moved into a project manager position at the district where he took



on more significant responsibilities, overseeing larger capital projects including new daycare centres and seismic upgrades at several schools. “I spent a very fulfilling eight years at the Greater Victoria School District doing some exciting and gratifying work.”

Foster says he became keenly aware of the growth and development taking place in the Sooke School District and says it was exciting to think about the possibility of being a part of that transformative process. “When I saw the posting for this position at the Sooke School District, I saw it as a good career opportunity that I just couldn’t pass up. It felt like a natural next step in terms of my professional trajectory.”

Sooke School District has approximately 12,900 students and serves the communities of Sooke, Port Renfrew, Metchosin, Highlands, Langford, and Colwood.

The decision was not without its reservations. “I twisted and turned about it quite a bit,” he says. “Regardless of the great career opportunity, I was really happy and comfortable at Victoria, and we had a great team. I didn’t want to break up the band!” Ultimately, the allure of joining SD62 led him to take the leap.

The transition to Sooke has brought about many new challenges and experiences. Foster describes it as “like drinking from a fire hose” due to the rapid growth, but he credits his new colleagues for making it possible. “We have a really supportive, high-functioning team that have made this transition as easy as possible,” he says. “It’s been an adventure with the pace and volume of work that we’re responsible for but the fact that we’ve got such a strong team here has given me a tremendous peace of mind.”

His tenure at the Sooke School District only began in May, so while Foster is still getting acclimated to the





new district, he has had no choice but to dive headfirst into the work required in this fast-growing district. Early project work has included the fabrication & installation of a new prefabricated classroom, and the relocation of five existing portable classrooms to schools requiring them to cope with the constant enrollment pressures. He has also assisted in developing an RFP and evaluating responses from design-build teams interested in assisting SD62 with two separate but simultaneous

modular, eight-classroom addition projects at two elementary schools in the core of the district.

Foster finds peace in his personal life by spending as much time as possible with family and friends. He enjoys playing and coaching basketball and enjoys spending quality time outdoors with his family and dogs. The proud father of two sons, aged 13 and 15, enjoys hiking and spending time on the stunning beaches and trails on southern Vancouver Island. ■

A Leaky Roof Lets In More Than Just Rain





Association of School Transportation Services of British Columbia (ASTSBC)

The Association of School Transportation Services of British Columbia (ASTSBC) has been the voice of the student transportation industry in British Columbia since 1965. We are an innovative, industry-leading organization who is committed to advancing the profession of student transportation. Our motto, "Your child's safety is our business," emphasizes our pledge to ensuring our industry excels in student safety.

ASTSBC heard from school districts about the challenges in providing comprehensive training to their bus drivers. In an industry focused on safety, this lack of training was leaving a big gap in the process. In 2018 the ASTSBC



came up with a solution to this problem. In efforts to make driver training cost effective for school districts, independent schools, and Band schools, the ASTSBC enlisted the help of Thinking Driver and developed a driver training program

including a school bus driver manual and instructor training to deliver the training program. Since the launch of the program, 39 instructors have been trained and qualified and over 200 drivers have completed all training modules and received their certificate. Many more are in the progress of completing training as over 1600 manuals have been distributed.

School districts will find that putting their drivers through this training program creates safe driving practices, helps drivers to build a rapport with students, and provides the tools to maintain discipline appropriately on the school bus. It will increase knowledge for transporting students with diverse needs, dealing with challenging students, and recognizing threats of violence which in turn reduces the school district's liability. This program has greatly enhanced the professionalism of student



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transportation and made this mode of transportation even safer than it was previously!

Roll ahead to 2023, ASTSBC is taking on the challenge of finding a solution to a new challenge that districts are facing. There is a serious driver shortage across Canada, and B.C. is suffering the same challenge. Districts are more often having to cancel runs or reduce their service due to driver shortages. One complicating factor in the recruitment of new drivers is the barrier of not having a Class 2 license. To address this problem, the ASTSBC has again retained Thinking Driver and developed a full Class 2 driver training program to train and prepare Class 5 drivers to pass a class 2 road test, with training specific to driving a school bus: The SBELT program (School Bus Entry Level Training).

The SBELT program runs from seven to 10 days, depending on class size, for a total of 43 hours. Training cost is \$350/day for one trainer plus travel, accommodation, and meal expenses. Up to four students can be trained at a time with one trainer. The day consists of half days of practical learning and half days of theory. A bus must be available onsite for the training and students must book their own ICBC exam and come to class with their Class 2 learners license and air brake endorsement. The program consists of theory training, in-yard around the vehicle, and in-cab (behind the wheel) training. The topics that are covered include an Overview of the Student Transportation Industry, Vehicle Components and Systems, Vehicle Inspections, Basic Driving Techniques, Professional Habits and Attitudes, Off-Road

Tasks and Maneuvers, and Legal and Regulatory. Some districts have already found success in recruitment through this new SBELT training program. As a discussion in your next ASTSBC zone meeting, you can find out real experiences and success stories from districts in your area.

The ASTSBC continues to search for solutions to challenges in the

industry, it strives to improve the standard of service, bring districts together in collaboration, and most importantly provide support in keeping our children safe on their journey to become our next world leaders. Your child's safety is our business. For further information or to access the ASTSBC driver training program, please contact info@astsbc.org. ■

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Teaching by design: New school reflects community

BY MELANIE FRANNER



As the first major capital school project since 1997, Quesnel Junior School represents more than a new educational institution for the City of Quesnel. It embodies the very character of the community itself, while also delivering 21st century learning in a leading-edge, energy-efficient design.

“The new school is very significant for us,” says Scott Thomson, Operations Manager and Project Manager, Quesnel School District. “Most of the existing schools date back to the 1960’s.”

Bricks and mortar

Construction on the \$52.2 million Quesnel Junior School began in summer 2020. The 550-capacity, two-storey facility for students in grades 8 and 9 attained a temporary occupancy permit in September 2022, with full occupancy taking place in September 2023.

The school was built on the existing site of the Maple Drive Junior School, which was demolished soon after the new school opened.



“It was a large site, but there were some complexities because we had to work around the existing school and the students,” states Thomson, adding that building during the pandemic also created some extra challenges.

Jen-Col Construction was the General Contractor for the project, which included the school itself, as well as new parking stalls, a pick-up/drop-off area for buses and a new neighbourhood learning centre with space to offer childcare and other local community programming.

Architectural achievement

Perhaps one of the more noted aspects of the Quesnel Junior School is its striking design – the result of several months of workshops and consultations with various members of the local community. “There is a huge First Nations influence in Quesnel,” says Justin

Dyck, Architect and Partner, Station One Architects. “Most of the flavour of the school design came from Indigenous consultations.”

Dyck points to the building’s main entrance as a nod to the architectural technology of the “pit house” favoured by the local nations. The construction method makes use of large, timber poles that tilt inward, creating open and airy spaces. “We tried to bring that element to the school through the use of angles and circular spaces,” says Dyck.

