Board of Education of
School District No. 27 (Cariboo-Chilcotin)

P: 250.398.3833
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350 Second Avenue N
Williams Lake, BC V2G 1Z9

EDUCATION COMMITTEE MEETING
AGENDA
April 13, 2022 – 4:00 p.m.

WELCOME AND ACKNOWLEDGEMENT

This meeting is being held on the traditional and unceded territory of the Secwépemc People.

1. **March 9, 2022 Education Committee Report**

2. **Board/Authority Authorized Courses**

   a. History of Rock and Roll 12
   b. Aviation 12

3. **Outdoor Learning at Cataline**

4. **Wild Schools**

5. **Operation Ranch Hands**

6. **Learning Series**

7. **District PowerBI Data Solutions**

8. **Future Meeting Dates:**

MEETING	DATE	TIME	LOCATION
Education Committee	May 11, 2022	4:00 p.m.	Board Office
Education Committee	June 15, 2022	4:00 p.m.	Board Office

"Learning, Growing and Belonging Together"

EDUCATION COMMITTEE MEETING REPORT

March 9, 2021 (4:03 - 5:34 p.m.)

Trustees in Attendance: Mary Forbes, Anne Kohut, Willow Macdonald, Linda Martens

Attending via Teams: Alexis Walch

Staff: Superintendent Chris van der Mark, Secretary-Treasurer Harinder Singh, Assistant Superintendent Cheryl Lenardon, Directors of Instruction Sean Cameron, Dean Coder, and Cathy van der Mark, Executive Assistant Carrie Pratt

Agenda Item	Notes	Action
Acknowledgement of Traditional Territory		
1. February 9, 2022 Committee Report	The committee reviewed the report and recommended no changes.	None.
2. Collective Responsibility in Action at LCSS	Over the past two years the administrative team at Lake City Secondary have been working towards consistent and positive communication with parents and students. Director of Instruction Sean Cameron shared tools and strategies being used by staff at LCSS to connect with families. Staff were provided with Teams phones and asked to communicate with at least one family per day. Journal entries in MyEd helped with coordination as all staff could view the entries, eliminating duplication of calls and omitting any students. Concurrently, the District has been using these tools to capture notes in MyEd for Indigenous Students. Mr. Cameron shared screen shots of the tools in use by staff at LCSS with the committee.	Information only.
3. Communicating Student Learning (CSL) Update	Director of Instruction Sean Cameron provided an update on Communicating Student Learning in SD27. While the province has been in a state of change over the past ten years, school districts have been operating under an interim provincial reporting order. SD27 used this opportunity to transition away from letter grades for students in grades K-7 and implement the use of a developmental performance scale on report cards instead. The District is currently developing a standard digital platform to support CSL.	Information only.

"Learning, Growing and Belonging Together"

4. Erase Report it Tool	Assistant Superintendent Cheryl Lenardon provided information on erase – a strategy of the Ministry of Education for building safe and caring school communities. Erase stands for ***expect respect and a safe education***. The erase website has resources and information for students and families on safety, mental health, bullying, racism, school safety, SOGI, and substance use. The Report it Tool provides an online anonymous tool for reporting concerns to the District's Safe School Coordinator. The erase link is on the District and all school websites.	
5. Comprehensive School Health Grants	Assistant Superintendent Cheryl Lenardon reported on *Comprehensive School Health Grants* provided through Interior Health. Funds can be used to designate a Health Promoting School Coordinator, supplement the cost of hiring for this role, or provide funding for health promoting initiatives within the school district. The District received $27,000 in funding this year and reviewed 12 funding requests. $22,125 in funds were awarded for 8 school projects including trauma-informed yoga, school garden projects, healthy food preparation, an interpretive nature path, blacktop hockey, sensory/physical literacy paths and school bikes. Schools will share their initiatives on their school websites and through posts on the district website under the applicable strategic planning focus areas.	Information only.
6. Early Learning	Director of Instruction Cathy van der Mark reported on early learning changes and initiatives occurring as child care transitions to the Ministry of Education – soon to be called the Ministry of Education and Child Care. • **Just B4** is a half-day licensed pre-school child care pay for service program for four year olds. • **Seamless Day Kindergarten** – this program employs certified early childhood educators to provide before/after school care in K classrooms and to support learning alongside the classroom teacher. • **Early Childhood Educator (ECE) Dual Credit Program** – this program will give B.C. students a head start in their post-secondary ECE studies (similar to current trades offerings) while also helping to develop and boost the future workforce in this sector. •	Information only.
7. Field Trip Approval	The committee reviewed the field trip application from Lake City Secondary-Columneetza for a wilderness backpacking trip to Chunoz Ch'ed (Potato Mountain-Chilcotin Title Lands). Field Trips considered high risk are reviewed and approved by the Board.	Referred to Board for approval.

Proposed Future Meeting Dates:

MEETING	DATE	TIME	LOCATION
Education Committee	April 13, 2022	4:00 p.m.	Board Office
Education Committee	May 11, 2022	4:00 p.m.	Board Office
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Briefing Note

TO: **Education Committee**

FROM: **Dean Coder**

DATE: **April 13, 2022**

RE: **Board/Authority Authorized Courses**

BACKGROUND

Last January, PSO submitted two Board Authority/Authorized courses for approval. They have since been reviewed and are now being recommended for Board approval.

