

Trades Training Advisory Committee

June 11, 2021

Committee Chair: Julia Renkema, SD75 Trustee

Committee Members: Randy Cairns, SD 75 Trustee
Wade Peary, Riverside College, Principal
Jim Pearce, Ecole Mission Senior Secondary, Principal
Angus Wilson, SD75 Superintendent
Chad Umlah, Ecole Heritage Park Middle School, Instructor
Chris Gruenwald, District of Mission, Forestry Department Director
Dan Schubert, Owned Schubert Plumbing & Heating Ltd.
Owns Independent Cycles Inc.
Mike Jackson, Trades Project Management Professional,
Registered Journeyman – Steel Fabricator

Mandate: The committee is an Advisory Committee to the Board of Education, tasked with reviewing and advising on the opportunities, barriers, and options for trades training for Mission students.

Objectives:

1. To understand how our school district delivers trades training and current capacity limitations
2. To understand the needs of local trades enterprises and how Mission Public Schools can respond
3. To investigate options to bridge the gap between academics and trades to respond to the belief that only students that struggle academically should learn a trade (Survey Results)
4. To find ways to attract students to participate in traditional and non-traditional trades
5. To present options for ways to promote interest in trades by creating educational tools for all grade levels. ADST Kits (Applied Design, Skills and Technology)
6. Investigate educational partnerships to bring more trades programs to School District 75
7. Investigate possible funding and sponsorship opportunities
8. Present recommendations to the Board of Education

Committee Vision:

Develop appreciation and knowledge of trades and careers throughout the school district inclusive of all learners.

Our current Mission Public School Trades Programs:

Ecole Mission Senior Secondary offers foundational level programs and Riverside College offers next level programs. Fraserview Learning Centre does not offer any trades programs. Hatzic Middle School and Ecole Heritage Park Middle School offer some trades programs starting in Grade 7.

Riverside College: Wade Peary, Principal

The College serves both senior secondary age students and adults, successfully combining four distinct types of students within the school and its programs.

Students include:

1. Senior school age students who have chosen a career path and do not want to wait until after senior high school to learn about the trade or career of their choice. These students combine senior high school graduation with entry level trades or career training, known as the "dual-credit option".
2. School aged graduates attend Riverside College in their gap year. Depending on their birthdate, some students are eligible for an additional two years of tuition free education after they graduate from their local high school.
3. The college also meets the needs of adult non-graduates to complete graduation requirements. Adult students may also combine trades training with academic achievements, achieving both trades certification and the Adult Dogwood diploma at the same time.
4. Riverside College serves the needs of graduated adults to add secondary courses required for university or college-entrance, or to make a career change by completing a trades or career program.

Funding sources for programs

Ministry of Education for school age students. The Ministry of education will fund students that are enrolled in a program taught by a TRB (Teacher Regulation Branch) registered teacher in a school run by the Board of Education.

ITA funding. The Industry Training Authority will fund school aged students \$1200 for enrolling in an applicable Trades Program. If the student is successful in passing the program, the ITA will also fund the district an additional \$1000. There is also additional funding available for students who are registered in both the Youth Train in Trades and the Youth Work in Trades Programs.

Riverside College Trades programs

Youth Train in Trades

Automotive Service Technician 1 – Foundations (ITA)

Carpenter Foundation 1 – ITA

Construction Electrician Foundation 1 – ITA

Hairstylist Level 1 – ITA

Pipe Trades Foundation 1 – ITA

Professional Cook 1 – ITA

Trade Sampler – 5 weeks each: Carpentry, Plumbing, Electrical, Automotive (no ITA funding available)

Youth Work in Trades

Similar to work experience, students work in a trade. These students are sponsored by a trades' person with a Red Seal. Students are typically paid for this work. The school district can claim up to 4 courses (16 credits) for students in this program.

Industry Training Authority BC (ITA) coordinates BC's skilled trades system by working with employers, employees, industry, labour, training providers and government to issue credentials, manage apprenticeships, set program standards and increase opportunities in the trades.

Number of students enrolled in Trades programs: 81 students (2020-21)

Career Programs

Business Support Specialist

Community Support Worker/Education Assistant

Esthetics

Information Technology Technician

Industrial Warehouse Person

Number of students enrolled in Career programs: 36 students (2020-21)

Riverside College did not run the Warehousing Program this school year and has not been able to run the Business Support Specialist and Information Technology Technician Programs for the past several years.

