



The Board of Education of School District No. 61 (Greater Victoria)  
Education Policy and Directions Committee

AGENDA

Date: Monday, January 4, 2021, 7:00 p.m.  
Location: Broadcasted via YouTube  
<https://bit.ly/3czx8bA>

Chairperson: Trustee Painter

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Pages

**A. COMMENCEMENT OF MEETING**

**A.1. Acknowledgement of Traditional Territories**

*The Greater Victoria School District wishes to recognize and acknowledge the Esquimalt and Songhees Nations, on whose traditional territories, we live, we learn, and we do our work.*

**A.2. Approval of the Agenda**

Recommended Motion:  
That the January 4, 2021 Education Policy and Directions Committee meeting agenda be approved.

**A.3. Approval of the Minutes**

Recommended Motion:  
That the December 7, 2020 Combined Education Policy and Directions Committee and Operations Policy and Planning Committee meeting minutes as they pertain to Education Policy and Directions Committee, be approved.

**A.4. Business Arising from Minutes**

**B. PRESENTATIONS TO THE COMMITTEE**

**C. NEW BUSINESS**

**C.1. Introduction of Student Representative**

a. Annika Clark, Victoria High School

**C.2. District Team Update - Inclusive Learning - District Principal Sean McCartney**

9

**C.3. Board Authority Authorized Courses - District Vice-Principal Jon Hamlin**

a. Aviation Maintenance 12

18

**D. NOTICE OF MOTION**

**E. GENERAL ANNOUNCEMENTS**

**F. ADJOURNMENT**

Recommended Motion:  
That the meeting adjourn.

**Note:** This meeting is being audio and video recorded. The video can be viewed on the District website.



**Combined Education Policy and Directions Committee & Operations Policy and Planning Committee Meeting**

**REGULAR MINUTES**

**December 7, 2020, 7:01 p.m.**

- Trustees Present:     **Education Policy and Directions members:** Nicole Duncan, Chair, Tom Ferris, Diane McNally, Ryan Painter, Jordan Watters (ex officio)  
                              **Operations Policy and Planning members:** Elaine Leonard, Chair, Rob Paynter, Angie Hentze, Ann Whiteaker, Jordan Watters (ex officio)
- Administration:       Shelley Green, Superintendent of Schools, Kim Morris, Secretary-Treasurer, Deb Whitten, Deputy Superintendent, Colin Roberts, Associate Superintendent, Harold Caldwell, Associate Superintendent, Katrina Stride, Associate Secretary-Treasurer, Chuck Morris, Director of Facilities Services, Andy Canty, Director – Information Technology for Learning, Jeff Davis, Director of International Student Program, Simon Burgers, District Principal, Madeleine Challies, French Language Coordinator, Jim Soles, Associate Director of Facilities and Manager of Major Capital Projects, Marni Vistisen-Harwood, Manager, Capital Planning and Implementation, Facilities Services, Kelly Gorman, Recorder
- Stakeholders & Guests:     Christine Payne, VCPAC, Jane Massey, CUPE 947 President, Connor McCoy, GVPVPA President, Mark Morrison, Second VP & Health & Safety Officer, GVTA, Kristal Stevenot, HDR Architecture Associates, Inc., Jim Mann, HDR Architecture Associates, Inc., Rod Windjac, HDR Architecture Associates, Inc.

**A. COMMENCEMENT OF MEETING**

The meeting was called to order at 7:01pm.

**A.1 Acknowledgement of Traditional Territories**

Chair Duncan recognized and acknowledged the Esquimalt and Songhees Nation, on whose traditional territories we live, we learn and we do our work.

**A.2 Approval of the Combined Education Policy and Directions Committee & Operations Policy and Planning Committee Meeting Agenda**

**Moved by** Tom Ferris

That the December 7, 2020 Combined Education Policy and Directions Committee and Operations Policy and Planning Committee meeting agenda be approved as amended with the addition of:

E1 Notice of Motion - McNally

Move H1 to C2

**Motion Carried Unanimously**

**B. EDUCATION POLICY AND DIRECTIONS COMMITTEE**

**B.1 Approval of the Minutes**

Trustee Whitaker requested that future minutes reflect the voting members for each committee.