DISCUSSION

HISTORY OF ROCK AND ROLL 12 COURSE SYNOPSIS:

History of Rock and Roll 12 is a course that will provide students an opportunity to learn about and appreciate an important genre of contemporary music, rock and roll, and to be able to place rock music into a cultural, social, political and historical context.

The course will cover several styles and trends in rock, and through these trends, the course will examine the impact on society not only in North America, but on a global scale. In addition, students, will discover the correlation between rock's roots and history and the popular music of today a thread of influence that runs from Elvis to Justin Bieber. History of Rock and Roll 12 will begin by examining rock's blues, soul, country, and gospel roots, the 'Big Bang' of the 1950's and the corporate, social and political backlash against it, and will examine perhaps the most important era in popular music, the 1960's, a volatile era of social and political change. The course will cover styles as varied as heavy metal, disco, and grunge, and their impact on a global scale. The course will look at the 1980's and the advent of the music video era and its positive and negative impact on the music industry and will conclude with student-generated and presented units on more recent trends such as rap and hip-hop, alternative, and rock in the 21st Century.

Students are exposed to some form of rock and roll on a regular, if not, daily basis, but this course will enhance both their appreciation and their ability to listen and discuss critically the music in a historical context and also understand the running thread between rock's history and the popular music of today.

AVIATION 12 COURSE SYNOPSIS:

The Aviation 12 course is designed to acquaint students with the large number of job and career opportunities offered in the aviation and aerospace industry. The course is also designed to acquaint students with the knowledge, skills, and attitudes relevant to the workplace. Students will have the opportunity to research and explore the history of aviation, theory of flight, aircraft design, construction, and maintenance, aircraft operations, air law, meteorology, navigation and communication, airmanship and safety issues related to aircraft operations. The course is also designed to give students the knowledge, skills, and tools necessary to plan their careers in an informed manner. Units and lessons will provide students with a varied learning experience; instructional strategies and course content will incorporate hands on learning, research, field trips, guest speakers, lab work and experimentation, individual and group projects, recommended readings, class discussions…etc. The course also serves to co-ordinate learning in mathematics, science, geography, metal, and drafting areas.

RECOMMENDATION

That the Board approve the two Board/Authority Approved Courses as presented.

Board/Authority Authorized Course:
History of Rock and Roll

School District No. 27 (CARIBOO - CHILCOTIN)

Developed by: Bryan Ardiel (PSO) / Christopher Parker (SD No. 61)	**Date Developed:** Nov. 2018
School Name: Peter Skene Ogden Secondary	**Principal's Name:** Geoff Butcher
Superintendent Approval Date (for School Districts only):	**Superintendent Signature (for School Districts only):** Chris van der Mark
Board/Authority Approval Date:	**Board/Authority Chair Signature:** Ciel Patenaude
School District/Independent School Authority Name: School District No. 27	**School District/Independent School Authority Number:** 27
Course Name: History of Rock and Roll	**Grade Level of Course:** 12
Number of Course Credits: 4 per semester	**Number of Hours of Instruction:** 120 hours per semester

Special Training, Facilities or Equipment Required:

Standard school learning space, access to projector and speakers.

Course Synopsis:

History of Rock and Roll 12 is a course that will provide students an opportunity to learn about and appreciate an important genre of contemporary music, rock and roll, and to be able to place rock music into a cultural, social, political and historical context. The course will cover several styles and trends in rock, and through these trends, the course will examine the impact on society not only in North America, but on a global scale. In addition, students, will discover the correlation between rock's roots and history and the popular music of today-a thread of influence that runs from Elvis to Justin Bieber. History of Rock and Roll 12 will begin by examining rock's blues, soul, country and gospel roots, the 'Big Bang' of the 1950's and the corporate, social and political backlash against it, and will examine perhaps the most important era in popular music-the 1960's-a volatile era of social and political change. The course will cover styles as varied as heavy metal, disco, and grunge, and their impact on a global scale. The course will look at the 1980's and the advent of the music video era and its positive and negative impact on the music industry, and will conclude with student-generated and presented units on more recent trends such as rap and hip-hop, alternative, and rock in the 21st Century.

Students are exposed to some form of rock and roll on a regular, if not, daily basis, but this course will enhance both their appreciation and their ability to listen and discuss critically the music in a historical context and also understand the running thread between rock's history and the popular music of today.

Goals and Rationale:

This course was developed to encourage students to explore rock music and the impact it has had on society. Through this course, students will learn how past generations of young people expressed themselves through music, how this music was not only a reflection of society, but also how it influenced the politics of a generation and therefore the political landscape on a global scale. Students will be encouraged to relate this to their own experiences and will appreciate and understand the history of rock music and how it has changed the world.