Examples of this influence can be found in the school’s entranceway and interior design. Upon entering the school, one is greeted with the dramatic “learning stairs”. The concrete, monolithic staircase connects the school’s two levels of learning, while offering spacious seating for a large, open area that can be used for everything from a drama stage, lunch spot, or informal



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gathering place. Additional smaller gathering spaces can be found under the two-storey “learning stairs”.

Another nod to the local nations is the use of water – in this case a smaller-scale, geographically accurate imitation cast in concrete of the two rivers (Quesnel and Fraser) that converge in the city. The depiction of these rivers spreads from the parking lot through the school and beyond to the outdoor learning centres.

The outdoor landscape itself is a reflection of the local nations in that it consists of medicinal and other plants native to the region.

Energy efficiencies

As the first major new school in the city since 1997, Quesnel Junior School also incorporates a 21st century learning design. This translates into studio wings that consist of four distinct pods, two on each floor. The

learning studios are all central to the “learning stairs”, but each can be opened to the adjoining learning studio to create one, large open space.

“The 21st century learning design is new to our district,” says Thomson. “The use of learning pods and open spaces is very exciting. Even the school grounds can be used as outdoor learning spaces. There is a real connection between indoors and outdoors.”

Sustainability is also a key component of the new school, with the construction being in alignment with LEED Gold Standards but focusing more on energy efficiency and reduced greenhouse gas (GHG) emissions.

“From a facility management perspective, I think the modernization of the HVAC system is amazing,” says Thomson, who cites the use of solar panels on the roof, air-source heat pumps and a south-facing solar wall on



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the gymnasium as examples of these GHG reducing initiatives. "It's a very energy efficient building."

More to follow

Already, the Quesnel Junior School has been very well received by students, residents, and educators alike. This includes members of the EFMA who attended last year's quarterly regional meeting, which was hosted by the new school.

"Everyone I take on a tour - be it a politician, a member of the public, or a colleague - is just amazed with the building," says Thomson. "They're so impressed that a small community like Quesnel now has a school like this. We're all so thankful for the government for making this happen."

And, it could be that Quesnel may soon have more to be thankful for - the Government of B.C. has just approved funding for a new school to replace the existing Carson Elementary school.

"We're just now starting the design process," concludes Thomson. ■



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Do you multi-task and does it work for you?

BY CHUCK MORRIS

With so many new people taking positions in school facilities, the following may be a reminder when tackling a boatload of work on short timelines. Many who have been doing this work for a number of years may well find this a good reminder. Whatever we do, we must be mindful of the stress in our lives. If the following helps you in anyway, run with it.

Multi-tasking on a computer with numerous open windows and competing priorities can be challenging, but it is a common scenario in today's digital age. To manage your tasks effectively and stay productive, you can contemplate the following steps.

Begin by identifying your most important tasks. What needs to be done immediately and what can wait. Can it wait? Sometimes using a task management tool or a to-do list to organize and prioritize your tasks can help. Many of us are faced with those competing schedules;

working on so many at the same time may seem to be the way to go.

Allocate specific time blocks for each task or categories of tasks. Use time management techniques like the Pomodoro Technique, which involves working for a set period (e.g., 20 minutes) and then taking a short break. I know we have tried numerous methods, but do they actually work? Did you try as hard as you should have?

Arrange your open windows logically. For example, group related tasks or applications together. Use virtual desktops (if your operating systems supports them) to organize different sets of applications.

Turn off notifications for non-essential apps. You may want to consider using website blockers or focus apps to prevent distractions.

Have you tried to learn keyboard shortcuts for your

operating system and applications? This can save time and improve efficiency.

If possible (and I know this is not always possible), delegate tasks to others or collaborate with colleagues to share the workload. Of course, in our world those staff are usually very busy as well, struggling at times with their own workload!

Another method that helps in some situations is to set specific time blocks for checking your email, meetings, and deep work. Stick to these schedules to avoid overloading yourself.

Limit your frequency of checking your email. I know it is hard to do and I have that habit, especially when one receives over 100 per day! Designate specific times for checking and responding to emails.

Regular breaks are essential for maintaining focus and preventing burnout. Use these breaks to clear your mind or to get up and stretch.

Consider using task management software such as Asana, Trello, or Todoist to keep track of your tasks and deadlines.

Communicate your availability and priorities to staff

and others to avoid conflicting tasks and expectations. Periodically review your tasks and priorities. Adjust your schedule as needed to accommodate changes.

Mindfulness techniques help you stay present and focused on your current task while reducing stress and anxiety with multitasking.

Whenever a task requires your full attention, focus on it exclusively. Multitasking can reduce the quality of your work. Do not over commit. Be selective about the task and projects you take on.

If you are consistently overwhelmed, seek support from colleagues or your Manager/Director. They may be able to redistribute tasks or provide additional resources. You may be in a position where you have the authority to request additional help for a temporary period of time.

After a hectic day of multi tasking, take a moment to reflect on what worked well and what did not. Use this feedback to improve your strategies in the future.

Remember that multitasking can reduce your overall productivity and increase stress if not managed effectively. Whenever possible, prioritize single tasking to ensure the highest quality of work. ■



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HVAC design for B.C. schools – Getting ready to be electrified

BY ROY COLLVER



Air-to-water units installed at the Ucluelet Secondary School (SD #70).

For 35 years I have championed properly controlled gas-fired condensing boilers and low temperature hydronics as a practical way to save money and energy while reducing the carbon footprint of educational facilities. If climate change had been taken more seriously 40 years ago as condensing gas equipment developed, we may have been able to avoid the worst of what is coming our way. Alas, assorted weather-related disasters around the world over the last few years have made it clear that decarbonizing buildings should be moved up the priority list to NOW. The September world surface temperature measurements are just in. Climate scientists are shocked, and getting really worried as the increases have gone off their charts.

Mechanical engineers faced with the daunting task of finding practical ways to quickly replace fossil fuel equipment have recognized electrification of HVAC systems as the most practical path, with heat pumps of various types being the most efficient. For new construction, this will be relatively easy – most older buildings, not so much. How we are going to pay for all of this upgrade activity is a whole other discussion. Although there has been no mandate yet to do so, it is clear that the province is going to have to drive electrification by stepping up with a plan to make it a prime goal for school districts. All levels of government will need to establish funding models that will allow action within a timeframe that respects the seriousness of the situation.

We do have two big advantages in B.C. when it comes to electrification: 1) much of the province has a relatively benign climate which translates into modest heating and cooling loads; 2) electrical generation in B.C. is already very low carbon with many practical options to increase grid capacity by adding green renewable sources. We have to get this going without delay.

