

Trades Training Advisory Committee
Report to Mission Public Schools Board of Education

June 30, 2022

Committee Chair: Julia Renkema, SD75 Trustee

Committee Members: Randy Cairns, SD 75 Trustee
Angus Wilson, SD75 Superintendent
Lynn Cummings, Riverside College, Principal
Jim Pearce, Ecole Mission Senior Secondary, Principal
Liam Dunbar, Riverside Student, Plumbing Program
Anna Dyck, Ecole Mission Secondary Student

Members at Large:

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

New members at Large:

Ron Coreau, past Director of Continuing Education at UFV

Kyle Goosen, Red Seal Welder

Rosemary Henriksen, Educator, Business Owner, Author

Candace Koch, Red Seal Automotive Technician

Jaime Mantle, Red Seal Commercial Transport Mechanic

Ian McComish, Red Seal Refrigeration Mechanic and Trainer

Stefany Tunshell, Red Seal Electrician

Rod Watkins, Bachelor of Education, UBC–Career in Tech Studies;

Journeyman Automotive Machinist

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
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:

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.

Capacity Constraints

Schools are nearing capacity. Interest in Riverside programs exceed the physical facility. 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.

Chair's Comments

It has been my pleasure to be a member of the Trades Training Advisory Committee. The committee's first meeting was held on September 24, 2019 with 2 Board of Education Trustees, Superintendent Wilson, Principals of Ecole Mission Senior Secondary and Riverside College, Ecole Heritage Park Middle School Woodworking instructor, one City of Mission Director and 2 Mission Business Owners. During the first 2 years of the committee's mandate, we identified the trades programs and relationships we currently have in place and the need to foster and strengthen them as we proceed. We identified our need to explore other external connections to draw attention to our trade's programs for career connections and financial support. We explored options to grow an appreciation for the trades at all age levels in our Mission Schools. One of our recommendations supported the use of ADST (Applied, Design, Skills and Technology) kits, created to be age-appropriate, starting in kindergarten and through to Grade 12, to grow an appreciation of how to design and build projects in a collaborative environment. We identified the need to engage parents, students and teachers to promote a career in the trades as a viable career option inclusive of all students.

February of 2022, the committee welcomed 2 MPSD students and 8 experienced educators and business members, from the community, to enhance the committee's student voice and community input.

The following is a list of subjects discussed from our first meeting in February 2022 to our last meeting in June 2022.

February 2022

The committee reviewed the June 2021 report submitted to the Board of Education.

Discussion centered around the need to provide ADST kits starting in kindergarten through to Grade 12. ADST provides students the opportunity to design, make, acquire, and apply skills and technologies in response to everyday needs and challenges. The thinking is that the earlier a child is exposed to learning through the use of ADST kits, the more confident the child will be to explore hands-on, problem-solving projects.

Discussion also centered around Industry Training Authority BC (ITA) math requirements and that our current workplace math does not align with Trades math requirements. During the current school year, Ecole Mission Senior Secondary linked Math and Woodworking classes. This linking of Math with Trades is not offered before Grade 10. Trades change over time creating the need for knowledge of math and physics in post-secondary. A suggestion was made to create a list of core math courses commonly used in most trades. Committee asked School District to consider a professional development seminar that targets trades math.

Apprenticeship retention is an issue; common comment was, "It's not what I thought it would be" in reference to the work to be done in all kinds of weather, levels of danger

and other job-related requirements. There is a need for full disclosure on job requirements including math skills prior to entering post-secondary trades programs. A suggestion was offered to create a portfolio for each trade with full disclosure of job and education requirements and earnings potential to inform course planning.

The committee discussed the priorities for the committee during this school year. Most of the discussion was around offering our students the math that they will need as a prerequisite to pursuing trades training beyond Grade 12. The Board of Education could address course development via Professional Development seminars and a Board Authority Authorized Course (BAAC) for Trades related math. Ideas for growing appreciation for a trades career included exposing students to the trades industry facilitated by hands-on experiences in the field. To better prepare students for post-secondary, UFV offers a 6-month pre-course for electrical.

A list of scholarships, grants and bursaries offered for advancing trades education may be helpful to students pursuing post-secondary Trades programs.

April 2022

Superintendent Wilson presented on the Math courses offered from Grade 10 to Grade 12 at Fraserview Learning Centre (FL) and Ecole Mission Senior Secondary School (MSS).

