

ICT Action Plan 2022-2025

Department/Portfolio: Information, Communication Technology

Senior Staff Lead(s): Renald Cousineau, Superintendent of Education - Program Services

Peter Burnette, System Principal for Experiential Learning, K-12

Doug Fiebig, Manager of Information and Communication Technologies (ICT) Department

Growth Target: The following growth targets (qualitative and/or quantitative) have been established for the system:

- implement an electronic portal for parents/guardians in order to augment two-way communication between staff and parents/guardians whether in-person at school or on-line at home;
- ensure equity of access by eliminating barriers to the range of high-quality programs and services offered across the system, through technological integration, in order to meet the needs of all learners; and,
- leverage innovative technologies to accelerate and deepen learning, as described in the '*Inspired Learning*' resource, both in-person and on-line.

To lower the ratio of devices to students from approximately 2:1 to 1:1 for all students in Grades 7-12 (device access ratio) in preparation for the upcoming school year. (Students in Kindergarten and Grades 1-6 will continue to benefit from a minimum 3:1 device access ratio.)

This indicator will facilitate the continued, seamless integration of technologies into teaching and learning environments, including assessment and instructional practices of the future.

To ensure the District's information assets are properly secured through the procurement of an ICT Security Analyst position, during the course of the current school year.

This indicator will be integral to elevating the organization's security posture by assessing risks and providing appropriate security solutions, moving forward.

Areas of Focus	Responsibility Centre(s)	Timelines	Resources Required	Notes
Cyber Security	<p>Allocate resources to cybersecurity through a reorganization of duties, additional resources and/or third party contracting</p> <p>Involve ICT in the procurement process, using ICT knowledge and expertise to evaluate third party security measures and system configuration during the selection process;</p>	2022	<p>ICT Security Analyst Position</p> <p>Hired Andrew Lebert effective August 15, 2022</p>	<p>Pricing based on recent job postings by Ottawa-Carleton District School Board and Waterloo Catholic District School Board</p> <p>Recommendation from Eastern Ontario Cyber Security Audit</p>
Cyber Security	Develop and implement cybersecurity policies and procedures, with assistance from the Educational Computing Network of Ontario (ECNO).	2022	<p>Educational Computing Network of Ontario (ECNO) Shared Technology Services</p> <p>RISA Project - \$6696.75</p> <p>Eastern Ontario has new Regional Information</p>	ECNO is currently working on the development of cybersecurity policies and procedures for all ENCO school board/district members

			<p>Security Analyst - Scott Read</p> <p>ECNO Security Services (PISO) - \$1500</p> <p>Provincial Information Security Officer, Steve Payne, has left. The position is currently vacant.</p>	<p>Recommendation from Eastern Ontario Cyber Security Audit</p>
Cyber Security	<p>Develop or acquire a data classification system, with the assistance of other Boards and using the Ontario Association of School Business Officials (OASBO) and ECNO as resources.</p>	2022	No additional cost	<p>ECNO is currently working on the development of cybersecurity policies and procedures for all ENCO school board/district members</p> <p>Recommendation from Eastern Ontario Cyber Security Audit</p>
Networking	<p>Transition Broadband Modernization Program (BMP) RA 2.0 Software-Defined Wide Area</p>	2022	\$90,000	<p>Note: See BMP RA 3.0 Objectives below.</p>

	Network (SD-WAN) to BMP 3.0 Secure Access Service Edge (SASE)			
<p>BMP RA 3.0 Objectives:</p> <ul style="list-style-type: none"> ● provide optimized SD-WAN capabilities for the school networks; ● provide secure local internet breakouts by delivering the entire security stack as a cloud service, eliminating the need for edge firewalls; ● reduce the load of security processing off of existing SD-WAN/security appliances by pushing security to the cloud; ● provide a pathway to a zero-trust architecture model; ● extend security to outside of school networks (security anywhere); ● eliminate appliance maintenance costs; ● prevent unauthorized access to the student’s network, applications, data, and devices by unauthorized users; ● protect against known and unknown threats and exploits – denial-of-service, virus, malware, ransomware and file-based attacks; ● reduce attack surface with smaller base to secure; and, ● deliver scalable and extensible architecture. 				
Networking	Implement multi-factor authentication for RCDSB staff	2022	To Be Determined	Multi-factor authentication is an electronic authentication method in which a user is granted access to a website or application only after successfully presenting two or more pieces of evidence to an authentication mechanism