What sets Riverside College apart from other Post-Secondary Institutions?

Size Matters: Riverside College is small and only takes one cohort for each program. This allows all of the staff to get to know all of the students and how to support each and every one.

Time Matters: Riverside College's programs are typically longer than the programs offered at the local PSI's. This extended time allows for the students to better understand the information presented to them.

Experience Matters: Riverside College requires all students to complete a mandatory Work Experience. No other post-secondary in the province has this requirement. Most of the Riverside College students are offered jobs once they complete their second Work Experience placement.

Certifications Matter: Each Riverside College student receives additional certifications to enhance their resumes. All students receive their First Aid, WHIMIS, and Super Host Certifications. Additional certifications are available in each of the program areas.

Extras Matter: With additional time, programs can add to their curriculum. The CSW/EA, Hairstylist and Esthetics Programs offer community services and outreach to the local area. The AST program races 4 cars in the local Drag Racing Association. These are just a few of the value-added activities the programs offer Riverside College students.

Ecole Mission Senior Secondary School: Jim Pearce, Principal

Departments:

ADST – Applied Design, Skills, and Technologies

The ability to design, make, acquire, and apply skills and technologies is important in the world today and key in the education of citizens for the future. The Applied Design, Skills, and Technologies (ADST) curriculum is an experiential, hands-on program of learning through design and creation that includes skills and concepts from traditional

and First Peoples practice; from the existing disciplines of Business Education, Home Economics and Culinary Arts, Information and Communications Technology, and Technology Education; and from new and emerging fields. It fosters the development of the skills and knowledge that will support students in developing practical, creative, and innovative responses to everyday needs and challenges.

Business Education

Business affects the daily lives of all people, as they work, spend, save, invest, travel, and play. Business influences career choices, incomes, and opportunities for personal enterprise and development. Therefore, students must be prepared to engage in business activity with confidence and competence. Students should familiarize themselves with the skills that are required in the business environment and the impact these skills can have on their own lives and on society. Business Education courses include: Marketing and Entrepreneurship 10; Accounting 11; Financial Accounting 12; Economics 12, Entrepreneurship 12.

We are fortunate to have a Café on site. This program offers students the opportunity to develop baristas skills as well as the intricacies of running a business. Students take orders for customers and provide coffee along with baked goods during the morning and lunch. Students do all the ordering inventory and accounting during their time in the Café.

Our cafeteria program provides students with the opportunity to build cooking skills and prep skills to provide a morning breakfast and lunch for all our students. In this program students learn a wide variety of skills so they can move along to their level one chef training program.

We have over 600 students in our applied skills program. This will be the first year that there is no space for extra students we are at capacity.

We have many different events take place over the course of the year in our applied skills program. One event is our gravity car competition which showcases our most vulnerable students who with support from our Educational Assistants and their instructor make cars and race them down a track. It is something we all look forward to. We also have our Race Car which during non Covid times we race at Mission Raceway. Other events competition that takes place include but not limited to our cupcake wars, fashion design week, production of T-shirts for various events, and fixing the public's cars in our automotive shop.

Fraserview Learning Centre – no trades programs offered at this time. The Centre is housed in an elementary school and there is no shop equipment on this site.

Hatzic Middle School: Angus Wilson, Superintendent

Trades Programs and Enrollment:

Grade	Course	Total Enrollment
7	Computational Thinking	50
7	Digital Literacy	45
7	Textiles	<u>49</u> 144
8	Computers & Communication Devices	67
8	Food Studies	64
8	Metal Work	43
8	Robotics	63
8	Woodwork	<u>58</u> 295
9	Food Studies	90
9	Information & Communications Technologies	87
9	Media Arts	24
9	Metal Work	21
9	Power Technology	22
9	Woodwork	<u>43</u> 287
Total Trades Program participation		726

Ecole Heritage Park Middle School: Chad Umlah, Instructor

Trades Programs: Heritage offers carpentry/joinery classes at the middle school level. (Grade 7, 8, & 9). There are no other trades programs offered at HPMS.

Woodwork is a very popular elective at the grade 9 level. This year there were 4 blocks of full year Grade 9 woodwork. Grade 8's received a quarter year rotation. Next year, Grade 7's will also receive a rotation of Woodwork (duration yet to be determined).