Math 10 – Foundations of Math and Pre-Calculus – 12 classes at MSS; 1 at FL

Math 10 – Workplace Math – 3 at MSS; 1 at FL

Math 10 – Core – 2 at MSS

Math 11 – Pre-Calculus – 8 at MSS; 1 at FL

Math 11 – Foundations – 5 at MSS; 1 at FL

Math 11 – Workplace Math – 4 at MSS; 1 at FL

Math 11 – Core – 2 at MSS

Math 12 – Pre-Calculus – 5 at MSS; 1 at FL

Math 12 – Calculus – 1 at MSS

Math 12 – Foundations – 3 at MSS; 1 at FL

Math 12 – Workplace Math – 1 at FL

Math 12 – Advance Placement Math – 1 at MSS for honours students

Foundations Math covers skills and concepts suitable for university programs that do not require calculus.

Workplace Math covers skills and concepts suitable for trades or immediate entry to the workplace

Core Math is designed for the individual needs of students requiring a fundamental understanding of mathematical principles. Completion of Core Math is not appropriate for most post-secondary programs, whether academic or vocational.

In September 2021, MSS compiled an inventory of Math skills to gain a better understanding of deficits in the area with updated data compiled in January 2022. The Committee asked that a copy of the MSS Math Inventory Report be included in the June agenda. The committee suggested that a similar inventory be taken for middle school students to identify instructional needs earlier. The Math Mentor Teacher will extend this exercise into the Middle Schools. MSS principal Jim Pearce shared that this new report could be sent to Trustees in the fall.

Principal of Riverside College notified the Committee that ITA is coming to the College to review 4 programs. Math is embedded in the course content. Programs require some pre-requisite math courses.

The committee discussed ways to give Grade 10 to Grade 12 students the opportunity to work during the summer in the Trades. MSS will be hosting a Job Fair in early June for students in the School District. A suggestion was brought forward, by Stefany Tunshell, to involve students in trades in the Mission Waterfront Project. Dam Schubert offered ideas for promoting a summer job program by hosting an evening job fair for employers to connect with youth and for youth and their parents to learn about the trades; ITA is willing to assist with a list of employers. Discussions to continue on hosting a job fair at the next meeting.

The agenda included a discussion, led by Trustee McKamey, on connecting with Indigenous Communities. Leq;a'mel First Nations has access to equipment, gravel pits, logging operations and more, to accommodate a heavy equipment operator program. There are a number of band members working in the trades but do not have certifications. Unfortunately, Trustee McKamey was unable to attend. Item to be moved to a future agenda.

June 2022

Presentation from Lynn Cummings, Principal of Riverside College;

Riverside students were well represented at the Mission Community Foundation Scholarship Awards. Eleven of the twelve scholarships were given to students in the Electrical program. For the first time, the Valedictorian was chosen from Riverside College. At the end of the awards a Riverside College student band performed the Pink Floyd song 'Time'.

Lynn Cummings provided an update on how Continuing Education supports the students with academics like Math and English in conjunction with their trade course. CSW, Hairstyle, Electrical and Plumbing graduates attract employers, unpaid work-study with a Red Seal certified instructor gives the students practical experience and acts as an interview with an employer. The School District's Secretary Treasurer was instrumental with this program. Committee member and Riverside student, Liam Dunbar, described his hands on experience working with trades journeyman at a Langley Plumbing company. He felt it was a great opportunity to prove himself.

Trustee Renkema shared that the Board of Education approved \$70,000 to purchase \$30,000 for plumbing equipment, \$13,000 for an automotive hoist, and \$27,000 for carpentry equipment.

Many students want to participate in trades programs, but capacity remains an issue.

The committee continued to discuss the Math Inventory Report from MSS and the possibility of a Board Authority Authorized Course (BAA) for Math. A BAA is developed by a teacher addressing a need and according to requirements set by the Ministry of Education and Child Care. These allow Boards of Education to offer courses that are relevant to the community and, once authorized, students may earn elective credits toward graduation. Superintendent Wilson will complete a review of Math courses offered at MSS to further the discussion around an appropriate math course for students interested in pursuing a trade.

Further to our April discussion relating to Summer Jobs in Trades for Grade 10 to Grade 12 students, the committee heard from MSS District Career Advisor Alexandra Goliath. Alexandra has a family background in trades and works with MSS work experience teacher Carolyn Chezzi. Alexandra discussed the work that they do to showcase career and educational opportunities to Mission students. In the 2021/2022 school year 20 Universities and Colleges presented to students via zoom; MSS students were given the opportunity to tour Riverside College, University of the Fraser Valley and Kwantlen Polytechnical University; Class presentations were held on Career Life Education and Career Life Connections; Field trips to Fire Fighting Academy, Mission Forestry Department, a Heavy Machinery Day, Skills Trade Competition and a Mini Medical School. Lacey Construction funded to provide 50 pairs of steel toe boots for MSS students participating in trades related trips. 600 students participated in the June 1st Job Fair hosting 23 booths of which 25% were Trades related; ITA and WorkBC were present. Other events included scholarship information sessions, student loan information sessions, Women in Trades – ITA, WorkSafe BC and a WorkBC resume writing workshop.