- a. Approval of the November 2, 2020 Education Policy and Directions meeting minutes

**Moved by** Tom Ferris

That the November 2, 2020 Education Policy and Directions Committee meeting minutes be approved.

**Motion Carried Unanimously**

## **B.2 Business arising from Minutes**

Trustee Whiteaker advised she and Associate Superintendent Caldwell held a conversation relative to the budget allocated to counsellors in the , C.8 Mental Health Grant from the November 2, 2020 Education Policy and Directions Committee meeting.

## **C. PRESENTATIONS TO THE COMMITTEE**

### **C.1 ISP Annual Report - Director Davis**

Director Davis presented the International Student Program Annual Report. Student enrollment is down 50% due to the pandemic, which is a lower decrease than average International Student Programs in other school districts. Interest remains high based on the number of applications received. Travel restrictions from source countries have also contributed to a delay in student enrollment. Questions of clarification were asked.

### **C.2 HDR Architecture Associates, Inc. re: Victoria High School - Associate Director of Facilities and Manager of Major Capital Projects Soles**

Associate Director of Facilities and Manager of Major Capital Projects Soles introduced Kristal Stevenot, Jim Mann and Rod Windjac Representatives from HDR Architecture Associates, Inc. The presentation focused on accessibility, inclusivity, energy efficiency, water efficiency and fire sprinklers. Vic High's architects identified multi-purpose spaces and a rooftop garden which will allow for a more flexible floorplan to engage teachers and students. Questions of clarification were asked. Trustees provided thanks to HDR Architecture Associates, Inc.

## **D. NEW BUSINESS**

### **D.1 Introduction of Student Representative**

Superintendent Green introduced and welcomed Student Representative Madeline Astridge from Reynolds Secondary School.

### **D.2 District Team Update - Languages and Multicultural Initiatives - District Principal Burgers and French Language Coordinator Challies**

District Principal Burgers and French Language Coordinator Challies provided an update. French Language Coordinator is a new position for the Greater Victoria School district and has been highly utilized. Highlights were the creation of a digital library, Professional Development Day(s)

plans, as well as Indigenous and Career Education literature translated into French. Trustees provided thanks to the staff for their dedication.

### **D.3 Diversity & Inclusion Forum Update - Deputy Superintendent Whitten**

Deputy Superintendent Whitten reviewed the memo provided. Questions of clarification were asked.

### **D.4 Advocacy Committee Update - Trustee Whiteaker**

Trustee Whiteaker referred to the report and advised that the committee had no further work relative to student assessment through pandemic as most students have returned to school. Trustee Painter thanked Trustee Whiteaker.

## **E. NOTICE OF MOTION**

Trustee McNally Childcare Notice of Motion to be brought to the December 14 Board of Education Meeting.

### **E.1 Staffing Child Care SD 61 - Trustee McNally**

*That the motion "That the Board of Education SD61 Greater Victoria direct the Superintendent to staff early child care / child care before and after school programs with first consideration to CUPE 947 members who apply for the positions, and FURTHER, that CUPE 947 EAs immediately / as soon as possible be offered the positions at their current hourly wage before wide advertisement or SD61 staff contracting with other community provider(s)." be referred to the Board of Education meeting December 14, 2020.*

## **F. GENERAL ANNOUNCEMENTS**

## **G. OPERATIONS POLICY AND PLANNING COMMITTEE**

### **G.1 Approval of the Minutes**

- a. Approval of the November 9, 2020 Operation Policy and Planning meeting minutes

Trustee Paynter requested a name correction to Painter in the minutes item 8.2

**Moved by** Ann Whiteaker

That the November 9, 2020 Operations Policy and Planning Committee meeting minutes be approved as amended.

**G.2 Business Arising from Minutes**

**H. PRESENTATIONS**

**I. SUPERINTENDENT'S REPORT**

**J. PERSONNEL ITEMS**

**K. FINANCE AND LEGAL AFFAIRS**

**K.1 Policy Sub-Committee Report**

- a. Draft Bylaw 9360, General Meeting of the Board

Trustee Leonard presented Trustees with the latest version of Bylaw 9360 based on edits from the September, October and November Operations Policy and Planning Committee meetings. Committee members discussed items #1-9 of the bylaw. By consensus the remaining items #10-15 be postponed to the January 11, 2021 Operations Policy and Planning Committee meeting.