Email from Chad Umlah:

I also run a Drag Racing club at Heritage. The cars and equipment were donated by Riverside. It is a joint club involving both Heritage and Hatzic Middle students. Richard Blaschek is the sponsor teacher/coach for Hatzic. I am in regular contact with Richard

and Ben Wooley (woodwork/metalwork) at Hatzic. We share resources and plan common skills for the students to carry with them into the senior grades.

A portion of my course hours are dedicated to Careers in Trades/Apprenticeship awareness. I am very vocal with my students about the potential for careers in Trades. One of the highlights for my students is getting to tour the Riverside campus at their annual Open House.

We do our best to keep in touch with the teachers at Mission Secondary in order to vertically plan our respective curriculum. Many of the students that start Woodwork in Grade 7/8 continue at Mission Secondary.

Mr. Chad Umlah

EHPMS

Woodwork/Digital Literacy 7/Beard Growing

Capacity Constraints

Schools are nearing capacity. Interest in Riverside programs exceed the physical facility. Ecole Mission Senior Secondary has maximized capacity in all of their trades' rooms; capping enrollment at 24 per class for a total of 192. Fewer than 15% of students are able to participate in a particular trade program each year. Our Middle Schools do not have capacity constraints at this time.

Local Trades Perspective:

Letter from Dan Schubert: Owned Schubert Plumbing & Heating Ltd. Owns Independent Cycles Inc.

June 1, 2021

Mission Public School Board of Education

Attn: Angus Wilson & MPSD Trades Advisory Committee

Re: Industry Snapshot and Perceived Trade Needs I have had the pleasure of serving with MPSD Staff and the MPSD Advisory Committee for some time now, and the demand for trades has never been higher. We are seeing an unprecedented demand for trades in all areas with no end in sight. MPSD along with Riverside are leading the way and providing an invaluable service to our community and our youth. In my time of ownership of a medium sized Plumbing + HVAC company we partnered with Riverside and worked together to train young men and women into successful tradespeople. We saw kids come into the program with little to no experience and develop into highly successful Journeymen, Project Managers, and business owners. Without Riverside as our partner our successes would not have been achieved and I am confident many of the apprentices we saw come through our doors would have been left out. Many youth are unaware of the job prospects and career opportunities that trades provides. I believe this responsibility lies with 3 groups; parents, educators, and employers. Riverside/MPSD have formed strategic alliances with employers to help with educating parents and students the benefits of trades. Now is the time to support MPSD and Riverside with adequate funding to not only continue these efforts but to increase as the trades shortage is becoming more and more troublesome. If we do not address these trades shortages someone else will, and it will not be to the benefit of our children or our communities. MPSD/Riverside are in a unique position that is not by chance but by the hard work and vision of its leaders, it is my strong belief that with continued support Mission will be a leader in the Province for providing the highest level of trades.

Regards,

Dan Schubert

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E: danschubert.sig@gmail.com

Letter from Chris Gruenwald: District of Mission, Forestry Department Director

The Mission Municipal Forest has been working with School District #75 on opportunities to introduce students to outdoor education. We have worked closely with Stave Falls elementary on development of their program, and have taken on high school students for work experience in Forestry. Additionally, we have worked closely with Stillwater Consulting Ltd to bring their 19-week 'Advanced Forestry Skills' training course to Mission – in 2020, Stillwater put on three cohorts of the program in our Community.

As with many industries in our Province, Forestry is facing a significant human resources crunch, with retirements far outweighing recruitment. This despite the fact that Forestry is becoming a much more complex discipline, with significant challenges to be addressed (i.e., Climate Change). As such, there is a critical need for well educated and skilled workers required to manage and conserve our great natural resource. Our forests provide so many benefits to our citizens, and maintaining healthy, functioning forest ecosystems will be a significant challenge moving forward.

We have had discussions with Riverside College, to develop our own version of the Advanced Forestry Skills training program that would be customized for our Community. We will continue to work with Principal Peary to bring this program to fruition.