Regardless of fuel source, the number one goal for any facility should be to provide a building envelope that minimizes the heating, cooling and ventilation load on the HVAC system, which eases transition to the most efficient lower temperature difference solutions. New buildings should be designed to net zero – full stop, no excuses. Architects and engineers have been developing solutions and designs towards this goal for decades and are ready to go whenever the building industry requires it. The Energy Step Code Council in B.C. is further working the problem, by requiring the adoption of net-zero, energy-ready buildings by 2032. These initiatives are intended to help kick-start the training, knowledge, and compliance procedures the construction and renovation industry will need to make it happen.

By minimizing loads on HVAC systems, smaller heat pumps can operate at cooler heating temperatures and warmer cooling temperatures, allowing them to achieve higher operating efficiencies and longer, less energy-intensive run times. This applies to all climate zones and all heat pump types, air-to-air, air-to-water, and geo-exchange. Overall system design needs to consider



Water-to-water units installed at the Royal Bay Seconard School in Colwood (SD #62).

the building load profile. Peak heating loads become more challenging in our colder north and east climate zones. Cooling loads are more of a mystery these days, with weather data needing to be regularly revised as climate change starts to bite down harder. Mechanical consultants and architects are watching these numbers carefully through researchers such as ASHRAE and Environment Canada to see where changes are happening.

Most of the OpsTalk readership is dealing with aging building fleets, so ways to retrofit older buildings will be of most interest. To get started, it is critical to have an Energy Modelling professional do a thorough analysis of existing structures. Original plans and drawings as well as any past upgrade information should be supplied. Architects and structural engineers will need to weigh in as well. Ventilation and enhanced air filtration became a hot button issue due to the COVID-19 pandemic, and we are all still working that problem through. Now, intense climate change and HVAC electrification issues are keeping us awake at night.

Really old buildings (1970's and earlier) will be a major upgrade challenge. Heating loads are high, existing heating equipment was designed for high temperatures, cooling is likely non-existent, and ventilation is by opening windows. Until higher temperature heat pump equipment is developed, you are looking at what is called a "deep retrofit", and will likely need to tear the whole building apart to upgrade insulation in walls and roof, replace windows, and replace mechanical equipment including boilers, roof top equipment, furnaces, water heaters, pumps, and control systems.

These steps may reduce HVAC loads enough to negate the rest of this list including, replacing, upgrading, or adding piping, ductwork, heat terminal units, electrical, ventilation, and lighting.

A very daunting list, and we don't have enough answers yet, so our best advice for now would be to look at the not-so-old buildings where there may be lower-

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Intake unit at Bowser Elementary School (SD #69).

hanging fruit and wait for heat pump retrofit equipment to catch up. Hybrid systems using heat pumps for base load and electric resistance or gas-fired equipment for peak loads can also be an option where there is no other choice, so don't get rid of your condensing boilers quite yet. There are lots of bright minds right now looking at new options for older building green retrofits, so many more practical solutions may be available soon. None of us want to lose our beautiful old historic buildings just because we didn't try hard enough, but we won't be able to win them all.

With newer building retrofits, energy modelling results need to be combined with the current mechanical system details to be able to map a path forward. Most larger facilities in the province use hydronic heating systems for heat distribution because hydronics is the most efficient way to move heat around a structure. You need to know what the REAL load is, so you can compare it to the capacity of the existing equipment. Finding out that your existing radiators, fan-coils, unit ventilators, etc. can work at lower water design temperatures (120°F / 50°C) is very good news when replacing boilers with source-to-water heat pumps. If your equipment is oversized (likely), and you are currently using condensing boilers, then your existing system may already be in the sweet spot for heat pump conversion. Just yard out the existing boilers and connect your source-to-water heat pump(s) to the existing piping. Maybe yes, maybe no.

This topic needs to be examined based on existing technology and upcoming new developments, but here are a few points to ponder. Many larger commercial heat pumps for hydronic systems can't be simply shoe-

horned into existing boiler rooms. We are having good results with air source-to-water heat pumps, but these units need to either be outside on the ground or roof, or in a mechanical room with an external louvered wall or ducted intake and exhaust air. Water source (geothermal) heat pumps can be installed into existing boiler rooms, but you need to pipe the water from a geo-field into the boiler room and back. Larger heat pumps can also be quite noisy, but manufacturers are working on that problem too.

Fuel-fired rooftop heating cooling units can more easily be replaced with like-for-like heat pump units, but electrical service and distribution wiring as well as ductwork upgrades may be necessary. When it comes to domestic hot water production, we have heat pumps for that as well and they will normally be a fairly easy retrofit.

If any manufacturers, reps, or engineers reading this have a machine, system design, or control not mentioned, please bring it on! We are going to need all hands on deck and every new idea and invention we can find to be able to pull this off. The problem right now is that no one knows quite what this is going to look like, but it's going to be a big deal and ideas need to be aired out now, before school districts get sucked into spending huge amounts of money on stuff that just might not work very well. The talent, experience, and knowledge in BC EFMA is absolutely amazing, and I am sure your collective minds already have many answers. Please do us all a favour and lay out your ideas and conclusions, then send them to me in a note so I can develop this further. ■



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High-tech solutions can help everyone breathe easier

How air purification plays a vital role in the health and safety of students and staff



Indoor air quality continues to be a hot topic as Canadians are more aware that viruses can spread easily through droplets and aerosols. That puts people in enclosed spaces at risk, especially in environments like schools and other education facilities.

Although COVID-19 has been top of mind in recent years, there are other good reasons to worry about indoor air quality. Off-gassing, dust, smoke, and mould can all affect indoor air quality and, ultimately, our health. And climate change has led to higher levels of allergens and other pollutants that can infiltrate a building's air, leading to a rise in allergies and asthma.

Concerned employers have a duty to protect their staff members' and students' wellbeing. What's more, the benefits of an investment in clean air are twofold. Cleaner air can have a positive impact on productivity and health. And taking a proactive approach to hygiene can help alleviate more strain on schools and better support the health and safety of students and staff.

Why the concern?

Canadians spend up to 90 per cent of our time indoors according to Environment and Climate Change Canada, and that has made indoor air quality a focus for many of us, according to an April 2023 survey of more than 1,500 Canadians.

The survey – conducted for Dyson by market research firm Leger – found three in five Canadians were concerned over the quality of the indoor air they were breathing, and 18 per cent admitted to being 'very concerned'. The report also found that:

- 68 per cent of Canadians find it very important to have an air purification system in educational systems.
- Approximately 38 per cent said their concern with indoor air quality had increased because of COVID-19.
- Residents of B.C. and Ontario were most likely to say they were more concerned about air quality due to COVID.
- An air purification system topped the list of solutions that would make Canadians feel most confident about indoor air quality (27 per cent). Other solutions included regularly changing air filters in HVAC systems (26 per cent), natural ventilation (25 per cent), regular cleaning (25 per cent), and using plants to naturally filter air (20 per cent).

Furthermore, Dyson's 2021 washroom and air quality survey found that 82 per cent of Canadians believe air purification is important in indoor working environments, while 83 per cent believe it is important in schools, colleges, and universities.