By consensus the committee referred **K.1** b-f to the January 11, 2021 Operations Policy and Planning Committee meeting.

- b. Draft Bylaw 9140, Ad Hoc Committee of the Board
- c. Draft Policy 8251, Trustees' Code of Conduct
- d. Draft Bylaw 9130.4, Audit Sub-Committee
- e. New Policy 4116.13, Whistleblower Protection
- f. Abandonment of Policies

That the motion *"That the Board of Education of School District No. 61 (Greater Victoria) abandon Policies 6142.03, 6151, 6161.2, and 6164.1; AND FURTHER THAT*

*The Board refer Policies 6145.01, 6145.02, 6161.1, 6162.5, and 6163.1 to the Superintendent for administration manual consideration."* be referred to the Operations Policy and Planning Committee meeting on Jan 11th, 2021

**K.2 Monthly Financial Report: November 2020 - Secretary-Treasurer Morris**

Secretary-Treasurer Morris provided Trustees the Monthly Financial Report for November 2020. The yearly revenue and expenses were compared against those from the year prior. Questions of clarification were asked. A breakdown of miscellaneous services was requested and will be provided at the January 11, 2021 Operations Policy and Planning Committee meeting.

**K.3 2021-2022 Budget Process - Secretary-Treasurer Morris**

Secretary-Treasurer Morris presented the proposed Budget Process for 2021-2022. Questions of clarification were asked.

**Moved by** Angie Hentze

That the Board of Education of School District No. 61 (Greater Victoria) approve the 2021-2022 Budget Process as presented.

**Motion Carried Unanimously**

**L. FACILITIES PLANNING**

**L.1 SJ Burnside Upgrade Project Report - Secretary-Treasurer Morris**

Secretary-Treasurer Morris provided a summary of the report. Trustee Leonard thanked staff for the report and acknowledged the time spent to create the review. Trustee Leonard stated that due to the time, questions of clarification were to be emailed to the Chair of the Board Trustee Watters, Secretary-Treasurer Morris, and Superintendent Green. Questions and answers will be reviewed at a future public meeting.

**L.2 Online Registration - Director Information and Technology for Learning Canty and Associate Superintendent Roberts**

Director Information and Technology for Learning Canty and Associate Superintendent Roberts advised the committee of the implementation of online registration for the 2021-2022 school year . Questions of clarification were asked.

**L.3 December 2020 Operations Report - Director of Facilities Morris**

Director of Facilities Services Morris, presented the Monthly Operations Update for December including an overview of recent work and progress on major and minor capital projects. Trustees thanked Director of Facilities Services Morris and his team for their ongoing hard work.



**L.4 Shops Audit Findings and Status Report - Secretary-Treasurer Morris**

By consensus Shops Audit Findings and Status Report be postponed to the January 11, 2021 Operations Policy and Planning Committee meeting.

**M. NEW BUSINESS**

**M.1 Website Report Menu and Sub-Menu - Trustee McNally**

**Moved by** Angie Hentze

*That the motion "That the Board of Education SD61 Greater Victoria direct the Superintendent to direct the Information Technology Department to set up submenus under the "Our District" menu, between "Provincial School Act" and "Trustee Elections",*

**AND FURTHER**

*That the Superintendent develop a protocol by the end of November 2020 with staff that will ensure all public reports are placed in the appropriate file, following approval / receipt by the Board, the day after the meeting that approves / receives the report." be referred to the Operations Policy and Planning Committee meeting on January 11th, 2021.*

**Motion Carried Unanimously**

**N. NOTICE OF MOTION**

**O. GENERAL ANNOUNCEMENTS**

Associate Superintendent Roberts was directed by Trustee Leonard to read the questions submitted from the public. The questions and answers will be brought forward to the January 11, 2021 Operations Policy and Planning Committee meeting.

**P. ADJOURNMENT**

The meeting adjourned at 11:01pm.

**Moved by** Ann Whiteaker

That the meeting adjourn.

