School District No. 5

[Southeast Kootenay]



Information Technology

September 2023





DISTRICT DIRECTION

District Vision-Education Technology

 School District 5 believes in a student-centered approach to engage and move learning forward by providing innovative technology and experiences.

Vision:

Students love to learn here, staff love to work here, families love to gather here.



Mission:

Our students will graduate with dignity, purpose, and options.



Respect, Vision, Fairness, Collaboration, Integrity, Inclusion.





EXECUTIVE SUMMARY

- The purpose of this plan is to continue to build on the District's current shared vision for transforming our classrooms and educational practices.
- It is essential that the plan be directly linked with the School District's current and future strategic plans.
- Transforming infrastructure, teaching practices and our classrooms is outlined in the long-term road map.
- The plan will suggest broad goals and actions that will move us in the direction of a shared vision.
- This is a living document where flexibility and agility are necessary traits in this age of rapid change.
- This plan is broken into four parts including Infrastructure, Professional Learning, Student Learning, and Organization

OVERARCHING GOALS OF THE PLAN

- To ensure that technology services in School District 5 link to the District Strategic Plan and Framework for Enhancing Student Learning.
- To ensure that the technology infrastructure has the capacity to support curricular goals, now and in the future with industry best practices in mind.
- To assess current administrative technologies to ensure that they are cost effective, of a high quality, and meet the needs of the district.
- To look at ways to improve productivity through technology, by challenging and revising learning and business processes. To ensure that educators in the district are fully supported and have professional development opportunities that will facilitate our building the classroom of the future.



CONNECTION TO DISTRICT GOALS

- The Technology Plan must be connected to:
 - District Strategic Plan and curricular goals.
 - Framework for Enhancing Student Learning.
 - Aboriginal Enhancement Agreement.
 - BC Education Plan.
 - New formative-based assessments.
 - BC's new curriculum, assessments, and reporting.
 - The Districts administrative and business technology need
 - Support vulnerable and diverse learners





Outcome 1:

Students will meet or exceed literacy expectations for each grade level.

2

Outcome 2:

Students will meet or exceed numeracy expectations for each grade level.

3

Outcome 3:

Students will feel they have a place to belong in our schools and our society.

4

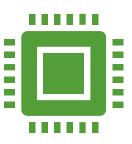
Outcome 4:

Students will graduate with confidence, purpose, and options.

THE EDUCATION TECHNOLOGY PLAN MUST CONNECT WITH OUR FRAMEWORK FOR ENHANCING STUDENT LEARNING OUTCOMES



Refine



Sustain



Educationally Lead

RATIONALE

EDUCATIONAL TECHNOLOGY PLAN 2017-2022

CELEBRATING SUCCESSES

Leadership commitment to education technology at all levels

A robust and secure infrastructure

Aruba project

Financial commitment to the Technology plan

Devices at the points of learning

Implementation of systems SchoolMessenger, SafeArrival, Integration of MyEducation BC and Destiny, MyEducation Family Portal

SUCCESSES WITH TRANSFORMATIVE LEARNING TEAM 2017-2022

Continued teaching of different ways to demonstrate learning through multi modal tools such as movie making, animation, green screen and documentation.

Supporting diverse learner groups including small groups of students with special needs, student service teachers, educational assistants, administration, and clerical.

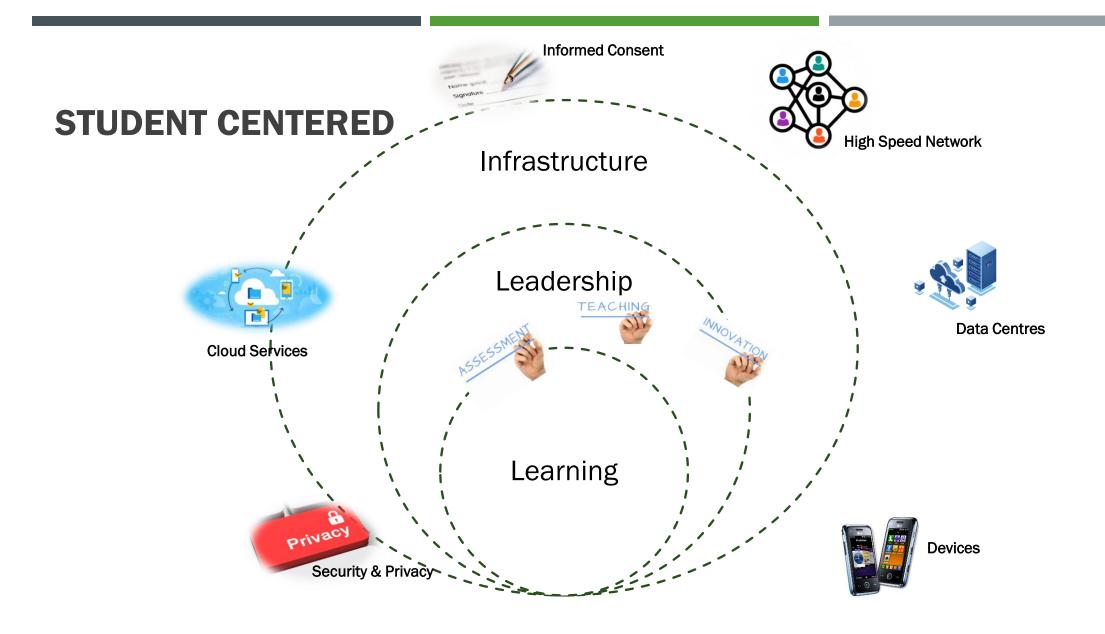
Introduction of new innovative tools: Drone obstacle course and creation of virtual tours. Virtual Reality headsets and Ozobots for coding, literacy, and support for the core competencies.