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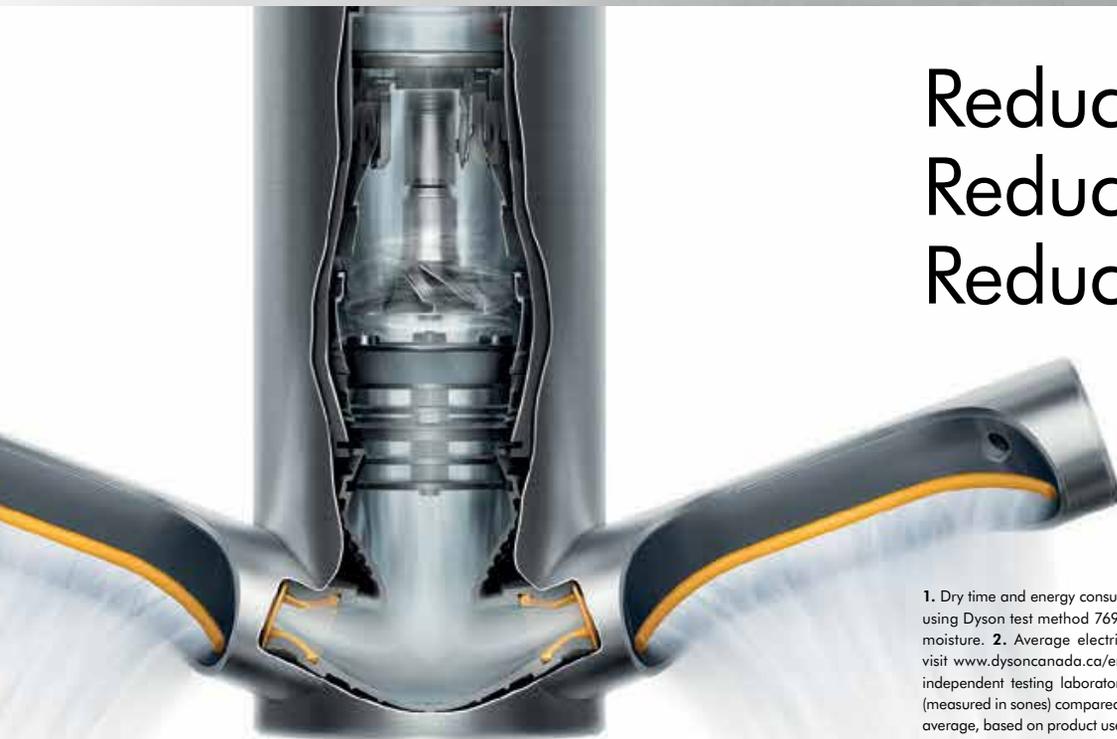
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1. Dry time and energy consumption calculated for Max mode. Dry time was determined using Dyson test method 769 based on NSF P335 to a measurement of 0.1 g residual moisture. 2. Average electricity price \$ 0.1/kWh as of May 2019. For calculations visit www.dysoncanada.ca/en/calcs 3. HEPA filter tested to IEST-RP-CC001.6, by an independent testing laboratory, under prescribed test conditions. 4. Average loudness (measured in sones) compared to Dyson Airblade™ hand dryers. 5. Vs paper towel industry average, based on product use over 5 years and weighted averages of individual countries of use. Dry times for Dyson product evaluated in Eco mode to 0.1 g remaining moisture. Average electricity price \$0.1/kWh as of April 2021. Assumes 200 washroom uses per day.



High-tech solutions can help everyone breathe easier

While many buildings have built-in ventilation systems, it can be difficult to know how effective these systems are at removing pollution from the air, especially when it's unseen. Coupled with increased awareness of indoor pollutants, visible purification technology can help occupants feel safe and confident in indoor environments.

Portable air purifiers don't just enable everyone to breathe easier, they can help people feel safe and confident in the indoor air quality. That said, not all portable air purifiers are created equal. Consider the following when choosing a system:

- The size of your space and the volume of air you need to filter. Dyson's quietest, most powerful air purifier yet – the HEPA Big+Quiet Formaldehyde – was specifically designed for commercial spaces. It projects purified air throughout spaces as large as 1,000 square feet – almost eight times more than an

average air purifier is capable of.

- Your current air quality issues. Old buildings may be dusty and commercial products, such as cleaning chemicals, industrial carpet, and flame retardants, etc., may off-gas volatile organic compounds and formaldehyde. The Dyson Big+Quiet has a HEPA H13 grade filtration system that can capture 99.97 per cent of particles as small as 0.3 microns – meaning it captures dust, allergens, and viruses, including COVID-19 virus. Even better, many Dyson purifiers have a catalytic filter to trap and destroy formaldehyde continuously, breaking it down into carbon dioxide and water.
- Whether the system you're considering is environmentally sound. All Dyson technologies are engineered to help organizations achieve their sustainability goals. The Dyson Big+Quiet operates energy efficiently using low pressure airways, and is long-lasting, with a HEPA filter that lasts up to 10 years. The machine is also built using 28 per cent recycled materials.
- How it works with your current system. The Dyson Big+Quiet was designed to complement existing HVAC systems and provide cleaner purified air throughout public spaces, such as schools, offices, retail spaces, and businesses.

Armed with the right information and data, schools can make informed choices about how to keep their students and staff safe. Technology, such as portable air purifiers, has a role to play in ensuring better hygiene in schools for students and staff alike. ■

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GripStrips® require very little maintenance due to their durable design and an annual inspection is always a good idea. If a strip requires replacement, simply remove and replace it quickly and easily. The strips are

reusable; when you need to stain or replace your stairs or ramp, just remove the strips and re-install when ready.

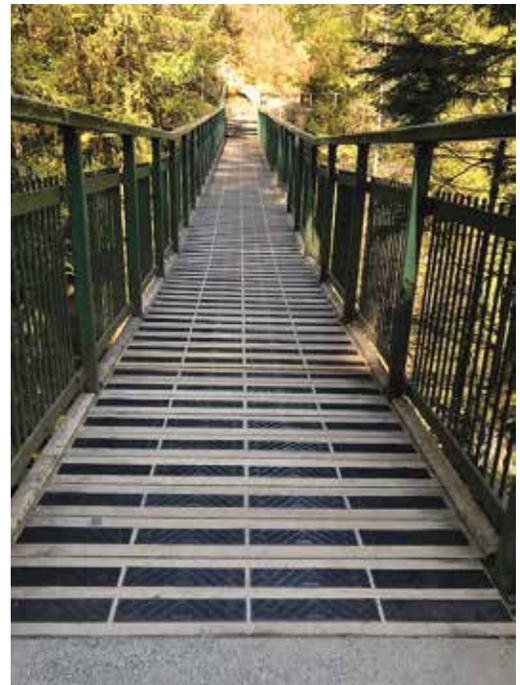
Established in 2007, GripStrips® were first available in retail stores within B.C. Now, they are available within Canada's largest building supply retailers and across North America. GripStrips® are the standard for parks within Greater Vancouver Regional District and used by many cities and municipalities within Metro Vancouver. With millions of strips sold, GripStrips® are specced, recommended, and purchased by engineers, property managers, school districts, businesses, residential customers, and contractors.