Networking	Implement FortiMonitor	2022-2025	2022-2023 - \$45,000.00 2023-2024 - \$45,000.00 2024-2025 - \$45,000.00	<p>FortiMonitor is Fortinet's unified risk management platform. It allows for the collection, analysis, and action on vulnerability and threat data from a diverse set of devices and network resources.</p> <p>FortiMonitor helps organizations modernize their performance-monitoring tools into a comprehensive digital experience monitoring platform to gain end-to-end visibility into the overall user experience. It does not matter where the user resides or where the application is hosted.</p>
Software/Application Centralization	Centralize the purchase of all RCDSB Software/Application purchases - Classroom and Business	2022-2023	\$945,662.32 Due to the large number of different budgets and funding sources used to purchase software, it has been determined that	Estimated cost based on 2021-2022 software pricing

	Combining existing budget expenditures into a single GL		Software/Application Centralization is not possible.	
1:1 Mobile Device Deployment	Grades 7-12 1:1 school based mobile device ratio allowing students access to devices at point of learning when required	2022-2023	<p>\$1,716,686.54</p> <p>(\$940 000 taken from Accumulated Surplus - internally restricted ICT)</p> <p>The following schools had their 1:1 Mobile Device Deployment completed during Summer of 2022:</p> <p>CEN - 0 Devices BCH - 25 Devices ADM - 0 Devices HVW - 56 Devices ADH - 412 - Devices OHS - 263 Devices MVD - 126 Devices</p>	JK-6 mobile device funding to remain based on FTE - 3:1 ratio \$169 per FTE
Parent Portal	Evaluation and implementation of Parent Portal	2022-2025	To Be Determined	TBD based on final product selection
Electronic Records Management (ERM)	Implement an Electronic Records Management (ERM) system for the	2022-2025	To Be Determined	TBD based on final product selection

	capture, storage, modification and sharing of physical files within the RCDSB. Establish policies and standards for maintaining diverse types of records..			
Classroom Mobile Device Allocation	Remove all mobile devices (iPads and Chromebooks) that were either purchased by IT (no matter the purchase date) or purchased by the school and are four (4) years of age or older and deploy new mobile devices (iPads and Chromebooks).	2023-2025	2023-2024 - \$530,299.50 2024-2025 - \$496,751.39 There will be no Classroom Mobile Allocation in 2022-2023 as we will be deploying devices for 1:1 Mobile Device Deployment	Estimated cost based on 2021-2022 student body count numbers and technology pricing
Storage for Mobile Allocation Devices	Tech Tub 2.0's for housing Mobile Allocation Devices	2023-2025	2023-2024 - \$47,000.00 2024-2025 - \$45,700.00 There will be no Tech Tubs required for Classroom Mobile Allocation in 2022-2023 as the District will be	Estimated cost based on 2021-2022 student body count numbers and Tech Tub pricing

			deploying devices for 1:1 Mobile Device Deployment.	
Teacher/ECE Laptop Allocation	Deploy new Windows laptops to Teachers and ECE's. Deploy docking stations to connect Teacher/ECE laptops to classroom interactive whiteboards.	2022-2025	2022-2023 - \$195,727.70 2023-2024 - \$188,433.50 2024-2025 - \$232,198.70	Estimated cost based on 2021-2022 staffing numbers and technology pricing
EA Chromebook Allocation	Deploy new Chromebooks to EA's.	2022-2025	2022-2023 - \$15,539.34 2023-2024 - \$15,948.27 2024-2025 - \$20,037.57	Estimated cost based on 2021-2022 staffing numbers and technology pricing
Windows Desktop Lab (Secondary Schools Only)	Replace Windows Desktop Lab	2022-2025	2022-2023 - \$58,200.00 2023-2024 - \$29,100.00 2024-2025 - \$58,000.00	Estimated cost based on 2021-2022 technology pricing
Continuing Education Classroom Windows Devices	Replace Continuing Education Classroom Windows Laptops	2023-2024	\$67,975.15	Estimated cost based on 2021-2022 technology pricing