Aboriginal Worldviews and Perspectives:
- **The Power of Story** - allowing and giving students opportunities to apply and demonstrate the skills associated with oral storytelling and the use of metaphor
- **Experiential Learning** - embrace learner-centered practice and interact with students to ascertain their strengths and preferences when it comes to learning experiences
- Learning is embedded in memory, history, and story
- Learning requires exploration of one's identity
- Learning recognizes the role of indigenous knowledge

Course Name: History of Rock and Roll   **Grade: 12**

BIG IDEAS

Music influences important historical events and social and cultural movements and how history influences music	Music is an industry that can conflict with the idea of personal and social expression	Music can change/influence people's attitudes and beliefs regarding society	Music can be used as a lens to explore common social issues in society	Music can increase and influence a person's awareness of their personal and cultural identity

Learning Standards

Curricular Competencies	Content
Students are expected to do the following:	*Students are expected to know the following:*
- Use **historic inquiry processes** and skills to: ask questions; gather, interpret, and analyze data and ideas from a variety of sources; and communicate findings and decisions	- Factors that explain the explosion of a genre in a decade - refer to elaboration (e.g. Rock and Roll in 1950s)
- Assess the significance of people, locations, events, and developments, and compare varying perspectives on their historical significance at particular times and places, and from group to group	- The significant historical events that coincide with major artists and genres
- Analyze, critique, assess how music is reflected through history	- Significant role played by technology and musical instruments of a musical genre
- Analyze, critique and assess how music influences historical events of each decade	- **Indigenous Artists** and their impact on the musical genre
- examine the social and cultural factors that synthesized to create a new form of music in each decade (1950s-present day)	- The important **role of women** in the development of a musical genre
- Assess how music has been a vehicle of expression by those who have been discriminated against (e.g. African -Americans, Indigenous Peoples of the World)	- how music affects a **student's individuality** and views of the world/society
- Explain how musicians use their craft as a means of **social commentary**	

- Assess and interpret how music affects individuality through an inquiry based/individualized based project	

Curricular Competencies – Elaborations

Historical inquiry process: process used by leading historical questions, analysing primary and secondary sources, and citing historical evidence

Social commentary: artists commenting on issues currently facing society through their music

Content – Elaborations

Indigenous Artists e.g Jimi Hendrix, Robbie Robertson, Link Wray, Buffy Sainte-Marie

Factors that contribute to the explosion of a genre in a decade: social, economic and cultural factors that shape that particular decade (e.g. 1970s - development of punk due to the economic depression and feeling of displacement and apathy in Britain)

Student's individuality and views of the world/society - students will explore their own individual tastes and preferences in music and explore an artist through a personalized/inquiry based project - students then deliver this information to their fellow students

Role of Women - in a male-dominated industry, how women broke through long-established barriers, with empowered women being feminine but also strong figures and how they are important role models for young women

Recommended Instructional Components:

Unit	Title	Discussion Topics
1	Foundations of Rock & the 'Big Bang'	- Social and Cultural factors that created Rock & Roll - Rise of original icons of 1950s rock - Elvis, Chuck Berry etc. - Rise of 'the teenager' as a powerful demographic - Rock & Roll as an expression of rebellion
2	Teen Idols, Doo-Wop, and Motown	- Rise of the music industry and how it 'created' artists - Influence of Motown and the voice it gave African- American musicians - Change in music style to a softer melodic tone
3	The rise of the songwriter, Beach Music, Bob Dylan, the Beatles & the British Invasion	- Influence of Beach Music - Importance of lyrics and themes of songs (social commentary) - Impact of 'British Invasion'
4	America's Response to Britain, and Psychedelia to Woodstock	- America's response to British Invasion - The influence of music, and substance use/abuse on the Psychedelic Era - Woodstock as a social and cultural phenomenon
5	Hard Rock, Early Heavy Metal, and Glam Rock of the 1970's	- Change from 'Idealism of 1960s' to the 'Excess of the 1970s' - Heavy Instrumentation and Theatrics during the 1970's genre
6	Punk, New Wave, MTV and the explosion of music videos	- Punk Music: Social Disintegration in Britain - MTV: Birth of Music Video
7	Disco and the Emergence of Women in Rock	- Studio 54 - Substance Abuse - Role of Powerful Women in Music - e.g. Aretha Franklin, Donna Summer, Blondie, Pat Benatar, Janis Joplin
8	Hard Rock Resurfaces, Hair Metal, and Grunge	- Rebirth of Hard Rock: Impact of Major Artists - Grunge and the Seattle Scene
9	Rock Cares: Charities and Causes (Live Aid, Concert for New York, etc.)	- Influence of Music and the Birth of Charities to Change the World - Live Aid, Farm Aid, The Concert for New York

10	Canada's Role in Rock and the role of North America's Indigenous Rock Musicians	- Impact of Canadian Artists - Role of Indigenous Musicians and how Indigenous issues have impacted the Rock Music World
11	Rap, Hip-Hop, Alternative, and Rock into the 21st Century	- Individualized Inquiry Project by students delivered as instruction to the class

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

Students will be evaluated by a variety of means, including self and peer assessment, written assignments and quizzes, oral/listening assignments, an inquiry based learning project, and as a final component, a digital portfolio on a/an artist(s) or genre(s) of their choosing.

<u>Potential Course Breakdown</u>

Discussion and Participation Groups	30%
Assignments	30%
Tests (written in groups)	20%
Final Project (Individualized inquiry-based learning project)	20%

Learning Resources:

- Katherine Charleton, *Rock Music Styles: A History*, 4th edition McGraw-Hill Publishing
- Anthony DeCurtis, *The Rolling Stone Illustrated History of Rock & Roll: The Definitive History of the Most Important Artists and Their Music.* 3rd edition. New York: Random House
- David P. Szatmary, *Rockin' in Time.* 6th edition. Prentice Hall
- David Brackett, ed., *The Pop, Rock, and Soul Reader: Histories and Debates,* Oxford University Press
- various online websites and articles
- various YouTube clips (performances, interviews, documentaries)
- Clips from the following films may be used:

  Films: *The Wild One, Blackboard Jungle, The Girl Can't Help It, Jailhouse Rock, The Buddy Holly Story, American Graffiti, A Hard Day's Night*

- Songs from the following albums may be used:

  Elvis Presley, The Freewheelin' Bob Dylan, The Times They Are a' Changin', Pet Sounds, Please Please Me, Revolver, Sgt. Pepper's Lonely Hearts Club Band, Who's Next, The Doors, Are You Experienced, Disraeli Gears, Led Zeppelin, Led Zeppelin II, Led Zeppelin IV, Paranoid, The Wall, The Dark Side of the Moon, Born to Run, A Night at the Opera, London Calling, Thriller, Synchronicity, Eliminator, Saturday Night Fever, Back in Black, Van Halen, British Steel, The Number of the Beast, Metallica, Nevermind, American Woman, Harvest, Reckless

Board/Authority Authorized Course: Aviation 12

School District/Independent School Authority Name: School District 27 Cariboo-Chilcotin	**School District/Independent School Authority Number:** SD No. 27
Developed by: Ian Watson	**Date Developed:** January 10, 2020
School Name: Peter Skene Ogden Secondary School	**Principal's Name:** Geoff Butcher
Superintendent Approval Date (for School Districts only):	**Superintendent Signature (for School Districts only):** Chris van der Mark
Board/Authority Approval Date:	**Board/Authority Chair Signature:** Ciel Patenaude
Course Name: Aviation 12	**Grade Level of Course:** 12
Number of Course Credits: 4	**Number of Hours of Instruction:** 120

Board/Authority Prerequisite(s):

Special Training, Facilities or Equipment Required:

Aviation background, knowledge and interest in the aviation/aerospace industry; a classroom or shop facility suitable for students to work on projects that involves the use small tools; navigation and meteorology charts, protractors, rulers, calculators, compasses; a class set of the textbook, *From the Ground Up,* wind tunnel and donated aircraft parts to support learning.

Course Synopsis:

The Aviation 12 course is designed to acquaint students with the large number of job and career opportunities offered in the aviation/aerospace industry. It is also designed to acquaint students with the knowledge, skills and attitudes relevant to the work place. Students will have the opportunity to research and explore the history of aviation, theory of flight, aircraft design, construction, and maintenance, aircraft operations, air law, meteorology, navigation and communication, airmanship and safety issues related to aircraft operations. The course is also designed to give students the knowledge, skills and tools necessary to plan their

careers in an informed manner. Units and lessons will provide students with a varied learning experience; instructional strategies and course content will incorporate hands on learning, research, field trips, guest speakers, lab work and experimentation, individual and group projects, recommended readings, class discussions…etc. The course also serves to co-ordinate learning in mathematics, science, geography, metal, and drafting areas.

Goals and Rationale:

The goals of the Aviation 12 course are to: 1) acquaint students with the growing number of occupations and career opportunities in the aviation/aerospace industry; 2) acquaint students with the knowledge, skills, and attitudes relevant to the work place and 3) give students the educational tools necessary to plan their careers in an informed manner.

Aboriginal Worldviews and Perspectives:

Aviation 12 shares a variety of Aboriginal Worldviews and Perspectives:
- Learning is understanding identity and one's relationship with the external environment
- Learning requires exploration of one's own identity.
- Learning involves recognizing the consequences of one's actions.
- Learning involves generational roles and responsibilities.
- Learning involves the teacher as facilitator of a student-centered course
- Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.
- Learning is holistic, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).
- Learning recognizes the role of indigenous knowledge.
- Learning is embedded in memory, history, and story.
- Learning involves patience and time.
- Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations

Board/Authority Authorized Course:
Aviation 12

Course Name: Aviation 12　　　　　　　　　　　　　　　　　　　　　**Grade:**

BIG IDEAS

Career Exploration & Planning	Aircraft Operations: The Airplane, Theory of flight & Aero Engines	Air Law: Aerodromes & Airspace, Air Rules & Procedures	Meteorology: Aviation Weather	Navigation & Communication: Air Navigation, Radio & Radio Navigation	General Airmanship: Airmanship, Human Factors & Air Safety

Learning Standards

Curricular Competencies	Content
• Students are expected to do the following: • Research, explore and obtain exposure to the various aviation related careers (airplane pilot, aircraft mechanic, air traffic control, electronic technician, meteorologist, flight instructor, flight dispatcher, station manager, schedule coordinator, food services, customer service, reservations, flight attendant, regional control centers, federal aviation administration, airport director, public relations, customs…etc.). • Research and explore career trends and opportunities. • Explore basic career responsibilities and expectations. • Research and explore educational requirements. • Examine the nature of the various careers: wages, salary, employment benefits, advancement, working conditions, mobility…etc. • Gather and interpret the information required to make informed educational, career, and personal decisions.	*Students are expected to know the following:* The Airplane • Aircraft Components {Parts of an airplane}. • Control Systems and Materials {Control Systems, Cabin Pressurization, Construction Materials, Loads and Load Factors, Logbooks, and Inspections}. • Aircraft Classes and Categories {Normal, Utility, Aerobatics, Commuter, Transport, and Additional Categories}. Theory of Flight

