



Date:

To: Board of Trustees

From: Director of Education

Subject:

Type of Report:

- ☐ Decision-Making
- ☐ Monitoring
- ☐ Incidental Information concerning day-to-day operations

Type of Information:

- ☐ Information for Board of Trustees Decision-Making
- ☐ Monitoring Information of Board Policy **XX XXX**
- ☐ Information only of day-to-day operational matters delegated to the CEO

Origin: (cite Education Act and/or Board Policy or other legislation)

Education Act Section 169.(1) Every Board shall; (a) promote student achievement and well-being; (b) ensure effective stewardship of the board's resources; (c) deliver effective and appropriate education programs to its pupils; f) develop a multi-year plan aimed at achieving the goals of student achievement and well-being, positive school climate, inclusive and accepting schools, stewardship of resources, and effective and appropriate education programs to its pupils.

Policy Statement and/or Education Act/other Legislation citation:

Ontario Ministry of Education Curriculum and Resources Website:

- The Role of Information and Communications Technology
- Experiential Learning
- Transferable Skills
- Cross-curricular and integrated learning

Ontario Ministry of Education Kindergarten Program

Ontario Ministry of Education Curriculum Documents

Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools – First Edition, Covering Grades 1 to 12

Growing Success – The Kindergarten Addendum: Assessment, Evaluation, and Reporting in Ontario Schools, 2016

Growing Success: The Mathematics Addendum, Grades 1 to 8, 2020

Learning for All: A Guide to Effective Assessment and Instruction for All Students, Kindergarten to Grade 12

Supporting Minds: An Educator's Guide to Promoting Students' Mental Health and Well-being

WCDSB Responsible Use of Information Technology and Electronic Data - [APS017](#)

WCDSB Electronic Mail and Social Media Use Guidelines - [APS035](#)

WCDSB Procedure for the Purchase of All Electronic Computing Devices - [APS015](#)

Ontario Broadband Modernization Project (BMP)

Waterloo Region Education Public Network (WREPNet) <https://www.wrepnet.on.ca/>



Alignment to the MYSP:

Nurturing Our Catholic Community

- Promote a culture of belonging and respect that supports success for all
 - Equitable access to learning opportunities

Student Engagement, Achievement & Innovation

- Nurture a Culture of Innovation:
 - Ensure classroom pedagogy and pathway opportunities are relevant and provide transferable skills for student success
 - Continue to seek and support reciprocal partnerships with community and educational partners and leverage the mutual learning
- Foster maximum opportunity for success for all
 - Increased opportunity for experiential learning

Building Capacity to Lead, Learn & Live Authentically

- Investment in global competency development and leading technologies
 - Increased awareness of and responsible implementation of Digital Citizenship
 - Increase in precise student programming and use of New Pedagogies for Deep Learning (NPDL)
 - Ensure technology is current and relevant to optimal teaching and learning practices

Background/Comments:

The 2020/2021 school year has continued to be one in which an innovative lens has not only been essential but paramount to the responsive needs that the COVID19 pandemic has asked of WCDSB students, staff and families. The foundational work of the Innovation Strategic Plan, which focused on the creation of a vision, mission and strategic direction, enabled a responsive, targeted, and thoughtful system response to virtual learning needs as well as pedagogical support in order that all learners might achieve optimal student outcomes. The learning opportunities that have been created during these unique times have catapulted teacher efficacy and systems thinking to new levels. We have been challenged to consider our obstacles as opportunities. With a progressive stance the WCDSB continues to make decisions through an equity lens and our innovative endeavors continue to focus on strengthening educator capacity, building strong community partnerships, planning for opportunities for the traditionally underrepresented, and strengthening accessibility for all.

Strategic Direction One

Guiding Question: How might we leverage our partnerships with families, parishes, and community partners to fulfill our mission with our Catholic Graduate Expectations?

Digital Citizenship Programming (MYSP 3.a.i and 2.a.i)

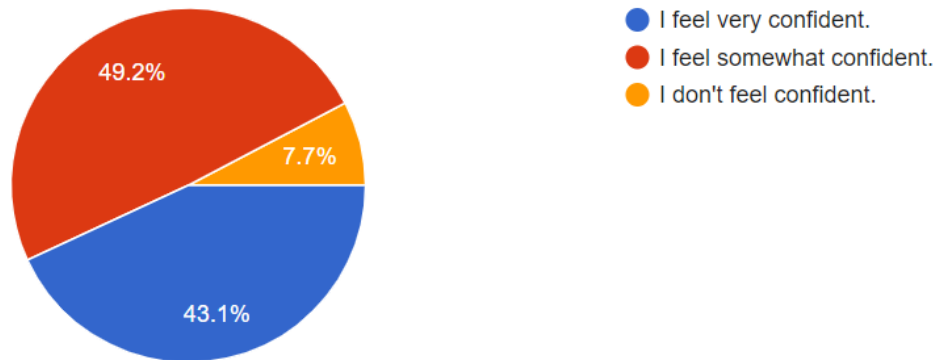
Digital Citizenship programming continues to be highly relevant and a significant need for supporting the increased online activities for students, educators, and their families. Last year the Common Sense Digital Citizenship Curriculum was selected by WCDSB as the most robust program for supporting cross disciplinary learning and including students, families, and educators in the learning. Key highlights related to digital citizenship programming since the last report include:

- Co-development of a program logic model for Digital Citizenship and Student Aware to develop a monitoring strategy. This strategic collaboration will help us better understand the WCDSB baseline and eventual relationship between preventative strategies and the numbers of investigations required through the Student Aware program.

- Continued work on aligning the Common Sense lessons with Ontario Curriculum Expectations, Ontario Catholic Graduate Expectations, and Global Competencies. This is a very time consuming process and only limited work on this has occurred so far this year due to competing priorities.
- Consultant work with six grade 7 and 8 classes to deliver the “Digital Drama” lesson in response to classroom and school needs. Each lesson includes an optional follow-up quiz that checks for understanding and responses to scenarios as well as the confidence scale question: “How confident are you in knowing how to de-escalate digital drama before it goes too far?” The aggregated responses by the students who answered the question after the lesson are as follows:

How confident are you in knowing how to de-escalate digital drama before it goes too far?

65 responses



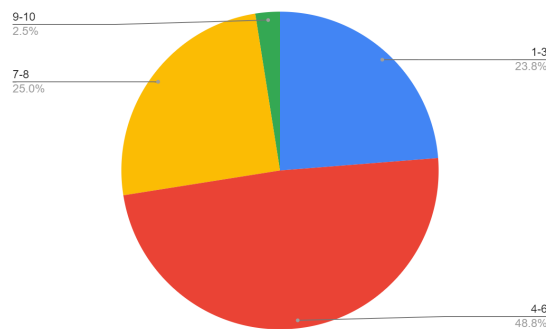
- Consultant work to present the Common Sense session “Plugged-in Parents: Grades K-8” to St. Gabriel Parent Council.
- Consultant work booked to present the Common Sense curriculum resources at staff meetings for St. Gabriel, St. Brigid, and Our Lady of Lourdes.

Experiential Learning Programming (MYSP 2a.i, 2.a.ii, and 2.b.iv)

Experiential learning through the lens of innovation continues to run strong across the WCDSB through a co-learning model where students and staff participate together with the aim of building capacity for continuing experiential learning beyond the sessions facilitated by the Experiential Learning and Innovation Lead.

From September through to March 1st the Experiential Learning and Innovation Lead has been busy leading experiential learning opportunities across divisions at 30 different schools so far:

Presentations By Division:



Staff and Student Participation:

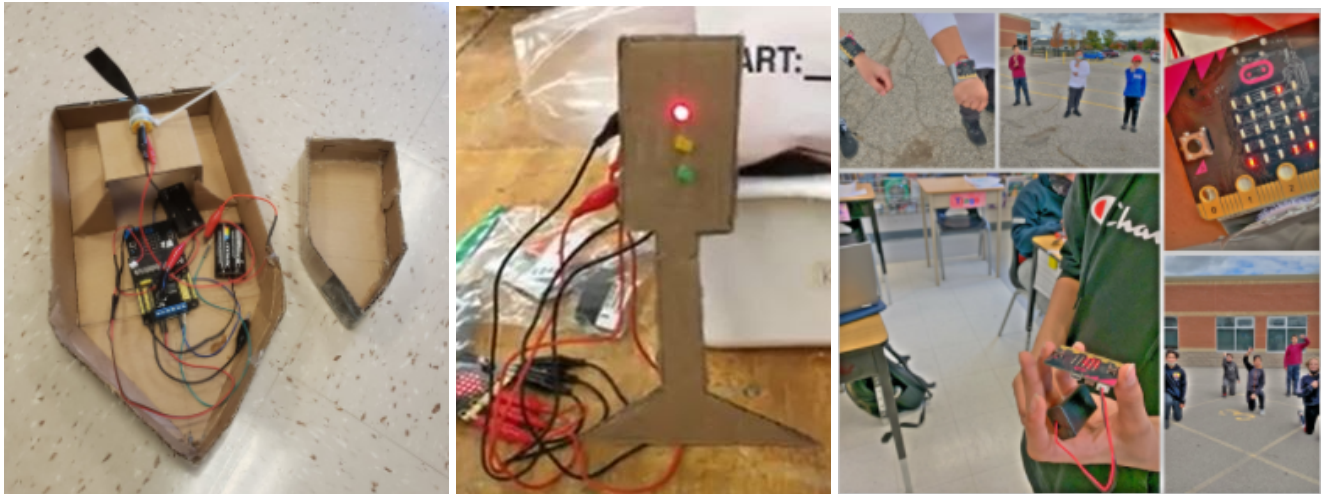
Total Staff Participation: 161

Total Student Participation: 1,539

Key Highlights:

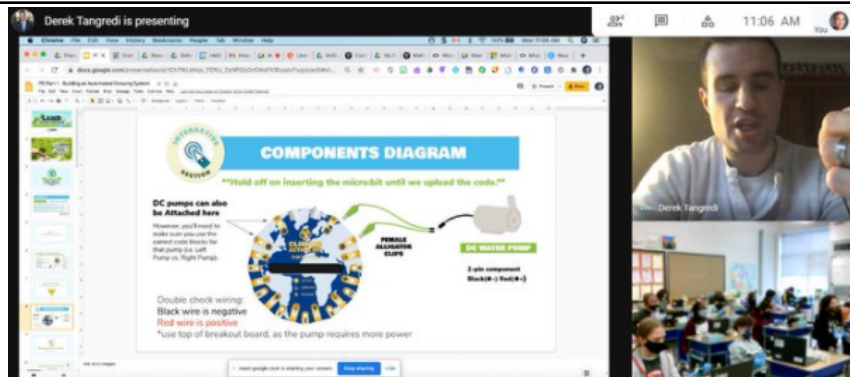
Micro:bit Kits

Coding Micro:bits has been the most popular workshop this school year with over 45 Micro:bit workshops including approximately 1,125 students. The presentations introduced micro:bits that connected coding to the new Math curriculum. We are currently in the process of extending our Micro:bit workshops to include building and coding cardboard boats, cars, and robot challenges for every division.



Climate Action Kit Event

Students at St. Anne (Cambridge) participated in a Climate Action Event where they learned how to use technology to solve the Global Sustainable Goals on land and water. The workshop was led by InkSmith where the students learned about the issues associated with deforestation and agriculture. The students coded a seed planting machine and a plant watering system that detects moisture in the soil. There were 52 students and 2 staff members who participated in the workshop. The goal is to extend this project to 10 more teachers and their students during an Earth Week Event in April.





Girls Who Game

This year we partnered with DELL Canada, Microsoft, and Intel to provide an opportunity for girls at St. John's Elementary School to participate in the Girls Who Game program. Girls Who Game (GWG) is an extra-curricular program that provides an opportunity for young girls and underserved students across North America to learn more about gaming and the use of Minecraft as a learning tool, while developing their global competencies, such as communication, collaboration, critical thinking, and creativity. This fall we had 12 girls and 2 educators participate in the first session. In the spring St. John's will continue to participate in the program and we have Christ the King participating in this opportunity for girls.

 **gwgthunder**
@gwgthunder

 **gwgthunder** @gwgthunder · Nov 5, 2020

Good times today as we learned about how to be good digital citizens, played some @PlayCraftLearn, and we got our shirts! #equity @Dell @transformedu @KatPapulkas @teachermackie #girlswhogame

Our #girlswhogame have an official name! We are the 'Mindful Mindcrafters' 🙌 Great meeting today where we learned about some awesome ladies in #STEM field and practised our @PlayCraftLearn selfies! 📸 @Dell @KatPapulkas @brendasherry @teachermackie #equity #transformedu @rchids



Hour of Code Event

The Hour of Code Event took place December 7-13. To support educators the website from last year was updated to further consolidate resources for educators to encourage more participation during The Hour of Code week. There were prizes available if WCDSB educators registered for the event. We had a total of 24 educators register for the event ranging from Kindergarten to grade 8. There were 949 students who participated and of those students 465 were female. Educators used this opportunity to connect this coding event to the math, social studies, language, and dance curriculum.



Ms. Bunn @MsBunn4 · Dec 16, 2020

Coding walking pedometers using Micro:Bits. The students had a blast and used their grit skills when coding. Way to go, students! Thank you @mfeonard231 #wcbsb #microbits #wcbsbawesome @stjoesjaguars



MrsWalker @MrsWalkerStPaul · Dec 15, 2020

Jumping into @PlayCraftLearn coding with the support of Mrs.C, Dan Nobel and @mfeonard231 @wcbsbStPaul. What #wcbsbawesome virtual collaboration!!



Global Competency Programming (MYSP 3.a.ii)

Global Competency Programming was embedded in the development of the WCDSB Framework for Learning Design which provided supports and resources for educators to assist with the need to be agile and responsive to shifting learning environments throughout this COVID impacted school year. The resources provided through our subscription to New Pedagogy for Deep Learning (NPDL) were especially helpful in keeping the Learning Design Planning section aligned with the best practices we have been working to promote and develop over several years. Language related to global competencies at the Ministry of Education is shifting to “Transferable Skills” of which there are seven that align very closely with the six global competencies found within the NPDL resources (especially as the seventh transferable skill is “digital literacy” and “leveraging digital” is a dimension of all six of the global competencies).

Professional Learning Highlights related to Global Competency Programming include:

- September 2 Secondary PD Day Session: [Tools and Strategies for Effective Learning - Adapted Approach](#) (integration of Ministry provided slides, introduction to WCDSB’s Framework for Learning Design, and choice of additional training and office hour opportunity)
- September 3 PD Day Morning Session Elementary and Secondary: [Work with WCDSB Framework for Learning Design and choice of office hour sessions to support specific learning needs](#) (links to meetings have now been disabled and numbers removed)
- Implementation of PPM164 including significant support for leveraging digital.
Examples include:



Dates and Sessions	Topics (all through the lens of equitable pedagogical strategy and assessment and evaluation practices)	Approximate Participant Numbers
September 2 PD Day Office Hours	Secondary Google Classroom and Meet D2L and Teams	70
September 3 PD Day Office Hours	Google Classroom and Meet D2L intro, Teams	300 + those in rooms with divisions or departments
September 8-October 16 -Lunch and afternoon office hours daily -St. Mary's Physical Education Department *Specific St. Isidore sessions and open to all sessions *Saturday Sessions in September and October for St. Isidore last minute hires or transfers	Rotating and As Needed Topics: D2L Google Classroom Teams Meet	275
Late October-December -On Demand 1:1 or Small Group sessions -individualized support videos -St. Peter's Staff Meeting -Onboarding session video (redone)	Jamboard Assignment tool in D2L Aspen Reporting and Comments Google Classroom GSuite Available tools and resources in D2L and Google Classroom integration Doc Appender for Forms ReadandWrite Troubleshooting Assessment and Evaluation Strategies Finding key resources in StaffNet Breakout rooms in Teams Teams Meet	50+
December 2 Special Education Family of Schools Sessions	Google Classroom Meet Jamboard Facilitating small group meetings	60
Christmas Break Sessions: French (FSL and FI) -both French and English teachers -individual or pairs support sessions and/or individualized support videos	Meet Online Teaching Strategies Flipgrid	35 +Created and sent out 8 separate general update how to videos on Meet through Memos and Social Media

January-April -On Demand 1:1 or Small Group sessions -email support (especially on demand as needed during the first two weeks of fully remote learning) -individualized support videos -general support videos updated to resources and system announcement/email -Occasional Teacher Support Sessions -Itinerant Teacher Support Sessions (Aspen) -St. Isidore Secondary Q3 Start-up sessions	-Teams -Meet -D2L -Google Classroom -Jamboard -Flipgrid -Attendance Strategies -Aspen Elementary Report Card Writing -any other as needed	300+
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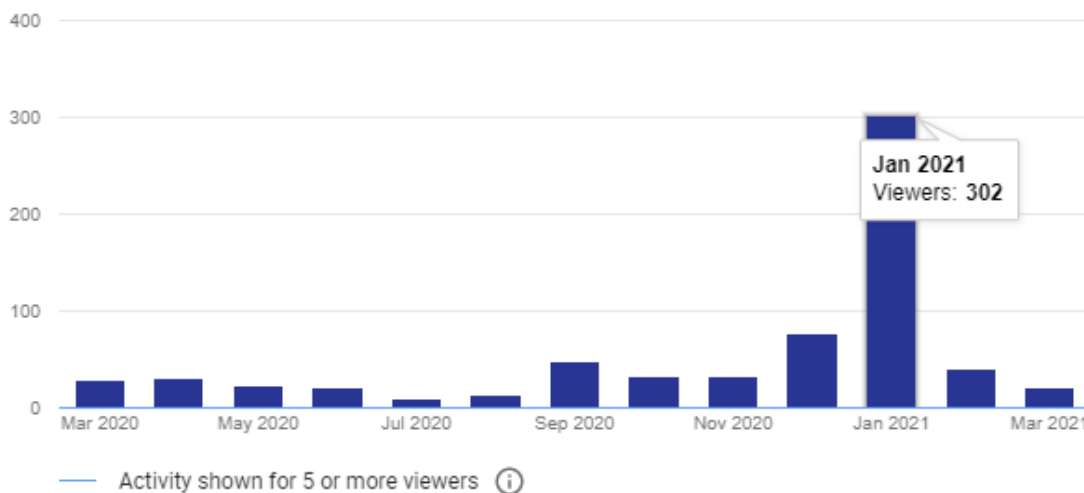
Additional Professional Learning (Websites, Google Classrooms and D2L Courses):