Regards

Chris Gruenwald
Director of Forestry



District of Mission

Forestry

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Letter from Mike Jackson: Trades Project Management Professional,
Registered Journeyman – Steel Fabricator

May 03, 2021

Mission Public School District Board of Education

Attention: Angus Wilson (Superintendent) & The MPSD Trades Advisory Committee

E-Mail: angus.wilson@mpsd.ca

CC: Julia.renkema@mpsd.ca

Re: An Industry Perspective of Current and Projected Trades Needs

To Whom It May Concern:

These last 24-months or so I have had the opportunity to see the Mission Public School District (MPSD), in association with Riverside Technical College, working towards a brighter future for Mission's young adults. This has been through a concerted and high-level review of the current approaches and influence of Mission's public education towards pursuing of a vocation in Trades. Given the current and increasing drought of talented tradespeople, this is very encouraging. As such, I want to quickly offer reference to the need and return on investment MPSD is making, not only to the institution, but to the lives of young people moving from public school and into work force.

For the last ten or so years, trades and specifically the construction industry has seen a troubling and massive reduction in its workforce. The Baby-Boomers and the next generation of their apprentices which founded the backbone of many of the companies and sectors in trades have all but retired. The next generation, who now makes up the management of those groups is aging and looking to retirement. The two generations who were destined to take over their place(s) have not done so; influenced by our Western Culture's turn to a Services-Orientated Economy. Kids of the 80's and 90's saw rich technocrats of the Silicon Revolution on TV and shied away from the sometimes dirty and physical nature of many trades. This change in attitudes was overlooked by many and now poses a significant threat to greater industry.

Kids these days don't want to be a tradesperson. They want glamour, a suit, and 'business meetings' like they see on tv. Unfortunately, the reality is that now those jobs are in small demand; they pay poorly for entry level applicants and require extensive student debt as well. What kids fail to realize is that because of the drought in tradespeople, trades jobs now pay extremely well. This is doubled by the fact that much of the training required to excel and grow in trades is on-the-job and free of charge. Young trades starting out, known as apprentices, that show initiative often even have their training compensated by the companies they work for... An investment in the company's future.

Furthermore, the lifestyle of tradespeople is no longer what it was for our fathers or grandfathers... Gone are the days of dangerous, dirty, back-breaking labour which many associate with such vocations. Industry, whether unionized or not, has changed. Safety is the primary and non-negotiable factor in the execution of any project or task. Companies not only try to provide the most safe and secure work for their employees, they are also legislated and closely monitored to do so. Further to that, Industry in the last ten years or so has changed again to include a more community-inclusive and environmentally sustainable approach to the

conduct of their business. It pays to be clean and safe as a trades employer now; this is a fact many not in industry do not understand.

Technology has also changed the everyday lives of tradespeople. For those more technical in nature, possibly looking to computers and digital applications as a career, trades have an exploding avenue needing such traits. 3D Surveying, Lidar mapping, GPS, and sophisticated computers are beginning to be found a lot more. The Operator's Booth of any reputable and modest crane now looks, quite literally, like the command seat of the space shuttle.

Because of these changes young people must re-evaluate the direction they take as they move into the workforce. Parents, teachers, and influencers of young adults must disperse with the pre-conceived notions which may have influenced *them* when they were young. Trades is one of, if not the most lucrative and viable options for those leaving high school. It offers a very high amount of pay right through the gate, a low cost of training, an exploding amount of capacity in the workforce, and can provide security for not only one's financial stability but also a foundation for a long and fulfilling career.

As an industry employer in the building trades, I see this situation growing increasingly concerning. We simply cannot staff projects with the amount of skilled tradespeople we need. Not for any reason other than that they, currently, simply don't exist. Unless we as a national community quickly change gears and support the trades, we will see a lot of work go overseas. Or a lot of external labour may come to Canada's shores.

I hope the MPSD can continue to focus efforts, funding, and direction towards increasing the influence of a future in trades to its students. I believe with a major and (*I assume*) underappreciated asset like Riverside College already operating to develop and support young adults in trades, the MPSD could become a beacon for such opportunity if given the right tools.

Most respectfully,



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Bridging the Gap between Academics and Trades

Student Survey Results – what did we learn?

Angus Wilson. School District 75 Superintendent

Broadly speaking the survey results are favourable. At Riverside College, virtually all parents were supportive of the student's choice. The larger MSS/FLC survey also confirmed students on a trades stream had family support, but of course this does not detect students pushed into other fields prior to the survey. Still, less than 14% of Academics path students identified family opposing trades as an issue. So, while there may still be work to do in 'selling' Trades, it has clearly come some way in perception in the broader community.