**Note:** This meeting is being audio and video recorded. The video can be viewed on the District website.

**Motion Carried Unanimously**

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Chair

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Secretary-Treasurer

DRAFT



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**MEMO**

From: Sean McCartney & Pam Halverson, District Principals, Learning Support

To: Ed Policy Committee

Date: January 4, 2021

RE: District Team, Learning Support Update

As part of the regular District Team updates, the Learning Support department will provide two updates in the January and March Ed Policy meetings. Please see the accompanying slides for further information.

This first update will focus on examples of the department work in four key areas:

- Infrastructure
- Professional learning
- Effective student supports
- Home-school partnerships

Examples will include:

- Inclusion for Learning Strategy update – approx. 70% complete on Facilities-supported capital project to create sensory and professional spaces in schools. Next focus in 2021 is in Secondary schools.
- Professional learning offerings, including a 6-part paid learning series for EAs between Jan-June 2021
- Complex Team structure and referral process, including the continuum of programming options (eg. Victor, Arbutus, Reynolds)
- Plans for developing materials for improved parent communication and engagement

# Strategic Plan 2020-2025



## Mission

We nurture each student's learning and well-being in a safe, responsive and inclusive learning community.



## Vision

Each student within our world-class learning community has an opportunity to fulfill their potential and pursue their aspirations.

### Goal 1

Create an inclusive and culturally responsive learning environment that will support and improve all learners' personal and academic success.

#### Strategy 1:

Develop and support high quality learning opportunities through the implementation of curriculum in order to improve student achievement.

#### Strategy 2:

Engage and collaborate with students, families and staff to provide an inclusive learning environment that will enhance and support student learning, identities and well-being.

#### Strategy 3:

Address the inequity of outcomes for diverse learners in literacy, numeracy, engagement and completion rates.

### Goal 2

Create a culturally responsive learning environment that will support Indigenous learners' personal and academic success.

#### Strategy 1:

Critically examine personal and systemic biases, attitudes, beliefs, values and practices to increase student and staff understanding and appreciation of Indigenous worldviews, histories and perspectives.

#### Strategy 2:

Engage and collaborate with local Nations, Indigenous educators, Indigenous community leaders, Elders and families to enhance Indigenous student learning and well-being and identity.

#### Strategy 3:

Address the inequity of outcomes for Indigenous learners in literacy, numeracy, attendance and graduation rates.

### Goal 3

Create an inclusive and culturally responsive learning environment that will support all learners' physical and mental well-being.

#### Strategy 1:

Continue to provide professional learning opportunities to all staff to further support implementation of social emotional learning, physical literacy and mental health literacy that improves outcomes for students and classrooms.

#### Strategy 2:

Work in collaboration with Ministry of Children & Family Development to provide joint educational planning and support for children and youth in care that helps develop the child's personality, talents and mental and physical abilities to the fullest for current and future success.

#### Strategy 3:

Engage and collaborate with families to encourage awareness of and engagement in physical literacy and mental health literacy that improves outcomes for students in classrooms and at home.

#### Strategy 4:

Address the inequity of opportunity for all learners to maximize physical health and mental well-being.

## Core Values

### Engagement

We work to actively engage students in their education and make them feel connected to their learning.

### Equity

We give each student the opportunity to fulfill their potential.

### Innovation

We are innovative and consistently seek ways to make positive change.

### Integrity

We are ethical and fair.

### Transparency

We are accountable for the decisions we make and how we make them.

### Partnerships

We create open and respectful partnerships with each member of our learning community.

### Respect

We respect ourselves, others and the environment.

### Social Responsibility

We share responsibility to work well and inspire students to create a better world.

### Sustainability

We are proactive in the stewardship of the resources of our organization, our community and our planet.

# Operational Plan - District Team 2020-2021



## Goal:

Develop a greater understanding and knowledge of culturally responsive and equitable learning, teaching and working environments in order to close the opportunity and achievement gaps for all learners.

### Strategy 1:

Develop a framework that will be used by district staff and stakeholders to increase their understanding and ensure implementation of culturally responsive and equitable learning, teaching, and working environments.