- Return to School StaffNet Landing Page (formerly Educator-Led Learning@Home) -5935 views
 - WCDSB Framework for Learning Design -3300+ bitly clicks plus other access points)
 - Special Education Resources -4552 views
 - Subject Specific Resources (folders rather than page, no view tracking at folder level)
 - Assessment and Evaluation -1204 views
- Help Desk - 95,901 views
- Submit a ticket - 18,384 views
- Privacy and Records Information Management - 2282 views
- Google Apps - 711 views
- Aspen Report Card Area in Help Desk - 4619 views
 - Elementary and Secondary documentation created
 - 17 instructional videos created
 - Elementary and Secondary FAQ section created in response to needs identified by Help Desk after first reporting entry period

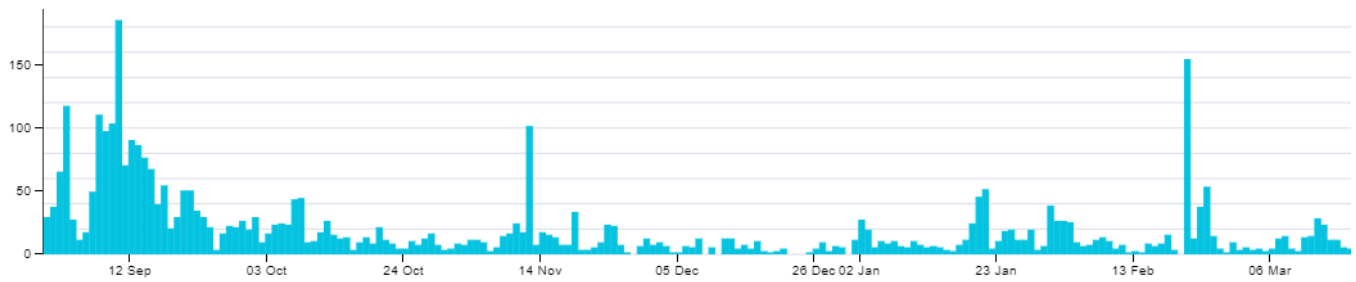
Leveraging Digital Learning Management System and Virtual Meeting Usage Reports:

GSuite Support Webpage Views

Monthly unique viewers for Mar 22, 2020 - Mar 22, 2021

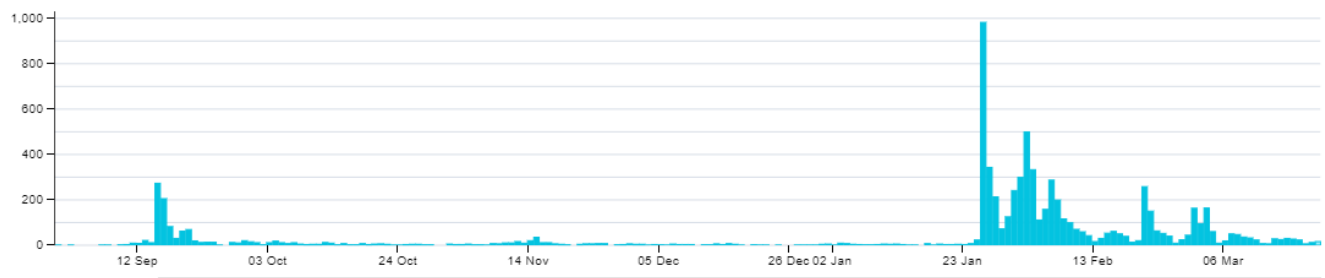


Professional LearningLE Course (over 3700 course accesses by educators Sep - Mar 2021)



Student E-Learn Readiness Course (approximately 7500 accessed by students Sep - Mar 2021)

Note: all students were automatically enrolled in January 2021



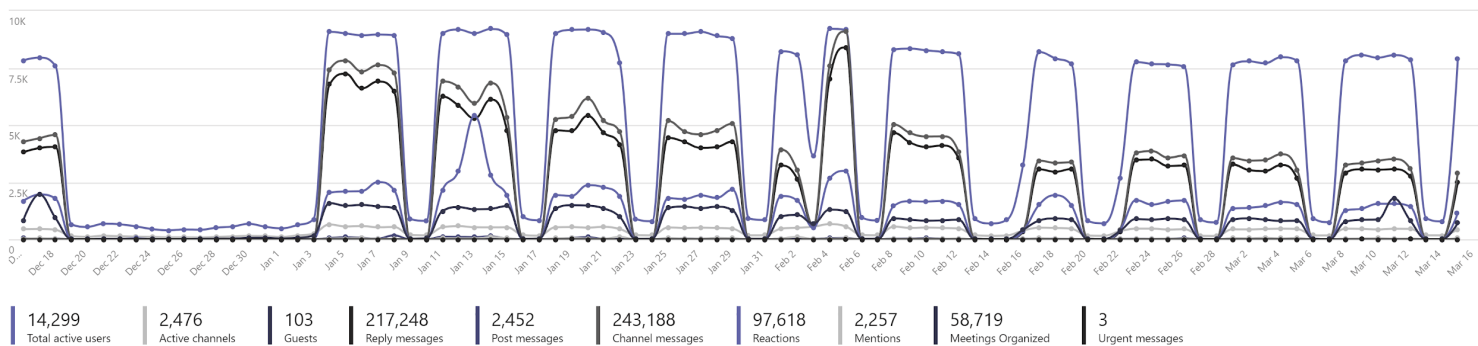
Professional Learning/Resource Google Classrooms

- Elementary Computer Site Administrators (90 enrolled)
- Occasional Teachers (70 enrolled)
- Special Education Teachers (108 enrolled)

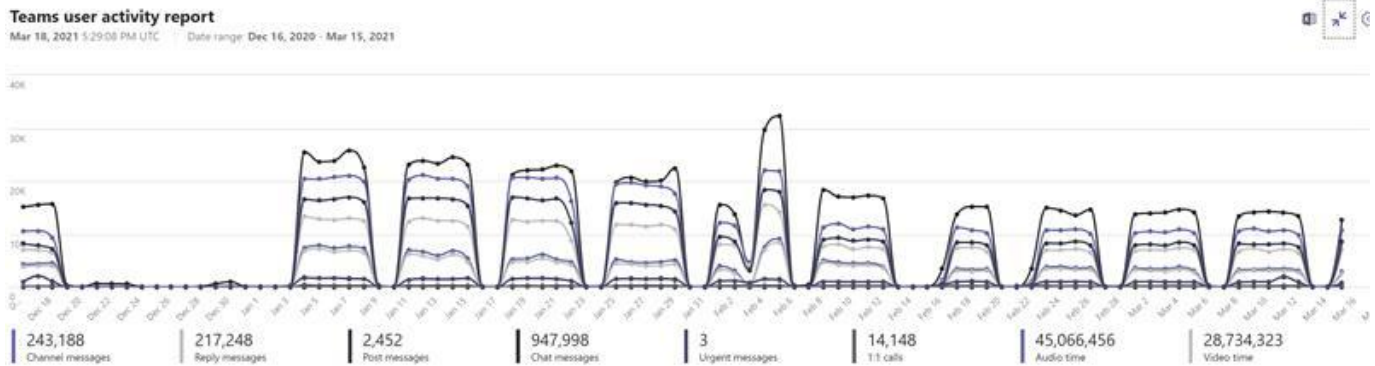
Teams Usage Report (December-March)

Teams usage report

Mar 18, 2021 5:27:02 PM UTC | Date range: Dec 16, 2020 - Mar 15, 2021

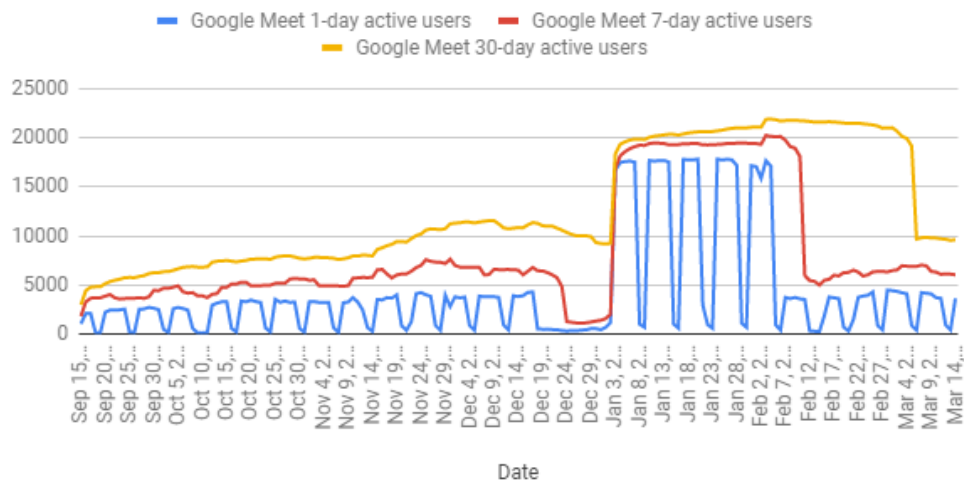


Teams User Activity Report (December-March)