Alexandra is on the committee organizing the October 11th Job Fair at the Mission Leisure Centre.

Youth Work in Trades awarded \$1,000.00 YWIT/ITA grants to 7 of the 14 students that enrolled in the program. ITA provides students in Grade 10 to 12 the opportunity to get on-the-job training in a trade. Participants earn up to 16 credits towards their high school diploma, log 480 training hours with pay and may receive a \$1,000 award.

Alexandra and Carolyn plan to visit the Middle Schools before the end of the school year to encourage them to look into Work Experience options and Career Advising support.

Dan Schubert asked how employers can connect kids to summer jobs. Alexandra said that there is a job board at MSS that local employers can use to post summer jobs.

Ron Coreau suggested that Alexandra become a permanent member of the committee.

Trustee Carter is vice-chair of the Heritage Committee. The committee meets regularly with Mission Parks and Recreation and the Downtown Business Association regarding the Waterfront. At future Heritage Committee meetings, Trustee Carter will start a conversation about including our youth with employment opportunities on the Waterfront project.

Committee member, Jaime Mantle, brought forward a discussion about the MPSD and Riverside College websites needing updating and that links to information are broken. Superintendent Wilson acknowledged that work on the websites is needed and they are waiting for the resident expert to return from leave.

Committee member Mike Jackson would like the committee to meet more frequently. This can be considered for the 2022/2023 school year when the committee reconvenes in the fall to set its priorities.

On May 2nd, Trustee Carter, Alexandra Goliath and Trustee Renkema participated in the BC Centre for Women in the Trades (BCCWITT) virtual meet and greet. BCCWITT is a partnership led by women from the trades, with industry and labour representatives, committed to increasing the percentage of women in skilled trades above the 4% provincial average. Presentations were made by women in welding, carpentry and electrical trades. Each presenter spoke about the barriers they faced as they pursued their work. Barriers ranged from profiling students to push them to a different career choice, pressure from parents, physical limitations that they had to find work arounds, isolation by male counterparts. One presenter shared that she has family members in the trades and had access to STEM (Science, technology, engineering and math) programs in high school.

Stefany Tunshell shared that she created a Facebook group called Fraser Valley Women in the Trades. The site connects women in the trades to network, share job opportunities, challenges/successes and organize meet and greet events. Several committee members and Mission Public School Trustees are now members of this group.

Chris Gruenwald shared information regarding the purchase of a portable sawmill in partnership between the City of Mission and the School District. The City's woodlot will donate the lumber used to instruct students on the machine operation and provide cut wood for School District and City projects.

The committee discussed the report to the board and the need to sort recommendations in order of priority.

Recommendations to the Board of Education (High Priority Recommendations list first)

1. **Capacity Constraints.** Interest in taking trades related programs exceed the physical capacity of the schools currently offering trades courses. Thinking creatively is suggested by the committee; including the use of current facilities outside of regular school hours to expand trade program delivery and opportunities for Mission students and the community at large, explore extra spaces at other Mission schools, partnering with local business and other educational institutes to share space and explore opportunities to make use of Mission's outdoor areas for some programs. Local First Nations may wish to share the use their lands. Use the time and space at Ecole Mission Senior Secondary to implement a previously planned spring break multi-certification program.
Note: Riverside College has applied to ITA for a level 2 Hairstylist program using after hours space, with a Red Seal instructor, for the spring of 2023.

2. **Math Courses.** It has been determined that students interested in pursuing a trades career are not provided with senior level math courses required in Grade 10 to 12 to ready them past public school graduation. The committee recommends that the School District stream math course selections for those expressing an interest in the trades as early as Grade 10. The board is encouraged to consider implementing a Board Authority Authorized (BAA) math course(s) targeted to the trades to satisfy ITA requirements.

3. **Applied Design, Skills and Technology Kits.** The committee continues to promote and recommend the use of ADST kits to teach students, of all grade levels, how to collaborate on a project, learn to use tools, develop fine motor skills, understand mathematical concepts and learn to problem solve. It is an integral part of all of B.C.'s curricula as referenced at <https://curriculum.gov.bc.ca/content/applied-design-skills-and-technologiesintroduction>).
Recommended funding sources to enhance student learning through ADST Kits but not limited to the following:
 - Provincial School District funding including funds from surplus that have been designated for sustainable projects
 - Business, educational and industry institutes and community sponsors
 - ITA funding. ITA offers Discover Grants that focus on ADST and trades related projects

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 its current capacity constraints. The support of the Board of Education is requested and necessary 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 extending options for our schools.