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MENTORING STAFF

BY CHUCK MORRIS

Remember back to that time when your children were old enough to help you in a meaningful way (all of it is meaningful) and you would take them aside to show and teach them a few things about what you were doing? The light in their eyes as they began to ‘get it’ would resonate with you. After that, in most cases, they would have an increased interest in knowing more. Never a burden, you would gladly continue on this path and watch them grow.

Do you know your staff in the sense that you are aware of what they do and notice whether there is ambition there or not? Most staff have some interest in knowing more about what they do, and you can help them. Just like you used to do with your children, adults like to know and grow. Knowledge is important and powerful.

There is nothing to hide so if you can, why would you not help out staff? Talk to them and actually listen so you can understand what they have to say.

Fashion your responses in an easy-to-understand way without overloading them. They will listen and appreciate what you have to say. Lead them to positioning themselves for a broader understanding of the work; the operation and why all of us are here.

There are varieties of methods you can use to find out what makes your staff tick. One district that I worked in set up individual meetings, calling them ‘Meet the Director’. It was very effective and allowed me to understand where they came from and, at the same time, give some of my background to allow them to gain some knowledge of who I am. I spent an hour with each and learned a lot about them and I hope they learned what they needed from me. There is a myriad of other ways to achieve similar results. However, if you do not start somewhere, you will be missing a great opportunity to help each of them.

You would be remiss if you do not assist your staff

from time to time. You do not hold the secret to the world, so sharing your information is important. It is not a secret, and you should not be afraid of letting them know what you do or what a manager does in another department. Allow them to gain some insight into what is going on higher up the chain of command. If they strive to learn more, that is great. You as the leader helping to train them is a good thing! If they are bound by a union contract and job classifications, they can still learn.

When I notice people learning, I would sometimes go that extra mile outside of what has been the normal practice (but still within their classification). Doing tasks such as a little more paperwork, planning the day ahead, and reviewing again in the morning in case new information came in overnight etc.

Help them out. Do not overburden them, but watch and coach as you see fit. Be sure to share this; do not only focus on one staff member as most people want to have an opportunity to broaden their horizons. ■

“A mentor is someone who allows you to see the hope inside oneself. A mentor is someone who allows you to know that no matter how dark the night, in the morning joy will come. A mentor is someone who allows you to see the higher part of yourself when sometimes it becomes hidden to your own view.”

(QUOTE BY OPRAH WINFREY)



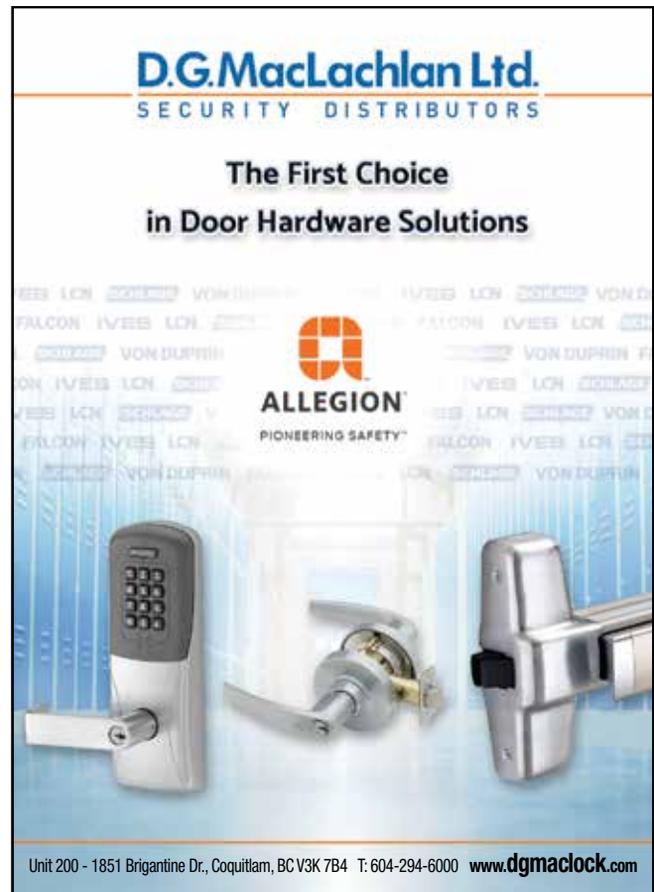
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ASHRAE 2023 UPDATE: A new and better way to ventilate classrooms

BY MURRAY WARD, GREENLIGHT CANADA



A high wall-mounted HEPA/UV-C Air Purifier, one of three in a smart classroom system.

A new norm is coming for ventilating classrooms, and it should be welcomed by everyone.

This new norm is in response to new pathogenic viruses and now wildfire smoke that are causing an unprecedented assault on the safety of our indoor air. And there is no reason to think this won't keep happening.

Multiple health science and engineering expert bodies have convened since the beginning of the COVID-19 pandemic and come to a common conclusion. Ventilation rates of our indoor spaces need to go up very substantially!

Ventilation is the way polluted air gets diluted down to levels low enough to minimize the risk of infection. This has been known for over a century. The American Society of Heating and Ventilating Engineers (the predecessor of today's ASHRAE) published ventilation recommendations in 1895 intended to reduce disease transmission. While these recommendations found their way into laws in North America from the 1920s, over subsequent decades ventilation standards have been set at values generally much lower than the original ASHVE values. This occurred especially following the energy crisis of the 1970s. Having to heat and cool outside air for it to be comfortable indoors became much more expensive as energy prices soared.

Fast forward to this decade's health crisis. The COVID-19 pandemic has caused enormous personal, societal, and economic damage, much of which resulted from the closure of public buildings due to widespread perception (supported by considerable evidence) that they were high-risk environments for infection transmission. ASHRAE was encouraged by the US White House COVID-19 Response Team to take the lead in developing a new standard for the control of airborne pathogens.

In July this year, ASHRAE published its new Standard 241-2023 Control of Infectious Aerosols. While the standard will need to be adopted into local codes for it to become law in B.C., the 'new norm' it calls for is very apparent. This is especially true in two ways:

1. Ventilation systems need to have the capacity to supply much higher rates during times when the risk of the transmission of infectious disease is elevated, so for example during the regular respiratory illness season or during particular outbreak waves. For classrooms, the proposed rate is 40 CFM per person.
2. These ventilation rate values are specified in terms of equivalent clean air, whereas the regular ventilation standard rate for classrooms of 15 CFM per person was the amount of clean outside air. The 40 CFM per person rate can therefore be made up of clean outside air plus recirculated room air that has been filtered or treated to be as clean as outside air.