### Strategy 2:

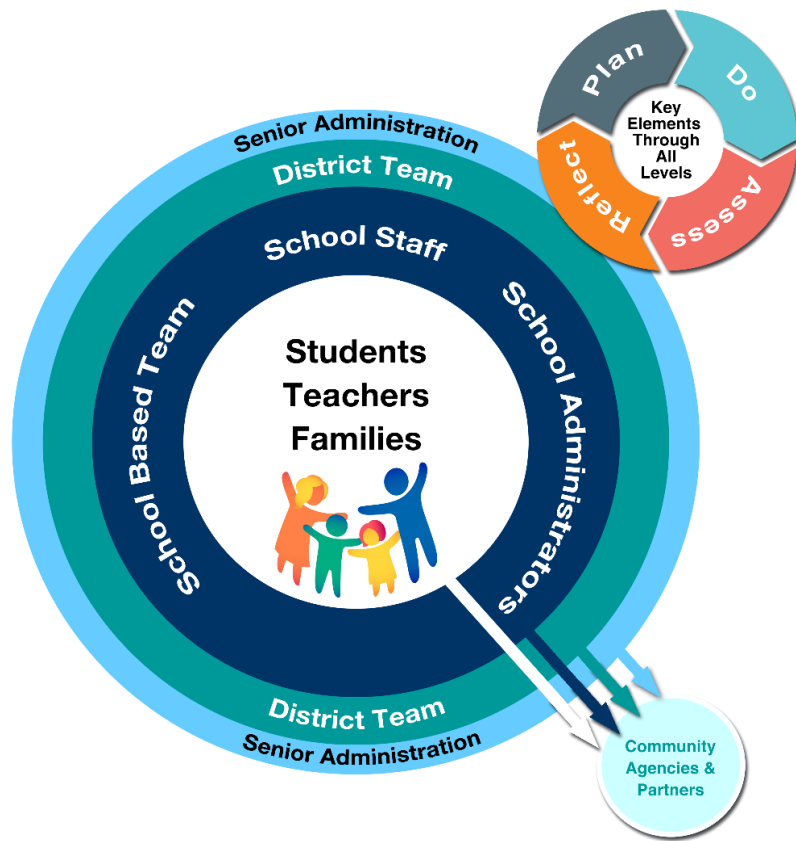
Develop and support high quality culturally responsive and equitable learning opportunities and resources in order to close the achievement gaps for all learners.

### Strategy 3:

Utilize the Equity Scan to critically examine personal and systemic biases, attitudes, beliefs, values and practices to inform future growth and change.







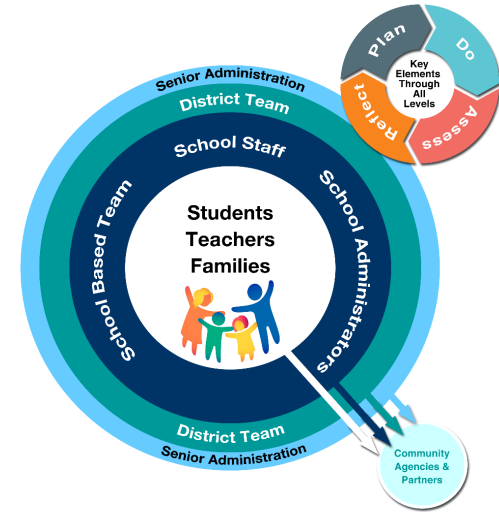
# Learning Support Update #1

Department focus in four key areas:

- Infrastructure
- Professional learning
- Effective student supports
- Home-school partnerships

# Infrastructure

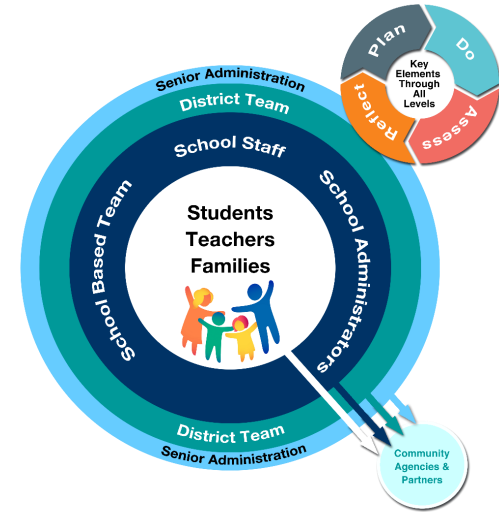
- **Inclusive Learning Strategy**
  - 70+% complete (elem, middle); 2021 focus on Secondary schools
- **Learning Support website as single repository**
- **Online referral process**
  - Designation requests
  - Itinerant support requests