- Use information to implement their educational, career, and personal plans.
- Build networks of resources to support their educational, career, and personal goals.
- Relate their strengths, interests, attributes, and values to their educational, career, and personal goals.
- Access, use, and evaluate services, resources, and advice related to their educational, career, and personal goals.
- Demonstrate competent use of computer technology to support their educational, career, and personal goals.
- Apply appropriate computer research tools to build resources to support their educational, career, and personal goals
- Demonstrate an understanding and appreciation for information technologies as it relates to educational, career, and personal plans.
- Use information technologies to develop their educational, career, and personal portfolios.
- Gather, interpret, and assess the historical information as it applied to the present aviation/aerospace industry.
- Apply and incorporate the historical information into their projects and experiments.
- Apply correct scientific methods and principles to their projects and experiments.
- Identify and describe Canada's contributions to the aviation/aerospace industry.
- Identify and clarify problems, issues, and influences pertaining to the development of today's aviation/aerospace industry.
- Explain the development, importance and influence of the aviation/aerospace industry on today's economy.
- Gather and interpret the information required to make informed educational, career, and personal decisions.
- Analyze internal and external factors to inform personal career-life choices for post-graduation planning
- Elaborations: may include consideration of passions, preferences, strengths, education/work opportunities, well-being
- Assess personal transferable skills, and identify strengths and those skills that require further refinement
- Explore and evaluate personal strategies, including social, physical, and financial, to maintain well-being
- Collaborate with a mentor to inform career-life development and exploration.

- Theoretical Applications {Forces Acting on an Airplane in Flight, Wing Design, Airplane Axes, Stability, Performance Factors, Airspeed Limitations…etc}.
- Flight Instruments {Pitot Static Instruments, Radar Altimeter, Gyro Instruments, Angle of Attack Indicators, Mach Indicators}.

Aero Engines
- Definitions and Configurations {Power, Types of Combustion Engines, Parts of Reciprocating Engines, Two and Four-Stroke Cycles, Diesel Engines, Turbocharging, Supercharging, Engine Timing, Cooling and Lubrication}.
- Fuel Systems {Types of Fuel Systems, Tanks, Selector Valves, Lines and Filters, Gauges, Fuel types, and Fuel Related Problems}.
- Carburetor and Fuel Injection Systems {How Carburetors Work, Mixture Control, Carburetor Icing, Fuel Injection}.
- Exhaust Systems
- Ignition Systems {Magnet Polarity, Magnetos, Dual Ignition, Shielding, Ignition Timing}
- FADEC Systems
- Electrical Systems
- Propellers {Pitch, Types of Propellers, Feathering, Prop Reversing, Propeller Care}
- Engine Instruments {Oil Pressure and Temperature Gauges, Cylinder Head and Carburetor Temperature Gauges, Tachometer, Manifold Pressure Gauge}.
- Engine Operation
- Jet Propulsion {Ram, Turbojet, Turboshaft, Turboprop, By-Pass, Turbofan Engines, Thrust Reversal}.

• Define, recognize, explain, and demonstrate their understanding of the following topics as they apply to Aircraft Operations. • Define, recognize, explain, and demonstrate their understanding of the following topics as they apply to Air Law. • Define, recognize, explain, and demonstrate their understanding of the following topics as they apply to Meteorology. • Define, recognize, explain, and demonstrate their understanding of the following topics as they apply to Navigation and Communication. • Define, recognize, explain, and demonstrate their understanding of the following topics as they apply to General Airmanship.	**Aerodromes and Airspace** • Aerodromes {Runway Numbering, Markings, Taxiways, Guidance Signs, Wind Indicators, Lighting, Aerodrome Traffic Procedures…etc}. • The Canadian Airspace System {Domestic Airspace, Altimeter Regions, Identification Zones, Uncontrolled and Controlled Airspace, Classification of Canadian Airspace, Flight Information Region, Mountainous Regions…etc}. • The U.S. Airspace System {US Domestic Airspace, US Identification Zones, Classification of US Airspace}. **Air Rules and Procedures** • Rules of the Air {Airworthiness, Logs and Licenses, Rules and Right of Way, Fuel Requirements, Night Requirements, Over Water Flights, Aerobatics, Aircraft Occurrences, Explosives and Dangerous Goods…etc}. • Air Traffic Rules and Procedures {Air Traffic Services, Clearance and Instructions, Position Reports, Flight Rules, Flight Plans and Itineraries, Transborder Flights, Cruising Altitudes and Speeds, Weather Minima, Special VFR, Holding Patters, Identification Zones…etc}. **Aviation Weather** • The Atmosphere {Properties, Divisions, and Standard Atmosphere}. • Clouds {Cloud Formation, Classification, and Sky Condition}.

	- Pressure {Atmospheric Pressure, Sea Level and Station Pressure, Pressure Systems, Pressure Changes, Pressure Gradients, Coriolis Force, Surface Friction, Centrifugal Force, Convergence and Divergence}. - Winds {Hemispheric Prevailing Winds, Upper Level Winds, Surface Winds, Wind Speed and Direction, Wind Shear, The Jet Stream}. - Humidity, Temperature and Stability - Air Masses {Weather in an Air Mass. Modification of Air Masses}. - Fronts {Polar Fronts, Types of Fronts, Frontal Weather}. - Precipitation and Fog - Thunderstorms {Thunderstorm Weather and Avoidance}. - Icing {How Icing Affects the Airplane, Types of Icing, Icing in Clouds and in Precipitation, Protection from Icing, Icing Avoidance}. - Turbulence - High Level Weather - Weather Signs - Weather Information {Charts, Observing Systems, Reports, Forecasting, Information Sources}. Air Navigation - Latitude and Longitude - The Earth's Magnetism - Units of Distance and Speed - Aeronautical Charts - Navigation Problems Radio