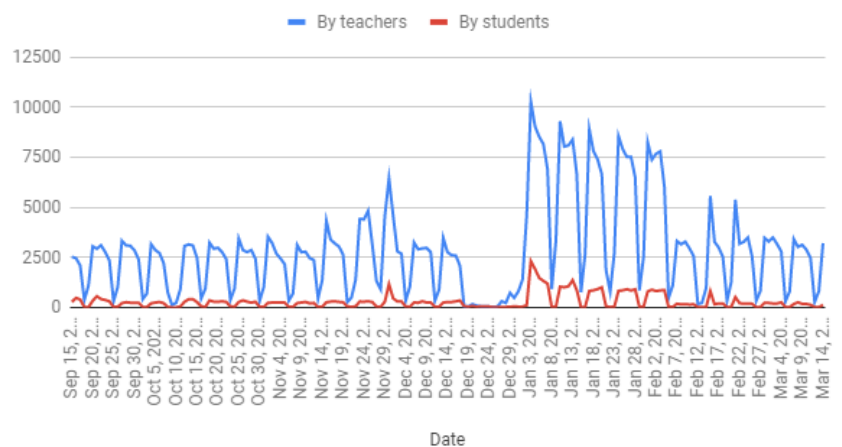
Google Meet Usage

Google Meet 1-day active users, Google Meet 7-day active users and Google Meet 30-day active users



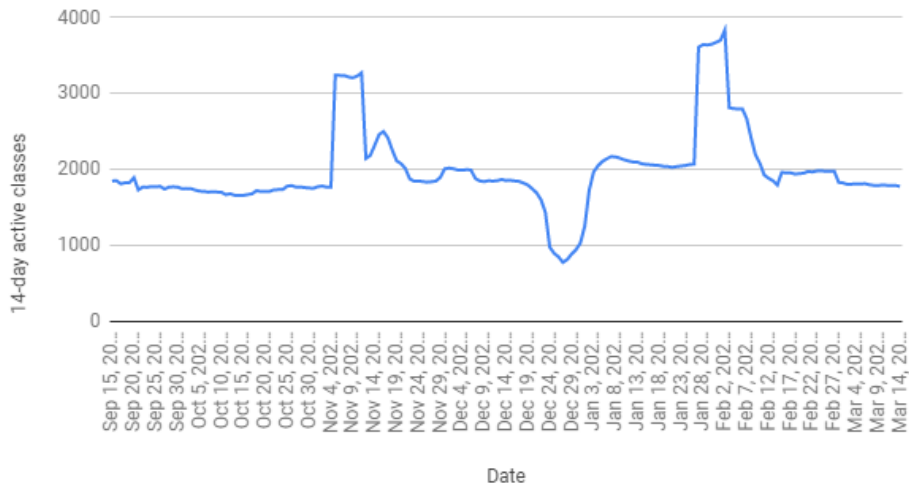
Posts in Google Classroom By Date

By teachers and By students



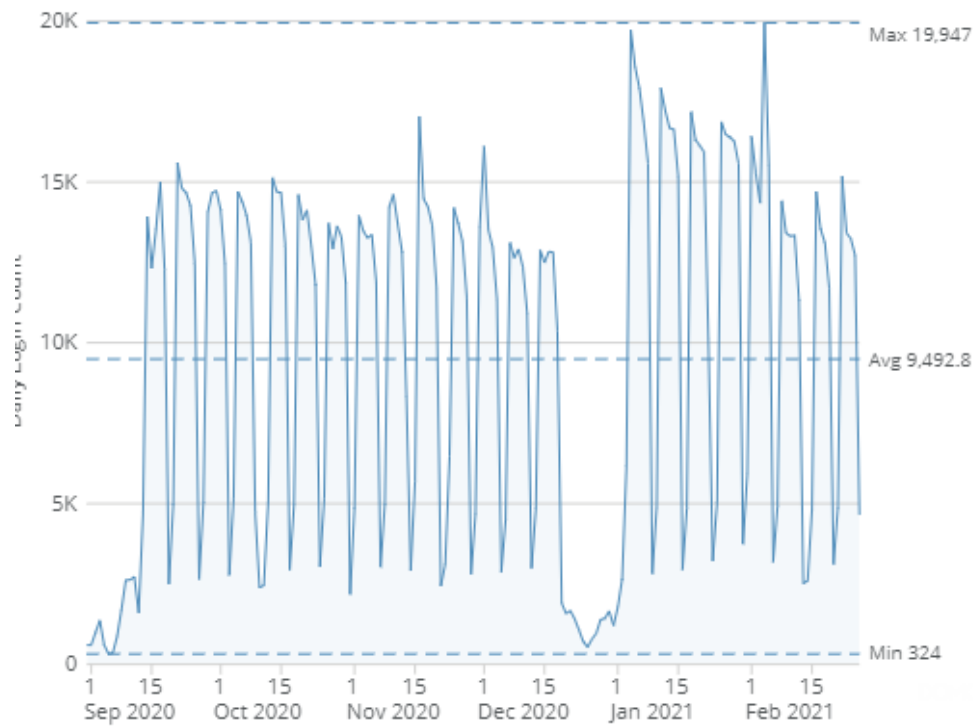
Active Google Classrooms (GCs where there are posts, assignments etc., on a given date)

14-day active classes vs. Date

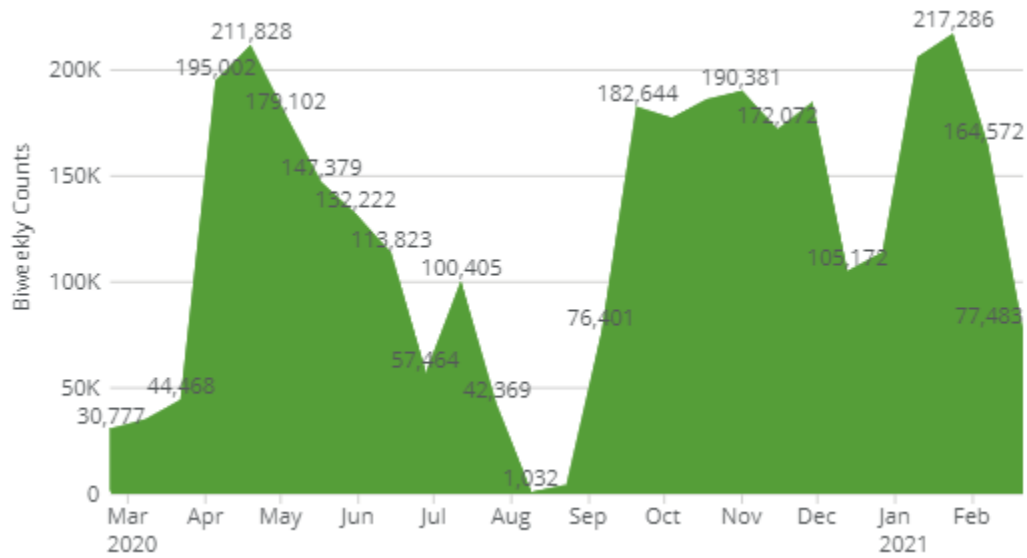


Note: Spikes correlate with the automatic creation of Google Classrooms at the start of new quadmesters and normalizes based on those who combine split and duplicated classes or who use D2L classes rather than Google Classroom.

