


2020-2024





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The above graphic illustrates that reliable infrastructure is the foundation upon which everything must be developed. Moreover, defined hardware and software standards provide the needed consistency and stability across schools to allow educators to infuse technology into their practice. The standardization of hardware and software creates district-wide compatibility, allowing the expansion of communication, collaboration and sharing of ideas. Training and professional






Teachers in the Cowichan Valley School District are committed to improving student learning through collaboration, continual personal development and exploration of promising practices. The District Technology Advisory Committee supports our teachers in using the following ISTE standards as a framework through which to amplify student learning.

IST




For more info



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1. To provide teachers with portable technology tools which allow them to amplify student learning, collect and share evidence of learning and keep their business processes efficient.
 2. To have projection technology available in each teacher's classroom to allow presentation and sharing of information.
 3. Over the next four years to have every teacher with an assigned device and where possible an iPad 9.7" and lease return Mac or Windows laptop.

The district has been working to ensure each full-time teacher is assigned a mobile device that supports their current instructional practice and has the ability to allow movement toward digital portfolios and communicating student learning differently. We presently have 75% of all teachers with a mobile device be it a

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1. To provide all elementary classrooms in the school district with a ratio of one mobile device to every 4 students.
 2. To provide each elementary school enough mobile technology to allow them to organize equipment half-class and whole-class groupings as needed.
 3. To continue to support our iOS standard as a core technology, while adding a selection of supporting laptop devices

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1. To provide all Secondary Classrooms in the school district with a ratio of one mobile device to every 4 students.
 2. To provide each Secondary School enough mobile technology to allow them to organize equipment into half-class and whole-class groupings as needed.
 3. To continue to support a “messy classroom” model of providing a variety of devices including iPads, Windows Laptops, Mac Laptops, Windows Desktops and Mac Desktops to meet specific needs.


Presently, the district has approximately 2700 iPads, 1000 windows devices and 400 Apple Laptops deployed K-12. In Secondary Schools we have approximately a ratio of 4 students to every portable and desktop device. Secondary Schools have an assortment of equipment from iPads to laptops and specialty computer labs. Portable devices are embedded in classrooms / departments at each school and in some schools a selection of portable devices has been made available for short term check out through their libraries.

1. Audit existing student to device ratios across schools and maintain levels as much as possible.
2. Audit the entire district and collect feedback on present device deployments and requested device standards.
3. Connect device deployments with the Technology Mentor Program.

District Principal of Instruction and Innovation
District Technology Support Teacher
System Support Specialists



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1. To provide specialty programs with desktop or portable computers that meet program delivery needs.

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1. To continue to operate the L4U library management system for 1 more year.
 2. To complete a RFI / RFP process to select an updated library management system.


The district operates and centralized, web-based L4U library management system. This system provides circulation and inventory cataloguing for each school. Our contract will end in June 2019 and which point we will renew for one year and go through an updated product review to determine next steps for providing library services.

1. Go to RFI / RFP to procure a library circulation system.
2. Implement the selected library management system.



To provide Technology Department Technicians with standardized technology that meets their daily business process needs and allows them to best support staff and students.

Technology Department Technicians have three year old laptop computers,



Hardware standards are set through an evaluation process that looks at the specific needs of the end user, the security and privacy provided on the device / platform and total cost of ownership over the life of the device. This allows for selection of equipment that provides the best possible user experience for job specific needs. Similarly, software is evaluated through a use case analysis in combination with a security and privacy review to ensure the resource meets BC Public Sector Privacy requirements. Once these processes are completed, the District Technology Advisory Committee endorses standards.

The standards are continuously reassessed to ensure that equipment and software continue to best meet the learning needs of our students and business process requirements of the District.



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1. To provide all school sites with adequate bandwidth to meet the needs of educational programs and district business processes.