It is this second point that reflects the large paradigm shift of the new norm. It means that indoor

air quality (IAQ) objectives can be achieved without the penalty of increased energy costs. IAQ and reduced energy need no longer be conflicting objectives as they have been since the 1970s. This is the good news of the new norm and why it should be welcomed by everyone.

What does this all mean in practice for classroom ventilation systems?

In particular, it will normalise the use of in-room high-efficiency air purification systems. Earlier in 2023, ASHRAE published a document Design Guidance for Education Facilities: Prioritization for Advanced Indoor Air Quality. This provides practical steps that can be taken to upgrade schools' ventilation systems. For classroom level air cleaning it recommends "HEPA/UV machines" capable of 400 CFM on the fan speed setting with maximum acceptable noise (about 40 dBA).

This is one way that classrooms can easily be upgraded to help meet the requirements of the ASHRAE 241-2023 Standard. Two aspects of this method highlight the benefits of doing this:

1. It can result in large energy savings that rapidly pay for the costs.

Schools in B.C. have had to implement COVID-19 ventilation protocols that had them double ventilation rates of outside air (if this was possible and practical) and to run the ventilation systems for one to two hours before and after class - what was called 'pre-flush and post-flush'. These measures have resulted in very high additional energy costs which have had to be accommodated in

operational budgets. If, instead, the in-classroom 'equivalent clean air' systems are used for these functions, these energy costs can be saved, along with the associated greenhouse gas emissions.

2. The HEPA air filters are highly effective for removing wildfire smoke that finds its way indoors into classrooms.

This helps solve the dilemma faced if a wildfire smoke event coincides with a respiratory illness event, and the intake of outside air otherwise needs to be reduced to prevent the build-up indoors of wildfire smoke.

This winter, school districts can avoid paying the high additional energy costs and instead invest in high-efficiency in-classroom air purification systems. ■



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Making schools accessible

BY KATHY FISHER B.SC. (OT), CLINICAL EDUCATOR, REHAB TECHNOLOGY CONSULTANT, HME HOME HEALTH
ADDITIONAL CONTRIBUTIONS FROM MORGAN LOUDEN B.KIN, PRESIDENT, CAN-DAN REHATEC LTD.



As we strive for inclusivity and accessibility in Canada, it is important that we ensure that all children have access to schools. Not only is this a place for education, but it provides opportunities for a child's psychosocial skill development essential for building confidence and independence. Each child, regardless of their abilities, has a right to be treated with respect and dignity. Additional support may be necessary to assist students with access, caregiving, and learning challenges.

Creating accessibility awareness is the first step in ensuring that students with mobility and behavioural challenges can function in the school environment. How do students enter the building? How do they move between rooms and floors? What is necessary for the safety of students and caregivers in bathrooms? Are classrooms and workspaces suitable? How are students with mobility equipment safely evacuated in cases of an emergency? Can the building accommodate or be modified to provide the necessary spaces and are the costs of renovations realistic? These are some of the questions we need to consider when developing each student's care and learning plan.

When we are exploring accessibility within a school there are three primary considerations.

Client - What are their functional abilities, are they independent or do they require assistance in completing activities, and is their behaviour consistent day to day?

Environment - Is the building structure suitable for multiple clients with multiple needs, is it flexible for future changes, and can it meet the needs with changing students year to year?

Space - What is the size of the space, is it suitable for the purpose (bathrooms, changing areas, gym activities etc.) and does it allow for a student's privacy?

Before beginning any accessibility, modifications, or selecting specific equipment, it is prudent to start with early preparation and planning.

Entrances & Exits - Accessing the Building

Where an entrance is not at street level, often ramps are considered the first option. They however have inherent challenges. Is there appropriate space to ensure the length-to-rise ratio meets the building code? Will ramps become dangerous in inclement weather? Vertical platform lifts may be an alternative requiring less space, maintenance, and effort on the part of the user and caregiver.

Bathrooms - Space, Safety, Privacy

Bathrooms should be safe spaces to manage students' health and hygiene. Planning for bathroom set up must consider transfers to toilets and change tables. Where possible, ceiling lifts (or wall mounted options) require less space and risk to caregivers and are easily maintained. Floor lifts can be beneficial where



ceiling construction or cost may prohibit installation. Floor lifts can also be useful in case of a transfer or fall in other areas of the school.

Change tables offer a safe surface for changing or hygiene/caregiving activities. The height adjustable feature allows for a student's safe independent transfer and is critical in reducing risk of back injuries among caregivers.

Evacuation – Emergency Equipment

As part of an emergency preparedness plan, schools must be able to transport students with mobility issues to safe areas when elevators are not in service. EvacChairs can be used with students while reducing caregiver effort and risk to ensure compliance with evacuation guidelines.

Workspaces – Adaptive Desks for Access & Support

ERGOTables offer multiple desktop designs with angle and height adjustability to accommodate seating and mobility and communication equipment with the goal of optimizing a student's learning experience.

Access to education is a pillar of our communities across Canada. Therapists and access specialists (such as HME Home Health) should be essential members of the access planning team to ensure that students have the equipment and support they need to thrive in the educational environment. Together we can make change happen! ■



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Closing the gap: Addressing the trades shortage

BY CHUCK MORRIS

The shortage of certified building tradespeople is a growing concern in many regions, and there are several reasons for this phenomenon:

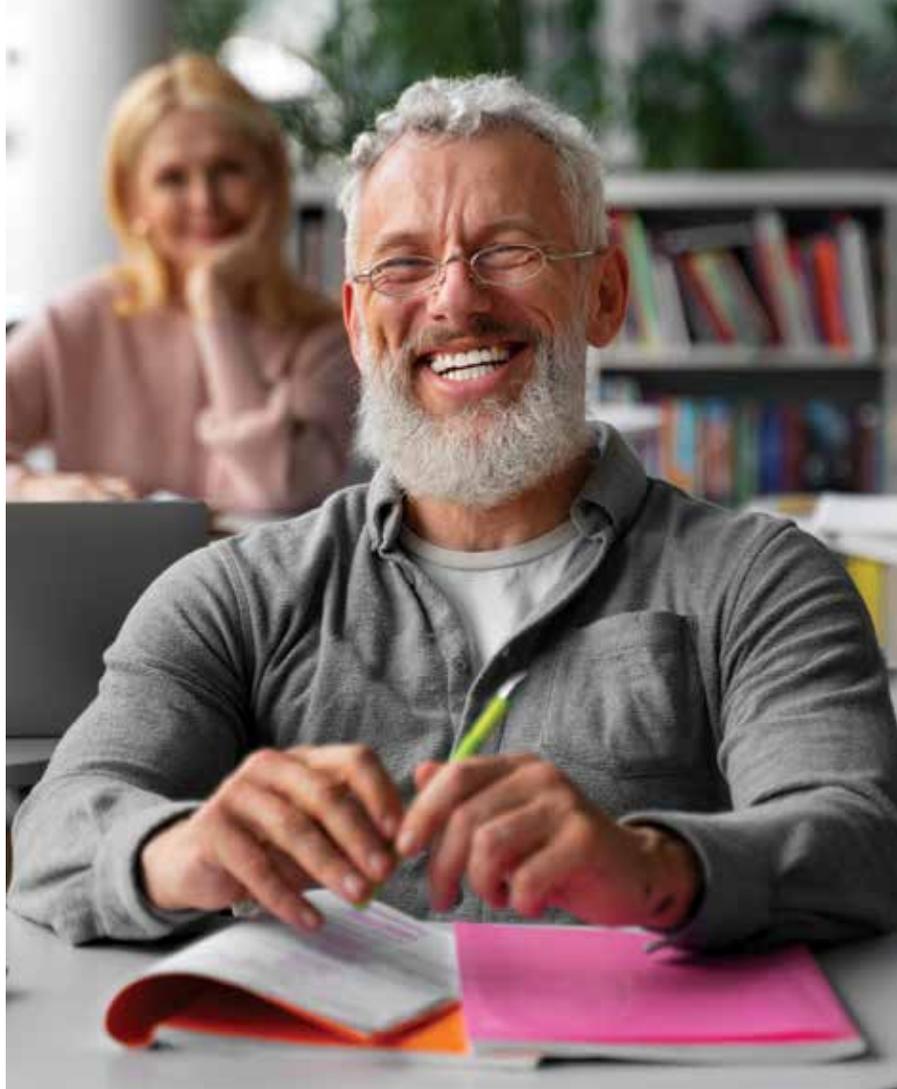
- 1. Aging Workforce:** Many older tradespeople are retiring, leaving a gap in the workforce. This generation is taking with them years of experience and knowledge.
- 2. Perception of Trades:** There has been a longstanding societal preference for academic degrees over vocational education. This has led to fewer young people considering trade careers, despite the potential for good wages and job security.
- 3. Lack of Apprenticeships:** The decline in apprenticeship programs has limited the number of new tradespeople entering the workforce. These programs are essential for transferring skills and knowledge to the next generation.
- 4. Workforce Development:** Many educational institutions and government programs have not adequately promoted or supported trade careers as viable alternatives to traditional four-year degrees.
- 5. Technological Advancements:** The construction industry is evolving with new technologies, and there is a perception that trades require a different skill set. Some individuals might be hesitant to enter the trades due to perceived barriers to entry.
- 6. Work-Life Balance:** Some people might be discouraged by the physical demands and sometimes irregular hours associated with trade jobs.

However, there are efforts to address this shortage and promote trades as a worthwhile career path:

- 1. Educational Initiatives:** Vocational schools, community colleges, and trade organizations are working to provide affordable and accessible trade education and apprenticeship programs.
- 2. Changing Perceptions:** Public awareness campaigns are aiming to highlight the benefits of trade careers, such as good wages, job security, and opportunities for advancement.
- 3. Financial Incentives:** Some regions offer incentives like scholarships and grants to encourage people to pursue trades.
- 4. On-the-Job Training:** Some companies are investing in on-the-job training and mentorship programs to develop their workforce.
- 5. Technological Integration:** The integration of technology into trade work is being emphasized to attract a younger, tech-savvy generation.

The shortage of certified building tradespeople is a multifaceted issue with economic, cultural, and educational components. Addressing this shortage will require a collective effort from educators, employers, and policymakers to make trade careers more attractive and accessible to the younger generation. Ultimately, a balanced approach that values both academic and vocational education is necessary to ensure a healthy and skilled workforce in the construction industry. ■

Life- long learning



Learning is an ongoing practice, or at least it should be for all of us. There will be opportunities coming soon through the EFMA Education Committee that will highlight a series of learning sessions. These will enhance your learning experiences and add to your knowledge allowing you to do an even better job and possibly opening doors (looking to be a Director one day)?

Continuous learning is fundamental for personal and professional growth. The opportunities provided by the EFMA Education Committee for learning sessions are invaluable in expanding your knowledge base, refining skills, and staying updated with industry trends. Engaging in such sessions not only enhances your current capabilities but also prepares you for future roles, such as becoming a Director.

Participating in these learning opportunities not only enriches your understanding but also broadens your perspectives, potentially opening doors to new opportunities and responsibilities. Building a strong foundation of knowledge and skills through continuous learning is a key factor in advancing your career and achieving your aspirations, like aspiring to be a Director.

Remember, each learning experience contributes to your personal and professional development, equipping you with the tools and insights necessary to excel in your current role and prepare for future career advancements. Embrace these learning sessions with enthusiasm, as they can indeed pave the way for your growth and success in your career journey. ■

Things to know about electrical operating permits

BY TECHNICAL SAFETY B.C.

What exactly is an electrical operating permit, and how does it differ from an elevator permit? These are common questions we get asked, and in response, our team of electrical safety officers has compiled answers to help building owners and managers better understand these types of permits.

What is an electrical operating permit?

Electrical operating permits are required to operate and maintain electrical equipment in accordance with safety regulations. This permit ensures that a qualified individual is responsible for your technical equipment and its safe operation, maintenance, and inspection. They also maintain records of the equipment and make those available to safety officers if requested.

If you have a Field Safety Representative (FSR) overseeing the work, you can conduct regular maintenance without needing to get multiple electrical installation permits.

Who is responsible for obtaining operating permits?

Generally, the building owner or operator is responsible for obtaining operating permits. They need to get the necessary permits before installing and maintaining electrical equipment or regulated

products. It's their job to make sure the equipment is well-maintained and inspected as required.

In some cases, the tenant or lessee may be responsible for obtaining the operating permit if they have control over their own space within the building. This happens when the owner is not responsible for that particular space, but the electrical equipment in it still requires an operating permit and must follow the rules. In those situations, the tenant or lessee must get the permit and follow the regulations.

It's important for building owners and operators to check with the appropriate authorities and seek advice from professionals, like an FSR, to make sure they meet all the legal requirements for operating permits.

What is the difference between an elevator operating permit and an electrical operating permit?

An elevator operating permit is specific to the elevator and its associated equipment installed after the elevator disconnect. It is obtained by the building owner or operator and ensures compliance with codes and standards. The elevator technician oversees compliance during installation, operation, maintenance, alterations, and repairs.



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On the other hand, an electrical operating permit covers the entire electrical system within the building or premises, from the main supply to all electrical distribution and equipment, including the elevator disconnect. The responsibility for obtaining an electrical operating permit lies with the building owner or operator and encompasses all electrical equipment and systems.

What happens if a building operates without an operating permit?