Storage for Continuing Education Classroom Windows Devices	Tech Tub 2.0's for housing Continuing Education Classroom Windows Devices	2023-2024	2023-2024 - \$2730.98	Estimated cost based on 2021-2022 student body count numbers and Tech Tub pricing
SMARTboard Projectors	Replace Existing SMARTboard Projectors	2023-2025	2022-2023 - \$35,000.00 2023-2024 - \$35,000.00 2024-2025 - \$35,000.00	Estimated cost based on 2021-2022 technology pricing
Principal/Vice Principal Laptops	Replace Principal/Vice Principal Laptops	2022-2023	\$76,500.00	Estimated cost based on 2021-2022 staffing numbers and technology pricing
Secretary Laptops	Replace Elementary, Secondary and Continuing Education Secretary Windows Laptops	2024-2025	\$80,000.00	Estimated cost based on 2021-2022 staffing numbers and technology pricing
Elementary Office Printers	Replace Elementary Office Printers	2024-2025	\$22,000.00	Estimated cost based on 2021-2022 technology pricing

Secondary Office Printers	Replace Secondary Office Printers	2022-2023	\$19,500.00	Estimated cost based on 2021-2022 technology pricing
Trustee Devices	Replace Trustee Laptops (Including Student Trustees)	2022-2023	\$20,000.00	Estimated cost based on 2021-2022 technology pricing
Director/Superintendent Devices	Replace Director and Superintendent Windows Laptops	2022-2023	\$15,000.00	Estimated cost based on 2021-2022 technology pricing
Superintendent Administrative Assistants	Replace Superintendent Administrative Windows Laptops	2022-2023	\$12,000.00	Estimated cost based on 2021-2022 technology pricing
School Support Counsellor Devices	Replace School Support Counsellor Devices	2023-2024	\$35,000.00	Estimated cost based on 2021-2022 staffing numbers and technology pricing
Disaster Recovery	Annual Disaster Recovery & Vulnerability Assessments / Penetration Testing	2022-2025	2022-2023 - \$50,000.00 2023-2024 - \$50,000.00 2024-2025 - \$50,000.00	IBM Canada K-12 Education
Disaster Recovery - Google	Disaster Recovery - Google (Backupify)	2022-2025	2022-2023 - \$15,000.00 2023-2024 - \$15,000.00	

			2024-2025 - \$15,000.00	
Video Conferencing	Replace/Update New Video Conferencing Equipment	2022-2025	2022-2023 - \$15,000.00 2023-2024 - \$15,000.00 2024-2025 - \$15,000.00	Estimated cost based on 2021-2022 technology pricing
eLibrary	Purchase of digital books for eLibrary	2022-2025	2022-2023 - \$12,000.00 2023-2024 - \$12,000.00 2024-2025 - \$12,000.00	RCDSB committed to minimum spend of \$6000.00 annually
Custodial Desktops	Replace all Custodial Desktops	NA	NA	Replaced in 2021-2022 school year.
Library Circulation Desktops	Replace all Library Circulation Desktops	NA	NA	Replaced in 2021-2022 school year.
Library Chromebooks	Replace mobile cart of 24 Chromebooks - 1 cart per secondary school	2023-2024	\$71,719.65	Estimated cost based on 2021-2022 technology pricing
Library Kajeet MiFi Devices	Purchase an additional 30 Kajeet MiFi Devices for a total of 10 per secondary school	2022-2023	\$16,500 (Year 1 only). \$29.500 annual renewal.	Estimated cost based on 2021-2022 technology pricing

Innovation	Funding for Innovation	2022-2025	2022-2023 - \$20,000.00 2023-2024 - \$20,000.00 2024-2025 - \$20,000.00	
Professional Development	Funding for Professional Development for Educators	2022-2025	2022-2023 - \$30,000.00 2023-2024 - \$30,000.00 2024-2025 - \$30,000.00	
eLearning/vLearning	Funding for eLearning/vLearning	2022-2025	2022-2023 - \$30,000.00 2023-2024 - \$30,000.00 2024-2025 - \$30,000.00	

Note: As part of the ongoing commitment to the District's measurement of progress over time, the metrics for Information and Communication Technologies (ICT) are denoted in bold font.