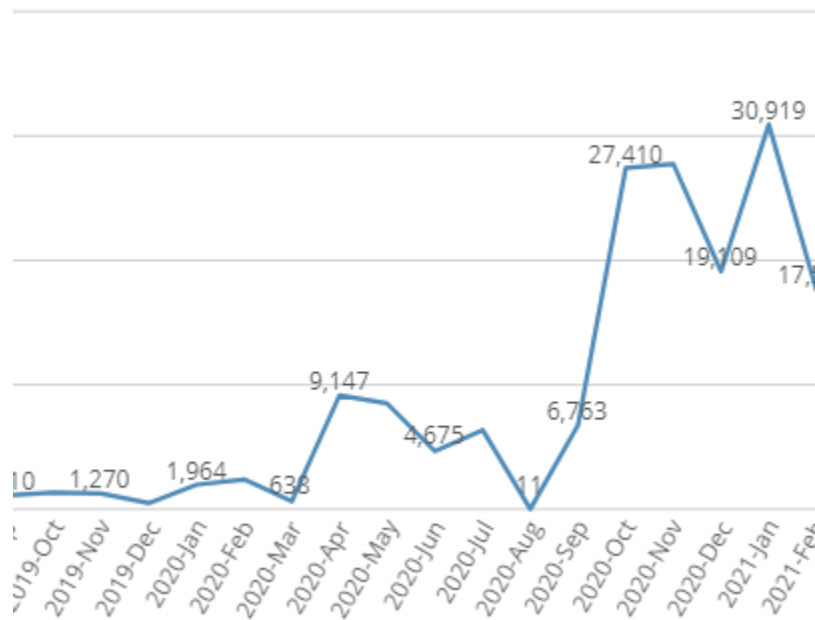
D2L Login trends Sep 2020- Mar 2021



D2L Tool Usage Trends - Assignment Tools Mar 2020- Mar 2021



D2L Tool Usage Trends - Oct 2020 - Feb 2021

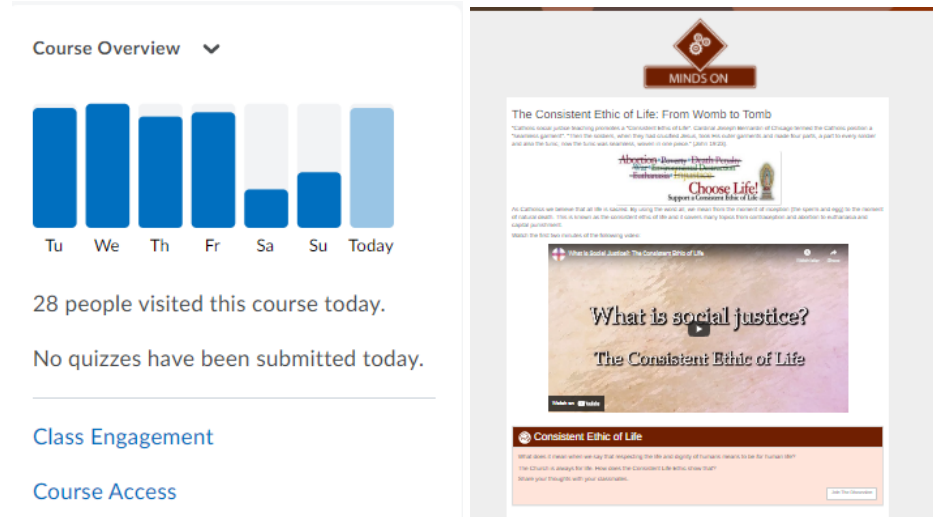


St. Isidore Secondary Virtual School and E-Learning

St Isidore CSS:

- 100 sections per quadmester
- 1200 students

eLearning (involving all secondary schools, St Isidore CSS, and Consortia courses) with approximately 1100 courses taken over various timings September -June



Strategic Direction Two

Guiding Question: How might we use the various aspects for technology tools (pedagogical, security, and technical) to provide a scalable, sustainable, and equitable strategy for technology?

Equity and Technology Governance (MYSP 1.b.ii, 3.a.ii)

Digital equity is about ensuring that everyone has equal access and opportunity. This means access to devices and the Internet is essential but not enough to ensure equity. To ensure equity we must pair technology governance with the elements of NPDL through an equity lens that include community partnerships, the learning environment, pedagogical strategies, and strategies for leveraging digital. This section primarily outlines the role of technology governance in terms of equity of access; however, it is important to note that professional learning related to technology is through the lens of creating more equitable opportunities through innovative pedagogical and assessment practices.

Access to Devices:

- The current ratio of Chromebook/Cloudbook devices for students is 2:1. This is an increase in available devices from the previously established ratio of 3:1. This increase was made possible by funds made available through COVID resource reallocation and relief funds.
- Each year for the last 3 years, rural grant money for technology has been allocated to St. Clements, St. Brigid, and St. Boniface. Once the new St. Boniface location opens, it will no longer qualify as a rural school. The rural grant money supports upgrading technology at the rural schools which in turn frees up



slightly older technology to be allocated equitably throughout the system. In this way, the rural school grant is supporting not only rural schools but also other schools in need throughout the WCDSB.

- There are currently 4332 Chromebook devices allocated to learn at home with additional devices made available each time WCDSB students move to remote learning. Additionally, 355 internet connectivity devices have been provided to support learning from home.
- In late January additional funding for devices came available. After consultation with a variety of stakeholders, a subcommittee of IT Governance determined that larger Windows 10 Cloudbook touchscreen devices would be purchased for each school (based on enrollment at 1 per classroom plus as many additional devices based on this ratio as possible). These devices were selected as they can be signed out by educators since WCDSB is one of the few boards that does not provide dedicated educator devices. These devices will be used flexibly at the schools so that educators who need devices to support learning have a slightly larger screen and can run the Teams client, while still accessing features that students have available to them. Additionally, these devices are connected to the school rather than the educator, so that they can also be used by students on an as needed basis.
- WCDSB continues to have a “Bring Your Own Device” policy that encourages those who can bring their own device to do so. The rationale for this policy is that school devices are then freed up for use to create more access to devices for a school. With the BYOD policy in place, it becomes necessary to track which schools have greater access to devices through BYOD so that IT has a better understanding of where there is greater need for WCDSB provided devices. Currently at secondary schools, the number of BYOD devices have dropped due to distribution of devices to students. Elementary schools have seen an increase of over 5000 BYOD devices, or greater than 1/3rd increase.
- One of the most significant challenges related to managing equitable access to devices for students and educators is that funding has been made available in pockets rather than in a long term sustainable plan over multiple years like it has been during the Technology for Learning Fund years. For this reason, it is important that IT continues to have budgets allocated to providing technology to students and educators while also creatively using more predictable areas of funding like the rural grant money to support the system.

Access to Support Opportunities for Families:

Tech Tips in WCDSBLearn@Home

The Tech Tips area of WCDSBLearn@Home has been widely used by families (and educators to support families) since the onset of remote learning in the spring and throughout the 2020-2021 school year. The take-home device support phone line which runs from 8am to 4pm Monday through Friday received approximately 20-30 calls a day which requires significant IT support.



Let's Get Together WCDSB Partnership

[Let's Get Together](#) is an organization that expands experiential learning and support beyond students to include families. WCDSB has begun working with Let's Get Together to support families in developing their own digital literacy skills in order to support their children at home and navigate the online tools related to education. Through knowledge sharing about system requirements and needs, Let's Get Together is continuing to develop its small group weekend programming for families (in multiple languages) in order to help us support families. Additionally, they are acquiring refurbished laptops that can be provided to select families in need. Finally, Let's Get Together is also providing free/donation based student workshops on weekends for students. All Let's Get Together workshops are created by post-secondary students.

Classroom Technology and Innovation (MYSP 1.b.ii, 3.a.i, 3.a.ii)

Digital Tools and Resources Approval Program

In order to support digital citizenship as it relates to privacy and security, as well as discernment in leveraging digital for strong pedagogical and curricular purposes, an interdepartmental teams consisting of program services, IT, and purchasing representatives has been working to establish and maintain a list of WCDSB approved digital tools and resources and a process for requesting new digital tools and resources for review. To date the team has accomplished the following:

- Over 360 digital tools and resources published on a searchable approved digital tools and resources list with usage notes for safe use to minimize student data included in third party tools (this is our minimum viable list to which we continue to add digital tools and resources that have been missed and remove those that are no longer available, safe, or recommended)
- Established a Help Desk Ticket process for new requests to be reviewed and existing tools to be deployed. This involves pedagogical review, privacy review, security review, IT integration review, and purchasing review as required. To date over 135 digital tools and resources have been requested for review this year (with many being review required for in use tools). 15 comprehensive reviews have been completed at this point.
- Next steps include leveraging the WCDSB ECNO - VASP membership to integrate our review process with their review process to reduce our review time. The ECNO - VASP process started around the time we began our process and now that they are completing reviews more regularly it will help us significantly.
- Updated APS017 to include the new digital tool and resource review process and guide staff to the many already approved tools.
- Sent initial communications regarding the process and approved list through system announcements and embedded the approved tools (and a slides summary) in the Leveraging Digital section of the WCDSB Framework for Learning Design.
- Next steps for this team include:
 - Development and implementation of a broader communications strategy especially with relation to promoting existing digital tools and resources to stem the requests for so many new reviews.
 - Update staff training modules on privacy and security to include the WCDSB specific process.
 - Continue to clear out the backlog of requests through assistance with the privacy and security aspects which are the most time consuming.



Approved Digital Tools and Resources for Student Use (Full 2020-2021 List Linked Here)



Table of Contents Links:

- [General: content neutral tools for thinking, collaboration, communication, demonstration etc. \(Elementary and Secondary\)](#)
- [Secondary Department and Subject Specific](#)
- [Mathematics / STEM \(content specific Elementary and Secondary\)](#)
- [Literacy and Cross Curricular \(Elementary and Secondary\)](#)
- [Religion \(Elementary, for Secondary please see Department and Subject Specific\)](#)
- [French \(Elementary, for Secondary please see Department and Subject Specific\)](#)
- [Special Education](#)



Chris Demers @demers_chris · Mar 11

Education is a big target for cyber criminals. Think before you click. No better time than now for digital literacy!