	- Radio - Communication Equipment - Radio Communication Facilities - Radiotelephone Procedure Radio Navigation - VHF Omnirange Navigation system - Radio Beacons - Instrument Landing Systems - Microwave Landing Systems - Automatic direction Finder - Distance Measuring Equipment - Flight Director - Area Navigation - Electronic Flight Instrument Systems - Radar and Facilities - Emergency Locator Transmitter Airmanship - Care of the Airplane - Weight and Balance - Aircraft Performance - Wake Turbulence - Flight Preparations - Emergency Procedures - Bush Sense - Ultralights - Gliders Human Factors

	• Cockpit Organization • Crew Co-ordination • Fitness and Health • Sensory Illusions • Decision Making Air Safety • The Proper State of Mind • Checklists for Safe VFR Flights • Important Rules • Principles for Safe Take-Offs and Landings

Big Ideas – Elaborations

Questioning and predicting
Demonstrate a sustained intellectual curiosity about an aviation/aerospace topic or problem of personal, local, or global interest
Make observations aimed at identifying their own questions, including increasingly abstract ones, about the natural world
Formulate multiple hypotheses and predict multiple outcomes

Planning and conducting
Collaboratively and individually plan, select, and use appropriate investigation methods, including field work and lab experiments, to collect reliable data (qualitative and quantitative)
Assess risks and address ethical, cultural, and/or environmental issues associated with their proposed methods

Processing and analyzing data and information
Experience and interpret the local environment
Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information
Seek and analyze patterns, trends, and connections in data, including describing relationships between variables, performing calculations, and identifying inconsistencies
Construct, analyze, and interpret graphs, models, and/or diagrams
Use knowledge of aeronautical concepts to draw conclusions that are consistent with evidence
Analyze cause-and-effect relationships

Evaluating
Evaluate their methods and experimental conditions, including identifying sources of error or uncertainty, confounding variables, and possible alternative explanations and conclusions
Describe specific ways to improve their investigation methods and the quality of their data
Evaluate the validity and limitations of a model or analogy in relation to the phenomenon modelled
Demonstrate an awareness of assumptions, question information given, and identify bias in their own work and in primary and secondary sources
Consider the changes in knowledge over time as tools and technologies have developed
Connect scientific explorations to careers in aviation/aerospace
Exercise a healthy, informed skepticism and use scientific knowledge and findings to form their own investigations to evaluate claims in primary and secondary sources
Consider social, ethical, and environmental implications of the findings from their own and others' investigations
Critically analyze the validity of information in primary and secondary sources and evaluate the approaches used to solve problems

Assess risks in the context of personal safety and social responsibility

Applying and innovating
Contribute to care for self, others, community, and world through individual or collaborative approaches
Co-operatively design projects with local and/or global connections and applications
Contribute to finding solutions to problems at a local and/or global level through inquiry
Implement multiple strategies to solve problems in real-life, applied, and conceptual situations
Consider the role of scientists in innovation

Communicating
Formulate physical or mental theoretical models to describe a phenomenon
Communicate scientific ideas and information, and perhaps a suggested course of action, for a specific purpose and audience, constructing evidence-based arguments and using appropriate scientific language, conventions, and representations
Express and reflect on a variety of experiences, perspectives, and worldviews through place

Curricular Competencies – Elaborations

- **user-centred research:** research done directly with potential users to understand how they do things and why, their physical and emotional needs, how they think about the world, and what is meaningful to them

- **empathetic observation:** aimed at understanding the values and beliefs of other cultures and the diverse motivations and needs of different people – may include traditional cultural knowledge and approaches; First Peoples worldviews, perspectives, knowledge, and practices; places, including the land and its natural resources and analogous settings; experts and thought leaders

- **constraints:** limiting factors, such as task or user requirements, materials, expense, environmental impact

- **plan:** for example, pictorial drawings, sketches, flow charts

- **impacts:** including 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

- **iterations:** repetitions of a process with the aim of approaching a desired result
- **sources of feedback:** may include peers; users; First Nations, Métis, or Inuit community experts; other experts and professionals both online and offline
- **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

Recommended Instructional Components:

Units and lessons will provide students with a varied learning experience, instructional strategies and course content will incorporate hands on learning, research, field trips, guest speakers, lab work and experimentation, individual and group projects, recommended readings, class discussions…etc. The course also serves to co-ordinate learning in mathematics, science, geography, metal, and drafting areas.

Student Expectations:
- Ability to work with others.
- Ability to work with hands and small tools.
- High level of classroom maturity.
- All projects/tests reports/journals are to be completed at the highest personal standard
- For extended absence from school, other than serious illness it is the student's responsibility to obtain work and to complete all assignments when returning to class.
- If a student is absent for a test, the student will receive a "0" for that test until an excused absence is secured. If the absence is excused, the student will be given the opportunity to either write the test or make up the test in some other way as decided by the teacher. If more than one major test is missed the teacher may refer the problem to the administration when they feel it is appropriate. This is school policy.