# Professional Learning

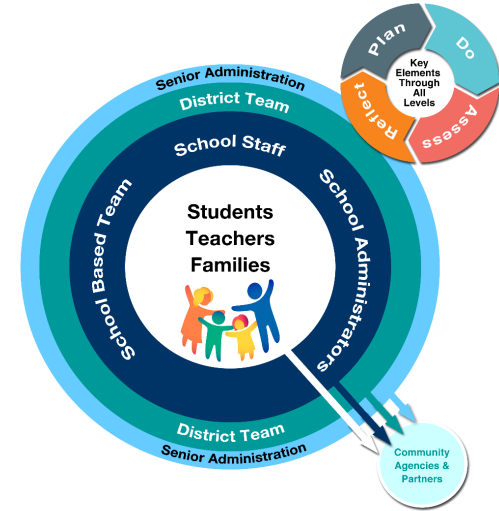
- Connecting Assessment, Planning and Programming (CAPP) learning series
- EA Professional Learning Series
  - 6-part paid after-school series; Jan-June 2021
- Competency-Based IEP 'pilot'
  - 2 families of schools





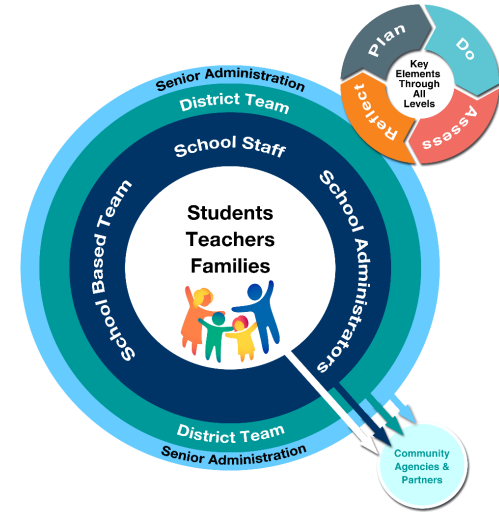
# Effective Student Supports

- **Collaboration across and with District Team**
  - Includes itinerants, community partners
- **Complex team and Tier 3 referral process**
  - Expanded supports for behaviour
  - Continuum of programming options
- **Enhancing SBT effectiveness**
  - Secondary focus



# Home - School Partnerships

- **Develop materials for improved parent communication**
  - District and school websites
  - Parent/Caregiver Guide to Inclusive Education
- **VCPAC & BCEdAccess bi-monthly meetings**
  - Proactive partnership
  - Strategies for parent engagement





## Aviation Maintenance 12

<b>School District/Independent School Authority Name:</b> Greater Victoria School district	<b>School District/Independent School Authority Number:</b> 61
<b>Developed by:</b> John Sumner	<b>Date Developed:</b> December 2020
<b>School Name:</b> Mount Douglas Secondary School	<b>Principal's Name:</b> Donna Thompson
<b>Superintendent Approval Date (for School Districts only):</b>	<b>Superintendent Signature (for School Districts only):</b>
<b>Board/Authority Approval Date:</b>	<b>Board/Authority Chair Signature:</b>
<b>Course Name:</b> Aviation Maintenance	<b>Grade Level of Course:</b> 12
<b>Number of Course Credits:</b> 4	<b>Number of Hours of Instruction:</b> 120

**Special Training, Facilities or Equipment Required:** The teacher will be a Technology Education specialist. The facility should have a classroom space to do the theory components of the course and an aviation shop equipped with an aircraft to do the practical components.

**Course Synopsis:** This course is designed to give students insight and experience into the field of aircraft maintenance. Students need to complete both the theory and practical applications of the modules covered. The hands-on, practical component of the course provides the opportunity to apply and refine the theoretical components, as well as develop workplace and employment skills necessary in the aviation field.