Secondary Schools presently have the largest bandwidth demands





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1. To expand our technical skills in using the full feature sets of the Provincially assigned Paloalto firewall routers and threat management utilities on all networks.
 2. To provide technical staff with efficient utilities and resources for tracking and managing all network devices.

All schools have ministry assigned Paloalto Firewalls in place. These devices provide a regularly updated content filter control as well as Unified Threat Management (UTM) features. On top of these physical devices, we license a DNS and content management filter called Cisco Umbrella which provides us a second layer of threat management capabilities.

Although our threat management is solid, it is not a complete solution as technical staff are required to track a device causing a threat or problem through server and firewall log reviews. This slows the speed at which threats can be resolved. A further layer of traffic monitoring with a sophisticated dashboard to display log data through a search tool is desired.

1. Expand technical team's training on the threat management utilities we have deployed to maximize the impact of their implementation.
2. Spec and install a network flow and monitoring tool to further refine the technical staff's ability to monitor and eliminate threats on our networks.

Network Systems Analyst
System Support Specialist Technicians as assigned
District Principal of Instruction and Innovation

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1. To provide district buildings with complete wireless coverage that is robust, stable and secure.
 2. To organize our wireless service around our VLAN deployments so that we have optimized traffic shaping to support our business, education and BYOD needs in buildings.

Secondary Schools have wireless networks with the ability to support and manage up to 2000 simultaneous devices and Elementary Schools can support approximately 1000 devices. All classrooms in all buildings have WIFI coverage. However, as our schools continue to grow and the density of device usage is increasing more capacity across our wireless access points is required to avoid service slow-downs.

1. Set and implement a wireless access point expansion / upgrade timeline for all schools based on specific building needs.
2. Provide technical staff training on wireless best practices from our vendor.
3. Budget for and purchase access points on a yearly basis to replace end of life equipment

District Principal of Instruction and Innovation
Network Systems Analyst
Operations Department





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1. To provide all school buildings with stable network wiring that meets category 6 standards.

All school buildings have category 5e networks with some networks identified as having cabling challenges due



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1. To provide each school with fast reliable file storage capabilities.
 2. To continue to provide school-based cloud service file storage for a broad spectrum of devices that can be reached through the web from both on and off-site.
 3. To provide caching services to support fast reliable iOS and Mac X updates.
 4. To continue to provide on-site directory services for fast reliable single sign-on.
 5. To explore reducing the number of school-

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1. To transition from our existing mail, calendar, contact and collaboration server as soon as possible.
 2. To determine an implementation plan and timeline to move to Microsoft Exchange Cloud Server for mail, calendar, contact and collaboration services.
 3. To make a final privacy decision on implementing Microsoft Exchange Services on premise or cloud based in the Microsoft Canadian Data Centre.
 4. To expand our of the Office 365 suite of tools for both education and business processes.

Status

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1. To continue to encourage our end-users to submit support tickets directly to the system or to coordinate through a building site contact.
 2. To research and select an updated ticketing system to replace our now end of life system.

The Help Desk Ticket System has been in production for over ten years and is used for day-to-day tracking of trouble tickets and to assign individual technician work. The system remains stable and functional, but it is officially at the end of development and support from the vendor. As no new development will take place on the system, it is time to begin looking for a replacement tool.

1. Continue use of the existing Help Desk Ticket System.
2. Research and select a replacement system and develop an implementation timeline.
3. Continue to build a culture across the school district of submitting support tickets rather than phoning technology services directly for non-emergency requests.

District Principal of Instruction and Innovation
District Technology Support Teacher
System Support Specialists



Desired Data	Instrument	Frequency
Hardware standard installed in all schools.	Tech Department Audits	Once per year
Software Standard installed in all schools	Tech Department Audits	Once per year
Teacher learning opportunities are consistently offered with attending teacher grade levels and school zones tracked to provide a picture of engagement.	1. Inservice calendar 2. Attendance records from inservice sessions	Continual review P12 Tf1 1 224.1 1 2