School District No. 27
(CARIBOO - CHILCOTIN)

Supplies
- Binder and loose-leaf.
- Protractors and rulers
- Scientific calculator
- Clothes suitable for working in a shop

Assessment Component:

Assessment involves the wide variety of methods or tools that educators use to identify student learning needs, measure competency acquisition, and evaluate students' progress toward meeting learning standards. Assessment of all forms should support a flexible, personalized approach to learning and measure deeper, complex thinking.

In developing assessment strategies, it is important that the assessment is transparent and responsive to the learners. Knowing, doing, and understanding are the three key pillars that are traditionally assessed using a number of vehicles. Feedback in a timely manner that is specific and embedded in instruction is critical as well as involving students in their learning. Assessment over time that is clearly communicated to parents and students is key in supporting student learning.

Assessment Components:
Journaling
Peer Assessment
Self-Assessment
Performance Assessment
Oral Presentations
Quizzes and Exams

All the projects, worksheets, reports, journals, exams, and quizzes are equally weighted. The amount awarded to each is dependent on the total marks awarded for the course.

Learning Resources:

Aircraft and Flight Theory

MacDonald, A. (2019). <u>From the ground up</u>. Ottawa, Ontario: Aviation Publishers Co. Limited.

Aviation History

Dwiggins, D. (1969). <u>Bailout: The story of parachuting and skydiving</u>. New York, N.Y.: Macmillan Publishing Co, Inc.

Dwigging, D. (1973). <u>Riders of the wind: The story of ballooning</u>. New York: Hawthorn Books, Inc.

Editors of Time-Life Books. (1980). <u>The aeronauts</u>. Alexandra, Virginia: Time-Life Books, Inc.

Editors of Time-Life Books. (1980). <u>The giant airships</u>. Alexandra, Virginia: Time-Life Books, Inc.

Editors of Time-Life Books. (1980). <u>The road to Kitty Hawk</u>. Alexandra, Virginia: Time-Life Books, Inc.

Editors of Time-Life Books. (1980). <u>The first aviators</u>. Alexandra, Virginia: Time-Life Books, Inc.

Editors of Time-Life Books. (1980). <u>The pathfinders</u>. Alexandra, Virginia: Time-Life Books, Inc.

Finnigan, C. (2001). <u>Microlighting: Affordable aviation</u>. Ramsbury, Marlborough: Crowood Press Ltd.

George, W. (1978). Kites for all seasons: <u>The history, the lore, the art, the science and a practical guide for building and flying kites</u>. Chicago, Illinois: Contemporary Books, Inc.

Lausanne, E. (1971). <u>The romance of ballooning: The story of the early aeronauts</u>. New York, N.Y.: Viking Press.

Lopez, D. (1995). <u>Smithsonian guides: Aviation</u>. New York, N.Y.: A Simon and Schuster Macmillan Company.

Molson, K. (1988). <u>Canada's national aviation museum: Its history and collections</u>. Ottawa, Ontario: D.W. Friesen Printers.

Mrazek, J. (1976). <u>Hang gliding and soaring: A complete introduction to the newest way to fly</u>. New York, N.Y.: St. Martin's Press, Inc.

Zuuring, P. (2001). <u>Arrow countdown</u>. Kingston, Ontario: Friesens.

Zuuring, P. (2001). <u>The arrow scrapbook</u>. Kingston, Ontario: Friesens.

Aviation Resource

The History Channel. (2000). <u>History's mysteries: The Wright brothers controversy</u>. New York, N.Y.: A & E Television Networks.

The History Channel. (1999). <u>Modern marvels: Balloons</u>. New York, N.Y.: A & E Television Networks.

The History Channel. (1998). <u>Modern marvels: Airships</u>. New York, N.Y.: A & E Television Networks.

Biography. (1994). <u>Wilbur & Orville Wright: Dreams of flying</u>. New York, N.Y.: A & E Television Networks.

The History Channel. (1999). <u>Suicide mission: Silent wing warriors</u>. New York, N.Y.: A & E Television Networks.

The History Channel. (1996). <u>Mach one: The times, the team, the sound barrier</u>. New York, N.Y.: A & E Television Networks.

The History Channel. (1999). <u>In to the wild blue: The world's best flight teams</u>. New York, N.Y.: A & E Television Networks.

The History Channel. (1999). <u>Modern marvels: Helicopters</u>. New York, N.Y.: A & E Television Networks.

The History Channel. (2000). <u>Investigative reports: Air traffic jams, bumped, delayed and grounded</u>. New York, N.Y.: A & E Television Networks.

<u>Aviation Educational Resources</u>

British Columbia Institute of Technology (Aviation Maintenance). http://www.htp.bcit.ca

Canadian Forces. http://www.dnd.ca

Coastal Pacific aviation (Pilots). http://www.coastalpacific.com/cpa/index.htm/

Industry Training and Apprenticeship Commission. http://www.labour.gov.bc.cc/itac/itachome.htm

Northern Lights College (Aircraft Maintenance Engineering). http://www.nlc.bc.ca

Selkirk College (Aviation two-year diploma). http://www.selkirk.bc.ca

Trinity Western (Aviation Studies). http://www.twu.ca

Board of Education of
School District No. 27 (Cariboo-Chilcotin)

P: 250.398.3833
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350 Second Avenue N
Williams Lake, BC V2G 1Z9

Briefing Note

TO: **Education Committee**

FROM: **Cheryl Lenardon**

DATE: **April 13, 2022**

RE: **Outdoor Learning at Cataline**

BACKGROUND

SD 27 has made place-based learning a key focus area of the District Plan for Learner Success. Schools have embraced outdoor learning as a pedagogy with many benefits.