**Goals and Rationale:** Industry, education and government recognize the need to increase training capacity for the aviation industry. This is especially necessary with the increasing complexity of the industry and with an increasingly aged aviation technician workforce. It is important for students to have the opportunity for personal and professional development while gaining lifelong skills and knowledge. They will be able to think critically, use cross-disciplinary logic, math, and science knowledge and skills, as well as become familiar with the complex existing and emerging technologies that will enable them to become more employable in the aviation industry. Students can use the skills and knowledge

gained to access further post-secondary education in the aviation field, as well as other fields such as engineering and business. The knowledge and skills learned in this course will enhance everyday experiences for the learner, and enable them to get more out of their academic, vocational, and personal lives.

**Aboriginal Worldviews and Perspectives:** Aviation maintenance explores its content through **experiential learning**; all theory involves **hands-on** components. All work in the shop is **learner-centered**, and students work at their **own strength level and at their own pace**. **Practical applications** Of all curriculum theory is at the center of any career trades course – the students learn to do a career that will pay them well and contribute to their store of practical life skills.

## BIG IDEAS

Aircraft operation, service, and maintenance include consideration of **social and environmental impacts**.

Professional service and maintenance interests require the evaluation and refinement of skills.

Tools and **technologies** can be adapted for specific purposes.

Career-training includes ongoing cycles of diagnosing, planning, deciding, doing and reflecting.

## Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to do the following:</i></p> <p><b>Applied Design</b></p> <p><i>Understanding context</i></p> <ul style="list-style-type: none"> <li>Interpret circumstances of or factors in a particular aircraft situation or challenge in the context of regular servicing and repair</li> </ul> <p><i>Defining</i></p> <ul style="list-style-type: none"> <li>Identify potential issues and troubleshoot</li> <li>Identify requirements, intended impacts, and possible unintended negative consequences of service and repair</li> <li>Determine whether activity is collaborative or self-directed</li> </ul> <p><i>Ideating</i></p> <ul style="list-style-type: none"> <li>Generate ideas to create a range of possibilities and add to others' ideas in ways that create additional possibilities</li> <li>Critically analyze how competing social, ethical, and sustainability considerations impact creation and development of solutions</li> <li>Choose an idea to pursue and maintain an open mind about other potentially viable ideas</li> </ul>	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"> <li>Basic repair and maintenance and preventative maintenance procedures</li> <li>social, legal, and ethical responsibilities associated with vehicle operation and repair</li> <li>Inspection procedures and processes</li> <li>use of advanced technical information and manuals for the purpose of diagnostics and repair</li> <li>Specialty aviation tools and equipment</li> <li>lifting equipment and procedures</li> <li>engine diagnostic and inspection systems</li> <li>emerging and alternative energy sources used to power aircraft</li> <li>advanced engine operation</li> <li>Aircraft maintenance and special services</li> <li>electrical and electronic applications</li> <li>advanced hydraulic and mechanical vehicle braking system and landing gear system operation</li> </ul>

### **Prototyping**

- Identify and apply a variety of sources of information to develop a plan that includes key stages and resources
- Analyze the **design for the life cycle** and evaluate its **impacts**
- Consider a variety of materials for effective use and their potential for reuse, recycling, and biodegradability
- Make changes to tools, materials, and procedures as needed

### **Testing**

- Identify and communicate with sources of feedback
- Develop an **appropriate test**, conduct the test, and collect and compile data
- Apply information based on feedback and testing results to make necessary changes

### **Making**

- Identify appropriate tools, technologies, materials, processes, and time needed
- Carry out updated plan, incorporating feedback from self and others and from testing results
- Use materials in ways that minimize waste

### **Sharing**

- Decide how and with whom to **share** their processes, to solicit and generate feedback
- Share final plans, products and processes to evaluate their success
- Critically reflect on plans, products and processes, and identify new goals
- Identify and analyze new possibilities for plans, products and processes, including how they or others might build on them

### **Applied Skills**

- Master safety procedures for themselves, co-workers, and operators in both physical and digital environments
- Individually or collaboratively identify and assess skills needed for automotive service plans, products and processes
- Develop mastery and proficiency in skills at various levels involving manual dexterity, mechanics, and maintenance
- Develop specific plans to learn or refine identified skills over time

- advanced hydraulic and mechanical aircraft braking system diagnosis and repair
- advanced aircraft suspension systems operation
- advanced vehicle suspension system diagnosis and repair
- wheels and tires
- flying control (Fixed wing and rotary wing)
- advanced flying control system types and operation
- advanced flying system diagnosis and repair
- environmental systems
- engine systems
- Aircraft safety systems
- design for the life cycle