New research finds 'record-breaking' number of K-12 cyber incidents
A new report released Wednesday found that K-12 schools in the United States experienced a "record-breaking" number of cyber incidents ...
thehill.com

Technology for Parent Engagement

Presently implemented and emerging web technology are providing WCDSB with the opportunity to engage parents and students from anywhere at any time. Web environments such as our provincial virtual learning environment (D2L), Google Guardian, School Messenger, School Cash Online and now the Aspen Parent Portal have enabled parents to become more engaged in classroom activities and their children's long-term achievement information. Google Classroom/Guardian and D2L/Prism have enabled students and families to have anywhere online access to classroom curriculum material and assignments. School Messenger has provided expanded attendance and school notifications to families. We will continue to grow and consolidate these environments to ease access for engaged parents and students under the new Aspen parent portal. We have begun piloting the new Aspen portal and already over 1900 parents are registered in the environment.

Classroom Technology 5 year refresh schedule - MYSP 1.b.ii, 3.a.iii

Areas Effected	Initiative	Implementation Years
All Schools	Chromebook/Mobile Device Refresh	1/4 Yearly
All Schools	Display/Projector Technology Refresh	2025/26
All Schools	Educator Device Refresh	2024-26
Elementary Academic	Elementary Desktop Refresh	2021/22
All Schools	Monitor Refresh	2021/22 2025/26
All Sites	School Administrator Laptop Refresh	2021/22 2025/26
Secondary Academic	Secondary Desktop Refresh	1/4 Yearly
Secondary Academic	Secondary Printer Refresh	Yearly Staged





Ms.Bunn @MsBunn4 · Dec 16, 2020

Coding walking pedometers using Micro:Bits. The students had a blast and used their grit skills when coding. Way to go, students! Thank you
@mfleonard231 #wcdsb #microbits #wcdsbawesome @stjoesjaguars



- Chromebook/Mobile Device Refresh** Chromebooks and other inexpensive mobile devices like Window 10 Cloudbooks have a limited lifespan of support by the vendors. WCDSB has achieved **an average 2:1** ratio of Chromebooks and Windows 10 Cloudbooks to students at every school. The ratio improved this year due to the purchase of Learn@Home devices from 3:1. The goal is to maintain this ratio of a Chromebook/Cloudbook type device over the next 5 years. A Chromebook/Cloudbook comes with a one-year warranty. Google has committed to a support lifespan of 3 years for performance, functionality and updates. To maintain a current and supported fleet of Chromebooks/Cloudbooks, IT will refresh 1/4 of the devices every year.
- Display/Projector Technology Refresh** Every classroom in WCDSB has a data projector. We have now refreshed all projectors that were installed in 2011. To maintain maximum availability of this critical classroom engagement tool, IT finished the refresh with replacing the final 1/5th of the installed projectors in 2020/21. Functional decommissioned projectors are used as spares to minimize classroom downtime when the projectors fail. The next refresh cycle will begin in 2025/26.
- Educator Mobile Devices** Every Classroom in WCDSB has a dedicated computer for the Educator and for operating the data projector. The requirement for educators to incorporate technology into their pedagogy and remote instruction is best served by access to a mobile device with a larger screen than our student 11" Chromebooks and Cloudbooks. A recent provincial grant has enabled WCDSB to purchase devices to support every classroom and educator for this purpose. These devices will need to be refreshed starting in 2024/25.
- Elementary Desktop Refresh** Elementary desktop computers will be refreshed to replace broken and outdated computers. The continued goal is to continue to support the 1 computer to every 16 students in the elementary schools. Extra working computers will be shuffled to other schools to maintain the ratio.
- Monitor Refresh** Classroom projectors have outdated video splitters paired with failing computer monitors that don't allow for easy sharing of mobile devices to the screen. New monitor technology allows for easy sharing to the screen of mobile devices while the teacher desktop computer can be used independently. All classroom desktop monitors will be refreshed by Sept 2022. The next refresh will start 2025/26.
- School Administrator Laptop Refresh (2021/22 2025/26)** Administrator Laptops are refreshed



every 5 years to maintain functionality.

- **Secondary Desktop Refresh** One quarter of all Secondary desktop computers will be refreshed replacing broken and outdated computers. The new computers will be targeted for the tech and design labs. Demands of higher learning at secondary schools require access to high end design and business application labs. The continued goal is to continue to support the 1 Windows 10 computer to every 4 students in the secondary schools.
- **Secondary Printer Refresh** Printers are replaced as required on secondary schools with a focus on reducing printing and print costs.

Strategic Direction Three

Guiding Question: How might we connect our innovators (staff and students) and amplify our learning community by sharing their innovative practices that lead to sustained deep learning?

Connecting Technology to Disciplinary Programming (MYSP 1.b.ii, 3.a.i, 3.a.ii)

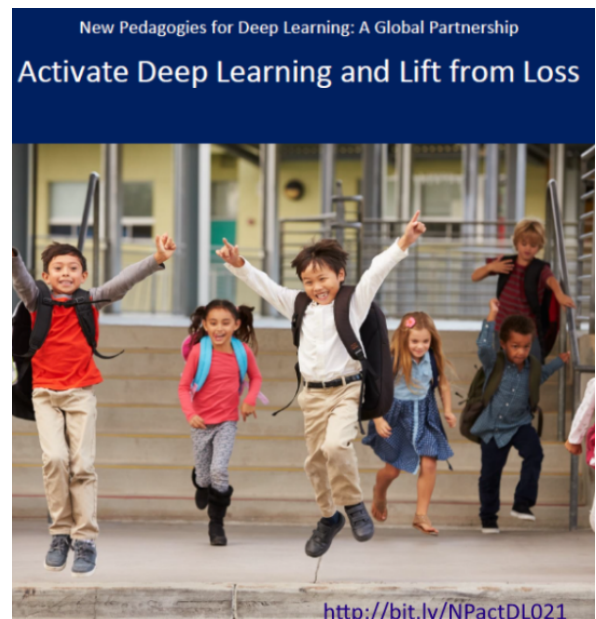
Leveraging Digital has long been a concept supported in multiple disciplines; however, this year has brought this need to the forefront. The WCDSB Framework for Learning Design has been a touchstone for supporting educators, elementary site administrators, and CEC consultants with communicating overarching principles for leveraging technology as well as specific digital tools and resources that are promoted by various departments and disciplines. Some examples of how technology has been connected to disciplinary programming this year include:

- Math Tuesday sessions that include how to leverage digital through Knowledgehook, Mathology, and plugged in coding resources to support the implementation of the new mathematics curriculum.
- Special Education Google Classroom for sharing online resources to support teaching special education students in online learning scenarios. The use of Lexia to support Empower students and the online delivery of Empower.
- Literacy support sessions for online guided reading and the provision of digital literacy resources including Literacy Pro Library, review of Spark Reading pilot, and the online delivery of BLAM.
- Religion sessions on how to access and use the online versions of the *Growing in Faith* and *Growing in Christ* and *Fully Alive* programs.
- St. Isidore grade level group meetings to share best practices amongst grade level colleagues.

Next steps related to disciplinary programming and the significant skills developed by our St. Isidore teachers is to leverage their experiences of this past year as they return as technology leaders to their schools in subsequent years. We look forward to future opportunities to share through innovation open spaces conferences and other professional development sessions.

Leadership for Innovation Learning Series (MYSP 3.a.i, 3.a.ii)

This year the Innovation Learning Series was on pause due to the pandemic. Instead, 'would be participants' were directed



to the system level Equity and Leadership Series. Additionally, past participants in Leadership for Innovation and the Innovation Committee were specifically invited to attend the New Pedagogies for Deep Learning (NPDL) Global Learning Series where they had the opportunity to collaborate with educators around the world on topics including equity and well-being through the 6Cs, co-creation of a deep learning Earth Day related task, and how to seize the desire for connection to lift learning and go deeper as we emerge from the pandemic. WCDSB participation in these webinars has varied from date to date (usually between 5 and 10 participants); however, the feedback from participants has been overwhelmingly positive with emails following stating:

"I attended yesterday and the hour flew by! It was such a wonderful learning experience!"

"These are sooo good. Thanks so much for sharing and thinking of me."

"Thanks for sharing this session out! Caught part of it and participated in the breakout room to create the plan. Great to work with others."



Information Technology 5 Year Strategic Plan 2021-2026

Information Technology Services Vision Statement

An empowered community that embraces innovation to achieve success.