Supported district technology including Teams, teaching and communication tools for teachers, students and parents to prepare and navigate learning throughout the pandemic.

Literacy support through demonstrations of Reading Progress, Seeing Al, Microsoft Dictate and Immersive Reader.

OVERARCHING PRINCIPLES 2022-2026

- Technical services, investments and initiatives should be derived from educational goals, curricular activities, goals, strategies, and pilots. Technology should not be randomly adopted and then dictate or restrict education.
- This education technology plan needs to by dynamic, student centered and evolve continuously in response to changes in philosophy and in the education environment.



SD5 INFORMATION TECHNOLOGY SUPPORT

- Support people:
 - 6500 students, 1100 staff, and 13000 parents
- Purchase and Repair hardware:
 - 2000 computers
 - 1000 iPads
 - 20 physical servers
 - 104 virtual servers



THE EDUCATION TECHNOLOGY PLAN IS DIVIDED INTO FOUR (4) AREAS

Infrastructure

Professional Learning

Student Learning

Organization

INFRASTRUCTURE

To ensure that the technology infrastructure has the capacity to support current and future curricular goals.

It is recommended that the District develop an IT Risk Management plan that is in line with provincial guidelines and best practices.

Technology is implemented with best practices in mind.

District preforms updates on an annual basis.

Continue the development and adoption of single sign on technologies to integrate identity management services for enterprise applications.

Technology supports the business needs of the organization.

Continue to implement M365 and other cloud-based services.

It is recommended that the District base their computer device purchasing decisions on the specific end user functional needs for teachers, students, administrators, and board staff.

Analysis and planning for current and future infrastructure including device management, network, on-premise services

It is recommended that the District adopt a standardized, stakeholder-based process for analysing all core technologies to ensure that the best possible value is received, and that students' education is at the forefront of investments.

PROFESSIONAL LEARNING

To look at ways to improve productivity through technology. Educators can expand their learning using technology.

To ensure that educators in the district are fully supported and have professional development opportunities that facilitate building the classroom of the future.

To look at ways of transforming the classroom; building learning communities and capacity.

To continue to lead professional development to support the FESL goals, the BC curriculum core competencies and big ideas.

STUDENT LEARNING

To assess how technology links to current and future curricular goals and activities

Education software, access to technology, safety and Freedom of Information and Protection of Privacy Act (FIPPA).

Digital Citizenship is the body of knowledge related to safe online behavior and includes security, privacy, personal information, use of photographs, digital property rights and protection from viruses and malware. Digital Citizenship is a way to prepare students for a society full of technology. Digital citizenship represents the norms of appropriate and responsible technology use. It is expected that districts will need to set standards for students and teachers to articulate and set policy to define and govern appropriate use of technology, and for the protection of personal privacy.

Tools to support ongoing assessment activities and ongoing self assessment

Technology can help teachers track and assess their students' progress, as well as their own. It can also be used to facilitate communication between students, teachers, and parents and to create digital records of student growth and development that can easily be passed along from grade to grade.

My Education BC, Scholantis, myBlueprint and Seesaw are assessment and communication platforms used in the district.

Provide technology to support all learners including Indigenous, Children and Youth in Care, and Diverse Learners.

From a technology standpoint, we need to determine where we are now and consider where we want to be in the future.

ORGANIZATION

To look at the improvement of business processes through integration, synergy, streamline and flow.