### Applied Technologies

- Explore existing, new, and emerging tools, technologies, and systems to evaluate suitability for aircraft maintenance and repair interests
- Evaluate impacts, including unintended negative consequences, of choices made about technology use
- Examine the role that advancing technologies play in aviation contexts

### Big Ideas – Elaborations

- **social and environmental impacts:** including operator and public safety; emissions and effects on the environment; manufacturing, packaging, disposal, and recycling considerations related to aircraft parts and products
- **technologies:** tools that extend human capabilities
- career-training

### Curricular Competencies – Elaborations

- **Design for the life cycle:** taking into account economic costs and social and environmental impacts of the product, from the extraction of raw materials to eventual reuse or recycling of component materials
- **Impacts:** including the social and environmental impacts of extraction and transportation of raw materials; manufacturing, packaging, and transportation to markets; servicing or providing replacement parts; expected usable lifetime; and reuse or recycling of component materials
- **Appropriate test:** includes evaluating the degree of authenticity required for the setting of the test, deciding on an appropriate type and number of trials, and collecting and compiling data
- **Share:** may include showing to others or use by others, giving away, or marketing and selling

### Content – Elaborations

- **Diagnostics:** onboard diagnostic systems, external diagnostic systems
- **Fundamental avia tools and equipment:** hand, power, and pneumatic tools and equipment (e.g., hydraulic test bed, tire changer, airframe rigging)
- **Train level automotive tools: for example** engine machine and hoist, scan tool, NDT testing, Intrscope inspections
- **Lifting equipment:** for example, jacks, hoists, stands
- **Procedures:** planning, integrity, stability
- **Aircraft systems:** for example, flying controls, landing gear, suspension, engine controls, electric generating
- **Aircraft safety systems:** for example, ejection seats, fire suppression systems, emergency landing gear systems



**Recommended Instructional Components:** The course will be broken into 80% project based, collaborative hands-on learning in the shop and 20% direct classroom instruction.

- Integrated online and digital information management. Example: Google Classroom
- Class located in a computer lab and/or maker space environment
- Learning opportunities for both individual and collaborative work
- Communal learning: Mini-tutorials presented by both the teacher and student experts
- Design challenges to build design thinking skills and strategies
- Many connections to authentic problems, users, and/or challenges in the local community
- Frequent check-ins, conversations and monitoring of student work during individual project phase of the course

**Recommended Assessment Components:** Ensure alignment with the Principles of Quality Assessment

Using the principles of quality assessment, students will demonstrate their understanding of theory through tests and quizzes, and will perform ongoing performance based tasks to demonstrate their skill development and practical understanding. Students will perform self-evaluation which will include tracking their own practical learning and provide feedback to their peers (working groups), as well as receive formative and summative feedback on their project work. Assessment of the direct classroom instruction will be primarily from quizzes and unit tests, but obviously the direct classroom instruction will also impact their practical learning.

- Use of competency-based assessment rubrics/charts with the following levels of proficiency: emerging, developing, proficient, extending.
  - Competency charts can support the wide variety and individualization of student learning, projects and work.
  - Competency charts can support and promote an environment where failure (during prototype/testing) is expected, accepted, and learned from
- Student self-assessment and reflection as they work through the design process
  - students will self-assess and reflect on the progress of their design solution while they are developing it
  - students will reflect on the design thinking process as they implement each step
  - students will reflect on their learning throughout the process
- Formative assessment throughout the skills phase and learning (part 1) and project process (part 2).
- Summative assessment of the final project and student sharing of that learning, idea, or design solution to an audience.
- On-going and individualized 1-1 feedback provided by the instructor

**Learning Resources:**

- Online
- Jeppesen books and manuals
- AME Training Manuals

- Aviation Mechanic handbook
- Aircraft components and equipment
- A & P Technician General
- A & P Technician General Test guide and oral study guide
- A & P Technician Airframe
- Helicopter maintenance, Jeppesen, Joseph Schafer
- Sheet Metal, ATP publication, Leo A. Meyer
- Viking Air training manual