Information Technology Services Mission Statement

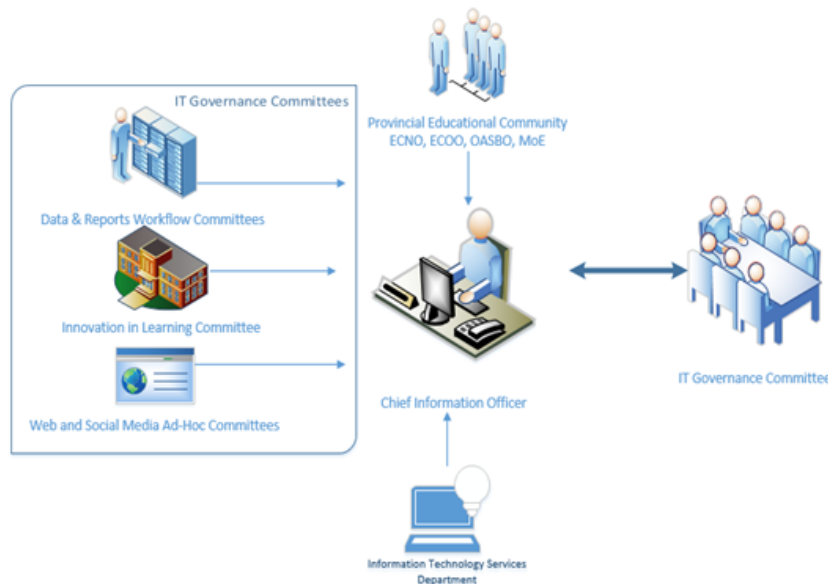
Enrich our community and foster a culture of innovation and trust by facilitating dynamic solutions and services.

IT Governance - MYSP 1.b.ii, 3.a.iii

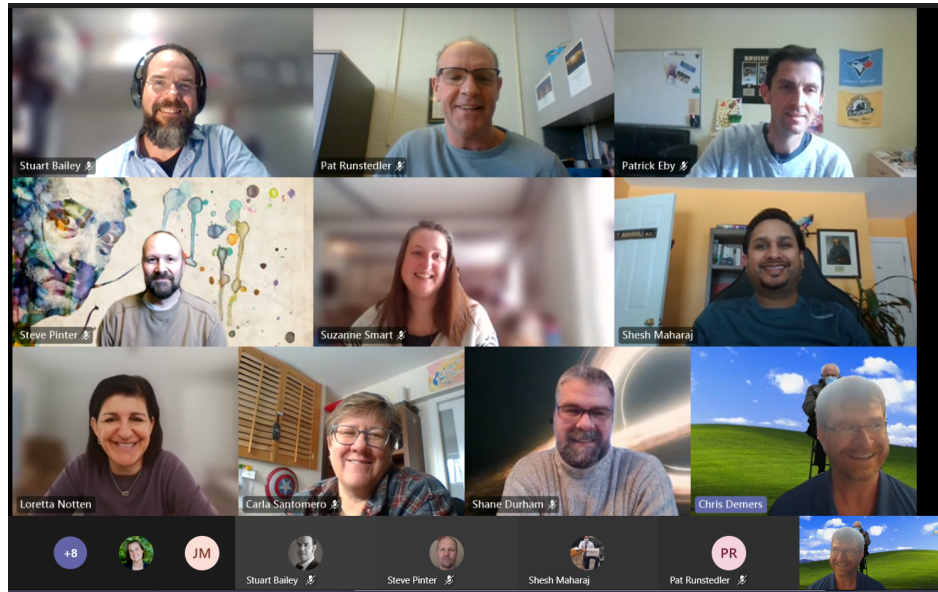
The Information technology 5 year strategic plan is formed through input from the WCDSB IT Governance committees, partnerships with the Ontario IT educational community, industry trends, pedagogical requirements as identified by the Program department, plus community and stakeholder input. Infrastructure Technology Governance refers to the decision-making and accountability structure. Within this structure, IT resources are aligned with the academic and administrative objectives of the WCDSB in alignment with the Board Improvement Plan for Student Achievement (BIPSA) and Multi-Year Strategic Plan.

This IT Governance structure ensures that the needs of stakeholders across the system are considered, and, as appropriate, guide the development of IT system priorities for technology and IT budgets. It is also important that this structure supports an increased accountability to ensure that critical standards, privacy and security requirements are met.

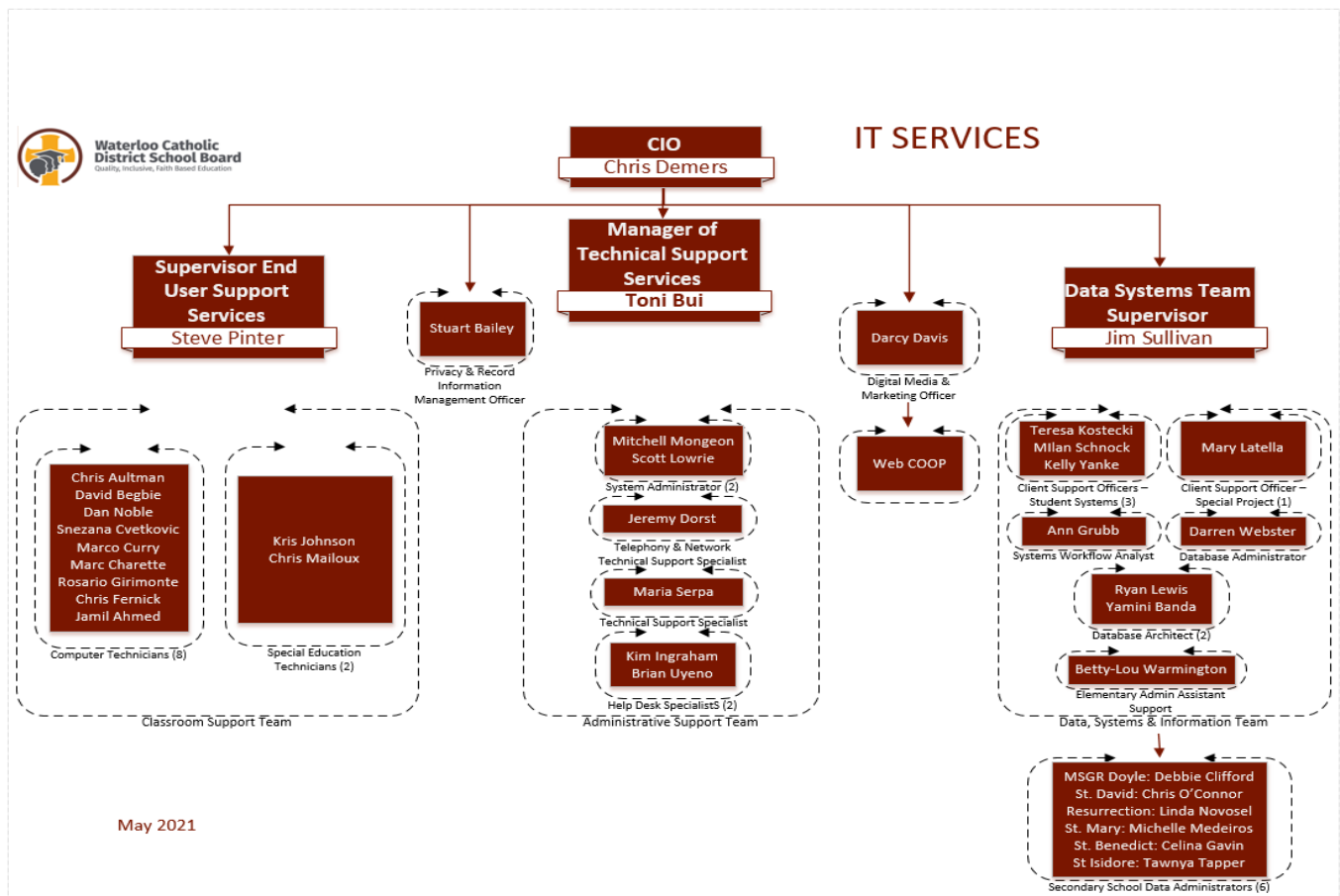
Information Technology Governance



IT Governance Council Meeting over MS Teams:



Information Technology Services Organization Chart



Key Performance Indicators - MYSP 3.a.iii



Key Performance Indicators (KPI) are a set of quantifiable measures that Information Technology Services (ITS) uses to gauge performance and status of the IT infrastructure over time. These metrics are used to determine WCDsb progress in achieving its strategic and operational goals for Information Technology and its ability to support it.

Our KPI's show a general increase in age of the IT infrastructure and devices. They also show a large increase in the number of devices and applications per IT staff member. The good news is the KPI's show a decreased time to respond and resolve technology issues.