Operating without an operating permit is illegal and can lead to penalties, enforcement actions, increased liability, and higher insurance costs. Additionally, it poses a risk to the safety of building occupants as the building hasn't undergone proper inspections and approval for compliance with codes and regulations. This can create hazardous conditions.

Building owners and facility managers must ensure they have obtained all necessary permits and comply with applicable laws. Operating without a permit can have serious consequences, including investigations

and fines from authorities like WorkSafeBC, attention from law enforcement agencies, violations of federal laws like Bill C-45, insurance issues, and civil liabilities for property damage or personal injury.

What is a field safety representative (FSR) and how do I find one?

An FSR is a qualified and certified master electrician with expertise in code standards, the Safety Standard Act, and regulations. They ensure that workers conducting regulated work have the appropriate qualifications and report any risks to a safety officer. To find a qualified FSR, building owners can use our "Find a licensed contractor" tool, which verifies the contractor's license number, ensures compliance, and mitigates liability issues.

Ready to apply for an electrical operating permit?

Get more information and apply at www.technicalafetybc.ca/apply. ■

Does your building require an electrical operating permit?

An electrical operating permit can help you save time and money. This permit allows building operators to:

- Make minor alterations
- Relocate existing equipment
- Install new equipment
- Avoid applying for multiple installation permits.



Start your application today
technicalafetybc.ca/apply



Determination

BY CHUCK MORRIS

Positive psychology delves into determination as a positive emotion driving people toward action, leading to significant results like persistence and success. One such action is called motivational relevance, when a situation is relevant to a person's commitments and goals. (Wiki)

Motivation may be what kickstarts your determination. I believe without motivation, you would be hard pressed to successfully start and bring to a successful conclusion whatever it is you think you want to achieve. What motivates you when faced with that challenge waiting for you on your desk? These can be quite cumbersome when you look at everything else you are being tasked to do and initially try to figure out the path you need to take to get it done within a real or prescribed timeframe.

One tool that does help is your positive outlook on most things. That 'can do' attitude has helped you achieve many milestones over the course of your career.

It does not matter if your longevity has been three years or three decades. It is all the same.

Will you stumble? Perhaps if you go into this blind, so preparation is paramount. Be cognizant of the tools you will need to get to the end of the project. Do you need to confer with any consultants, authorities having jurisdiction, local building department, or staff? Do you need to draw on your own knowledge and experience as you begin to envision the path you will take to that elusive successful conclusion?

Just like looking at a large project you may need to break it down into achievable goals, which may be many, depending how big a project you are about to get into. We have talked about these types of things before but one need remember that positive mindset you have will help drive you in the right direction. Fight negativity off tooth and nail. When embarking on a large project, whether it be a physical building or a large document

backed by fact (not conjecture) keep it on track. Do not let interference and negativity encumber your progress. You will be trying to keep within the timelines you acknowledged when you took this on.

In a document written by Dr. Erin Eatough, 'How to Develop the Characteristics of a Determined Person', she wrote in her closing statement, "Your determination is all in the name of succeeding at your goals. It's there to guide you in the right direction and remind you to never lose sight of why you're working so hard. The end goal is to achieve your full potential — and you can't do that without determination."

Let's park the old "woe is me" attitude. I have witnessed people struggle with not enough education,

understanding their position in life and working very hard over many years just to get to a starting point. While it may seem to most that life is hard (it is if you don't have a good start or financing to back you), you can do it! Make sure you allow your ambition to help build your determination without shutting the door on the relationships you have spent years building up. That in itself should help you realize that anything is possible.

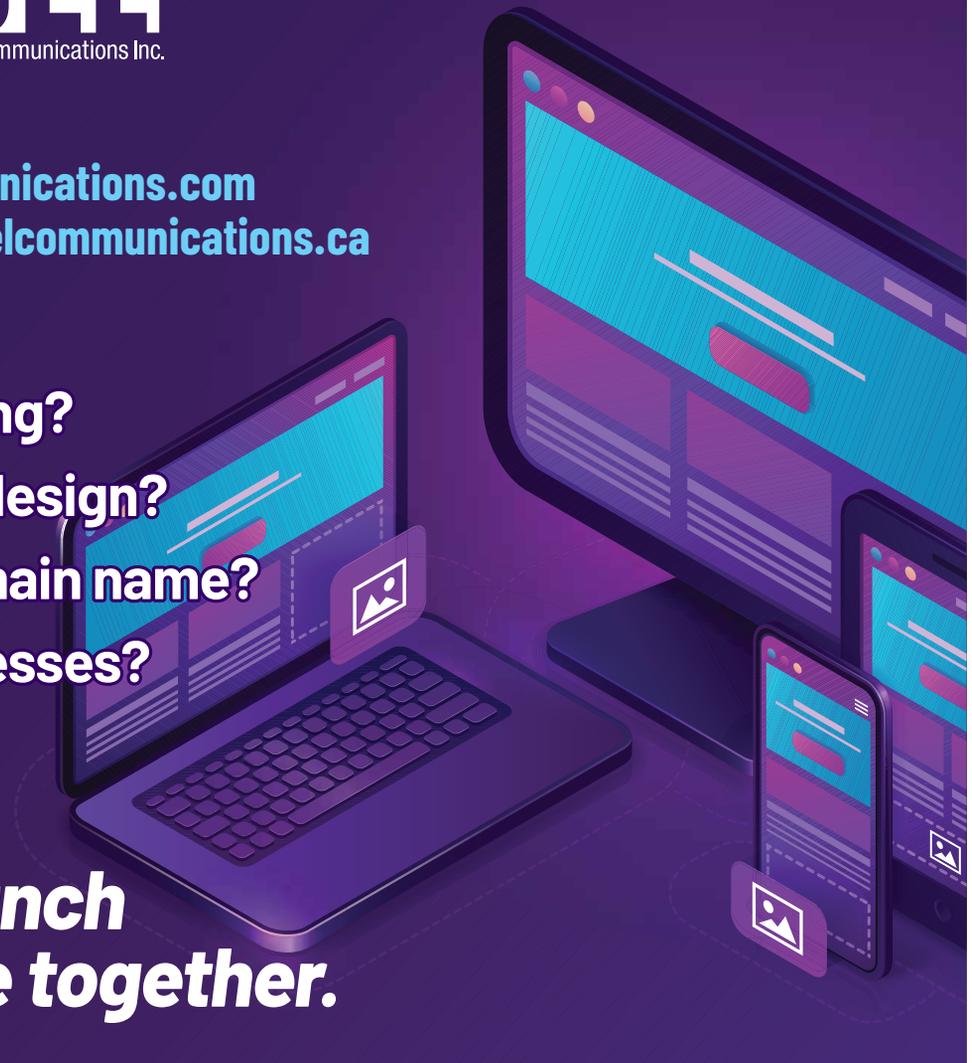
Tackle things that come your way in earnest, with logic, with eyes wide open and looking forward to the outcome(s). You can do this and before you know it that eagerness has built the ambition and determination you need. ■



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