There were some mixed messages about the profile of Trades in Middle and Secondary school, with respondents stating it was 'over sold' or not promoted enough. Interestingly, a number of students expressed concerns about technical/skill-based shortcomings with trades, but not academics. The largest barrier for academics, meanwhile, was cost.

Overall, the results show that students are aware of the possibility of a Trades based career, but there is still some hesitation over earnings and perceptions of the life quality of some jobs. Still, the picture is more positive than we might have previously believed.

Recommendations for Promoting Career Choices in the Trades

1. Build stronger relationships with local trade companies. Business owners could speak to students about local trades employment opportunities
2. Engage skilled workers/retirees to mentor students to learn to be successful on the practical and business side of the trade. Skilled labour shortages are being felt as employees look to retirement
3. Work to reduce barriers to entry for young workers without driver's licences, advocate for reduced ICBC rates for employers with young workers. It can be a challenge for young workers to get to their workplace than a traditional service industry job
4. Host trade fairs with local businesses, putting faces to companies and helping students realize that there are opportunities to move beyond labourer to Project Management positions and beyond. Provide venue for industry to promote trades to women and reach out to males to fill non-traditional jobs such as nursing and care aid
5. Support the District of Mission Forestry Department's commitment to expanding their relationship with our School District to encourage interest in careers in

- forestry. The District of Mission has many local areas that can be used as outdoor classrooms
6. Continue collaboration between Riverside College, Ecole Mission Senior Secondary, Ecole Heritage Park Middle and Hatzic Middle schools to engage in joint projects and plan trades related programs. Continue to support events such as the Gravity car competition, Regional Skills Competition, Drag Racing, Open House at Riverside College and School Tours
 7. Encourage pairing of academics with trades. Businesses courses for entrepreneurs
 8. Provide Career Advisors with more resources to inform students of career choices in the trades. One excellent resource is provided by Skills Canada BC Inspire! The program is delivered to over 15,000 students in Grades 6 to 10. Inspire! offers a one-hour video and hands-on activities to explore careers in the trades/technology fields and pathways to apprenticeships
 9. Create educational tools for all grade levels - ADST Kits
Create grade and age appropriate ADST kits. Each kit would provide teams of students to collaborate on a project, learn to use tools, develop fine motor skills and a work ethic. Strong start programs each have "construction stations" where they learn about shape, design and structure – develop mathematical concepts such as size, measurement and weight and show pride in the structures they create. Once the students enter kindergarten there are no such programs till middle school. According to Ecole Heritage Park Middle School instructor Chad Umlah "some grade 8 students have never used a hammer". Business and community sponsors and ITA funds could be used to purchase materials to create ADST kits. Riverside College has offered to manage the program using their students to assist with the design and creation of the kits and restock when the kits are returned. Mission teachers would be asked to assist in the design phase of the ADST kits. Ultimately a trades trailer could be used to provide a mobile classroom
 10. Engage with educational partnerships to bring more trades programs to the School District. ITA wants to bring back the Building Maintenance worker program
 11. Explore funding and sponsorship opportunities. Industrial Training Authority (ITA) provides grants to promote the trades in British Columbia. Riverside College applies for grants each year from ITA. Some of this money can be used to produce and maintain ADST kits. Through Riverside College partnership with ITA, Ecole Mission Senior Secondary receives some funding for metal, woodworking and automotive classes – as of September 2019 \$31,400. ITA funding for week long sampler program. Interest has been expressed from trades-based businesses and the District of Mission Forestry Department to sponsor some of our educational initiatives as well as local credit unions and Skills Canada. Possible partnership with the District of Mission to build tiny homes to house homeless.

Conclusion

Promoting trades training to Mission Public School District students will provide opportunities for students to start working soon after graduation. With more skilled labourers retiring than new workers entering the industry the need for young people to engage in the trades is increasing. The trades industry is looking for opportunities to engage, mentor, sponsor and promote their sector within our school district. Mission Public Schools is providing as many trades program options as possible within the capacity constraints of our facilities. The support of our Board of Education is requested to continue to build on the current connections the school district enjoys with our industry and education partners and provide financial support to enhance the learning resources and capacity of our schools.