While teaching and learning at Cataline last year, Vice-Principal Kelly Glen identified a need to focus on the social emotional health of students. She began taking students outdoors as an escape from classroom stress and found it to be a great learning experience for her and her students. What she observed during her time outside with her class led her to change how her teaching time was used in the building and how the school promoted outdoor learning. The school's outdoor learning program was developed as a result.

Once a week, each class spends 60-70 minutes with Ms. Glen in Cataline's fabulous outdoor space. Literacy, Science, ADST and Indigenous Ways of Knowing and Learning are often the anchor points for lessons but work on the core competencies is most often the hard work – and students are thriving.

Ms. Glen will make a presentation on her program.

RECOMMENDATION

Information only

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Briefing Note

TO: **Education Committee**

FROM: **Cheryl Lenardon**

DATE: **April 13, 2022**

RE: **HCTF Wild School Program at Nesika**

BACKGROUND

École Nesika Elementary has gone wild. The HCTF Wild Schools program is a school-wide, three-year initiative for Kindergarten to Grade 8 schools supporting outdoor and place-based learning. An interdisciplinary, curriculum-linked program, Wild Schools supports school communities to increase ecological literacy, outdoor field experiences and to build connections to conservation in the community. The Wild Schools program is focused on hands-on environmental learning and experiences to engage learners through a process of *'Wondering, Inquiring, Learning and Doing" — being WILD.*

Situated near downtown Williams Lake and with access to the forest, walking and biking trails, the river valley, and the dairy fields; École Nesika Elementary is a natural spot to take part in place-based learning. Like many schools, Nesika has already been getting outdoors for learning with increased frequency in recent years. Teachers at Nesika have leadership support and access to dedicated funding for outdoor field trips to community partner destinations such as Scout Island Nature House, the Williams Lake Community Forest, and Gavin Lake Forest Education Centre; as well as continued funding for supplies and resources to take students outside for place-based and inquiry learning within walking distance. The Nesika staff has committed to three years of training and support with HCTF to build their capacity as an instructional team. Nearing the completion of Year One, they have many successes to share.

Mrs. Zurak will make a presentation on Nesika's Wild Schools program.

RECOMMENDATION

Information only

Briefing Note

TO: **Education Committee**

FROM: **Cheryl Lenardon**

DATE: **April 13, 2022**

RE: **Operation Ranch Hands**

BACKGROUND

Dog Creek School has a unique project connecting students to their local environment, career education, and other curricular learning.

In December of this school year the coordinator of a ranch near Dog Creek School approached Principal Steve Carpenter about getting the students involved in helping raise this year's calves. It was the rancher's idea that they could show the students the opportunities for a career in ranching. Dog Creek enthusiastically engaged in this place-based outdoor learning.

Each student selected a calf to adopt. The school makes regular visits to the ranch to learn about the cows' life cycle and other science concepts connected to the environment. The cows have inspired drawing, and painting projects. Students are planning creative writing adventure stories with their calves as the heroes.

Mr. Carpenter will make a presentation on the school's Operation Ranch Hand program.

RECOMMENDATION

Information only

Briefing Note

TO: **Education Committee**

FROM: **Chris van der Mark**

DATE: **April 13, 2022**

RE: **Learning Series**

BACKGROUND

April 29 is our final professional development day of the year. We are fortunate to be joined by lead educational experts, Carole Fullerton, Leyton Schnellert, Peter Liljedahl and Shelley Moore. Carole, Peter, and Leyton will be working side-by side with teachers on Thursday, April 28, prior to the larger general sessions on the 29th.

School administration and staff have been collaborating to free up staff to meet with the educational consultant and the classroom teacher to discuss the design and intention of the lesson. They then observe the lesson and then gather to debrief. It is an amazing learning structure, and we appreciate the teamwork by staff and admin to make it work.

Continued thanks to Ryan Hanley and the CCTA pro-d team for their partnership on this endeavor.

RECOMMENDATION

Information only

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Briefing Note

TO:	**Education Committee**
FROM:	**Sean Cameron**
DATE:	**April 13, 2022**
RE:	**District PowerBI Data Solution**

BACKGROUND

During the 2020-2021 school year the district started the process of developing data solutions using the Microsoft data suite including SQL Server and PowerBI. Microsoft PowerBI is an industry leading analytics and visualization platform and has been selected as the data platform for the BC Ministry of Education.

Beginning in the 2021-2022 school year the district ended its contract with AMS as a data solution provider and moved exclusively to the locally developed PowerBI solution. Ending the AMS contract saved the district approximately $25,000 per year. These funds have been directed to acquire and expanded Microsoft licensing allowing all education staff to have dedicated Teams phones, enhanced security, and access to PowerBI.

DISCUSSION

The District has developed a number of PowerBI reports to support the school planning process and collective responsibility initiative. The program is currently available to all district leadership and school administrators. The next phase of the development will be to provide access to all teaching staff.

The PowerBI system provides district staff and school leadership with summary data for all key focus areas with the ability to drill down to the individual student level. A scrambled data set has been loaded to the system to allow for data sharing in public meetings. The summary level data is accurate for both the district and school with only the student identifiers changed.

During the committee meeting, a demo of the system will provide an achievement update looking at report card, attendance, and district assessments.

RECOMMENDATION

None. For information only.