MyEducation BC
Power School
Permission Click
Safe Arrival
School Messenger

Communication

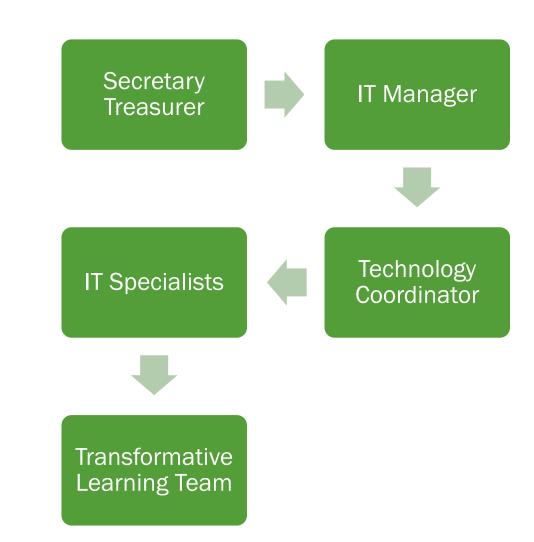
Disaster Recovery Plan

Retention of data and mailboxes

Staff and student data

SD5

Organizational Structure



RISK MANAGEMENT AND DEFENSIBLE SECURITY

- IT risk is the organizational risk related to the use, ownership, and operation of Information Technology in the District. These risks specifically relate to events that could potentially impact the delivery of education. In addition, it is useful to understand that risks could relate to operational-type things such as viruses, malware, disasters. They could also be related to compliance-type risks such as FOIPPA, informed consent, and best practice standards.
 - Risk analysis and responses need to be done within the context of the District's strategic plan and educational goals.
 - Risk analysis and proposed responses need to consider the overall costs and benefits of the response.
 - All risks and planned responses need to be communicated across the District.
 - Risks and planned responses need to be continuously analyzed and elaborated, as necessary.
 - Risk management also needs to ensure the safeguarding of company assets.

DISASTER RECOVERY AND BUSINESS CONTINUITY

- Business Continuity refers to the continuation or resumption of technology enabled educational activities in the event of a natural disaster such as a flood, fire, epidemic or a malicious attack from the Internet. These are critical plans that involve the implementation of specific technologies as well as orchestrated procedures in the event of a disaster.
- In conjunction with other district stakeholders, the IT department has developed a draft disaster recovery approach for specific disasters or technology failures. The exercise has identified several deficiencies including the need for off-site and off-district storage, and the need to provide an alternative method of access to the District's local network and the Internet in the event of catastrophic failure.

2022-2026 EDUCATIONAL TECHNOLOGY PLAN DEVICE RATIOS

- Ratio increased to include a device for a teacher 0.6 FTE on top of the overall 1.0 FTE
- There are 3 flex computers for small schools and 5 for large schools for staff under 0.6 FTE and for Teachers Teaching On Call

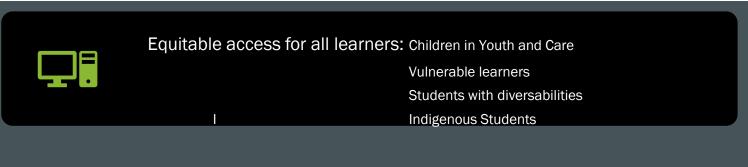
2022-2026 EDUCATIONAL TECHNOLOGY PLAN DEVICE RATIOS

- Infrastructure 5-7year cycle
 - Servers
 - Network
 - Phones and other network-enabled devices
- Computer Sustainability Plan
 - Replacement of staff computers every 4-5 years
 - Replacement of student computers every 4-5 years
 - Roll out is by groups of schools

STUDENT DEVICE RATIOS 2022-2026

- Elementary Ratios
 - 1 device to 5 students
- Middle and Secondary Ratios
 - 1 device to 3 students
- Learning Support Services
 - Equity scan and assigned ratios to meet the needs of all learners
 - Indigenous Students
 - Diverse Learners
 - Children and Youth in Care
 - Vulnerable learners

EDUCATIONAL PRIORITIES DRIVE THE TECHNOLOGY





Continue to move learning forward with innovative technology that is integrated into all subjects in all levels.



Learning commons and collaboration



Focus areas

Literacy
Numeracy
Sense of belonging
Graduating with purpose

SCHOOL LEVEL EDUCATION TECHNOLOGY PLAN

2022-2026

Schools will:

- Devise Education Technology plans and investments that are connected to school growth plans.
- Investigate additional Education Technology that may be connected to the District's FESL plan.
- Look at additional Education Technology that is connected to the District's Technology plan.
- Consider each school's strengths, weaknesses, opportunities and cultures within the plan.
- Look at increasing the capacity of educators in terms of understanding how technology can be leveraged for student learning.
- Proposal to Administration on technology needs that move learning forward.

FOCUSED EDUCATION RESOURCES

- The District is a member of Focused Education Resources (formerly known as Educational Resource Acquisition Consortium (ERAC)). Focused Education Resources (FER) is a cooperative member-based organization. The group works in partnership with members who include BC public school districts as well as independent schools. The organization provides a range of services to its members that include evaluation, licensing and acquisition of print, software, and digital learning resources. At present, the District purchases Windows server and desktop licensing, M 365 Licensing, access to learning / research databases, and several other enterprise-based desktop licenses.
- Working as a consortium, FER can leverage better prices for learning resources, software, and videos. FER is funded through membership fees, an annual BC Ministry of Education grant and cost recovery fees for services performed on behalf of vendors or members. Overall, FER provides exceptional value to the school district.



District Organizational Platforms

School Messenger Communication between home and school

Safe Arrival Attendance communication

Permission Click- Online forms

MyEducation BC Portal

Atrieve PowerSchool

My Budget File

Fame

KEV



District Platforms

M365 and TEAMS

Scholantis Portal and portfolios

See Saw Portfolios

D2L Brightspace

myBlue Print

Destiny Library Management System

MyEducation BC Student Information System

DIGITAL PLATFORMS



DIGITAL RESOURCES

- Reading Eggs
- BC Digital Classroom
- Math Seeds
- Tumble Books
- Curio
- Digital Classroom
- Mathletics
- Criterion
- Gale
- Learn 360
- Popey