This IT strategic plan utilizes the KPI results to project areas where infrastructure, software, bandwidth and devices need to be refreshed and scaled to need on a yearly basis. Find Summary of the KPI's on the following pages. Full KPI Document: [ITS KPI 2021 Final.xlsx](#)

	Key Performance Indicators							
	2016-17	2017-18	2018-19	2019-20	2020-21 Projections	2021-22 Projections	Overall total or change 2012-2021	
Elementary Academic Infrastructure								
Student FTE	15085	15787	16465	17019	17573	17388	23%	Increase
Number of Supported Desktop Computers	730	730	760	789	818	836	-45%	Reduction
Number of Unsupported Desktop Computers		462	462	460	460	460	350	Left in stock
Number of Laptop Computers	205	256	300	360	360	350	41%	Laptop Computers
Number of ChromeBooks	5429	6194	6310	6400	6480	8154	16988%	Increase
Number of Cloudbooks					150	1500	900%	
Student L@H devices	0	0	0	2200	3500	3500	59%	
Average Age of Desktop Computers	3.5	4.5	5	2	3	4	400%	Average Age
Average Age of Laptop Computers	7	7	8	9	10	11	1100%	Many are old
Average Age of ChromeBooks	2	3	2	3	3	2	2.00	4 year life cycle
Student to Computer Ratio	16	16	16	16	16	16	16	Decrease
Student to Cloud device Ratio	3	3	3	3	2	2	2	1 Chron
Technician to Computing Device Ratio	796	898	979	1001	1015	2100	707%	Big increase
Technician to Student Ratio	2155	2255	2352	2431	2510	2484	1:2600	Number of students per technician
Number of WiFi Access Points	550.00	650	690	801	830	850	462%	Increase
Number of WiFi Access Points Per Student	27.43	24	24	21	21	20	-357%	A ratio of 20 to 1
Number of Software Titles	70.00	60.00	60.00	60.00	60.00	70.00	-13%	Removal of old software
Number of approved apps & subscription		315.00	325.00	343.00	363.00	400.00	27%	
Computers replaced/upgraded	0	0	0	300	300	0	300%	300 new computers
Total number of BYOD devices connecting	7200	7500	7800	9855	12960	14000	659%	Increase
Total number of iPads	225	300	435	847	1259	1359	3020%	Increase
Total number of Android Tablets	27	27	27	27	20	18	360%	Increase
Number of Data Projectors	745	750	770	546	575	596	596	All replaced
Number of Bulbs replaced	80	300	400	300	100	75	75	Most projects
Number of Data Projectors refreshed	67	150	150	200	180	0	0%	% Replaced
Number of Data Projectors repaired/replaced	70	200	0	0	5	25	33%	Used or replaced
Average age of Data Projector	5.5	6	4.5	3	3	4	400%	3 is average
Secondary Academic Infrastructure								
Student FTE	6263	6309	6,783	6,890	7,074	7,412	11%	Slight Increase
Number of Supported Servers	10	10	10	10	10	10	10	Decrease
Number of Virtual Servers	20	20	22	24	27	29	29	Increase
Number of Desktop Computers	2149	2149	2156	2164	2173	2170	2170	Static
Number of Unsupported Desktop Computers		75	75	80	80	75	75	Left in stock
Number of Laptop Computers	121	121	120	135	135	135	135	Static
Number of ChromeBooks	2369	2522	2648	2820	2850	2900	2900	Increase
Number of Cloudbooks						566	566	
Student L@H devices				150	832	900	83%	
Average Age of Desktop Computers	7.5	5	4	5	5	6	6 years	Refreshed
Average Age of Laptop Computers	7.5	8	9	10	11	12	12 years	Second year
Average Age of Cloud Devices	2	2	3	4	4	3	4 years	4 years
Student to Computer Ratio	2.76	2.78	2.98	3.00	3.00	3.00	0.00	1 computer per student
Student to Chromebook Ratio	2.64	2.50	2.56	2.17	2.30	2.00	2.00	1 Chromebook per student

Staff Training - MYSP 1.b.ii, 3.a.iii



It is essential that timely training and resources be made available for the utilization of software and technology. Over the last year, live administrative training was mostly provided over Microsoft Teams. Training over this platform allows for the recording of training to be reviewed by staff as required. Training videos, documentation and other resources were created on the StaffNet staff portal.

Training	Audience	Delivery Method
Aspen (Report Cards, Attendance, Scheduling...)	Administrative and Academic staff	Online Live, documentation and videos
Privacy	HR and Payroll departments	Online Live and Documentation
Microsoft OneDrive	Administrative and Academic staff	Online Live and Videos
Microsoft Teams	Administrative and CEC staff	Online Live and Videos
School Messenger	Elementary Administrative Staff	Online Live, Documentation and Videos
Cyber Security	All Staff	Through Safe Schools Application
Administrative Assistant Training	New and existing direct support	Privacy, School Messenger, Cyber Security, Aspen, OnSIS, OneDrive, Teams

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Welcome To The IT Help Desk

StaffNet Home

Pages

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Published 5/26/2020

WCDSB SchoolMessenger Communicate User Training Video

SchoolMessenger Communicate End User Training

58 views · 0 likes · 0 comments

Activity Summary

416 views

Recent Activity

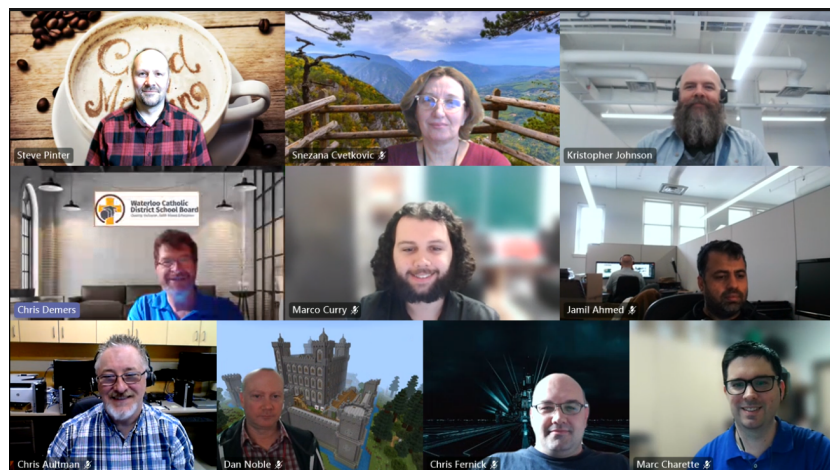
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Viewed	John Doe	5/26/2020 10:00 AM
Viewed	Jane Smith	5/26/2020 9:55 AM
Viewed	Mike Johnson	5/26/2020 9:50 AM
Viewed	Sarah Brown	5/26/2020 9:45 AM
Viewed	David White	5/26/2020 9:40 AM
Viewed	Emily Green	5/26/2020 9:35 AM
Viewed	Chris Black	5/26/2020 9:30 AM
Viewed	Alexander Grey	5/26/2020 9:25 AM
Viewed	Isabella Blue	5/26/2020 9:20 AM
Viewed	William Red	5/26/2020 9:15 AM
Viewed	Mia Yellow	5/26/2020 9:10 AM
Viewed	James Purple	5/26/2020 9:05 AM
Viewed	Olivia Pink	5/26/2020 9:00 AM
Viewed	Benjamin Brown	5/26/2020 8:55 AM
Viewed	Sophia Green	5/26/2020 8:50 AM
Viewed	Lucas Blue	5/26/2020 8:45 AM
Viewed	Hannah Red	5/26/2020 8:40 AM
Viewed	Ethan Yellow	5/26/2020 8:35 AM
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Status of 2020/21 Projects - MYSP 3.a.iii

Over the last year, the Information Technology Services department has worked on and completed many projects. Below are the projects projected in the 2019/20 IT Strategic plan report with current status of each endeavour.

Infrastructure	Current Status	Projected Finish Date	Notes
Broadband Modernization Project, SDWAN to all sites	100%	Done	All schools installed and configured
Cell Phone Refresh	5%	December 1, 2021	Half before Aug 31
ClearPass	5%	2022/23	Purchased, Pilot for 21/22, 22/23 roll out
Forti Authenticator	100%	Done	VPN and Multi Factor Authentication
Internal Segmentation Firewall	25%	Aug 31st	Increased security to prevent cyber attacks
Multi-Factor	10% Clients	100% on Web VPN	60% Overall
Internet bandwidth increase	Done	Increased 2000%	Increased
Mobile Device Authentication	Investigating	December 21, 2021	
Movement to Cloud storage/service	80% Onedrive	Teams for Group drives Planned	Students/Staff complete, 20% Admin staff
Network Switch refresh Elementary	5%	Aug 31st	Summer Project
Network Switch refresh Secondary	5%	Aug 31st	Summer Project
School Messenger Safe Arrival & Generic App	Delayed	December 21, 2021	Delayed due to Covid19 and Aspen
Security/Camera Infrastructure Refresh	100%	Done	
Wireless refresh	100%	Done	
Classroom Technology	Current Status	Projected Finish Date	Notes
Chromebook/Cloudbook Device Refresh	100% from the projected	Many more from grant	Done
Display/Projector Technology Refresh	100%	Aug 31st	Finished until next refresh
Educator Mobile Devices	Beginning roll out	Aug 31st	Grant allowed us to do this a year early
Monitor Refresh	Reallocated to devices	Delayed to 21/22	Funding went to Covid19 devices
Secondary Desktop Refresh	Reallocated to devices	Delayed to 21/22	Funding went to Covid19 devices
Secondary Printer Refresh	100%	Done	
Process Optimization	Current Status	Projected Finish Date	Notes
Email and Electronic Records Management Retention Automation	5%	22/23	Working actively toward this.
HR System Workflow Integration	25%	Aug 31st	Implementing HDSB model
Laserfiche Expanded tools for process optimization	39 New Electronic Flows	Ongoing with 178 form processes	Laserfiche, Excel, Google and MS Forms
Laserfiche Rio migration	Done	Done	On latest version now
Reduce Printing	0%	No progress	Covid19 has resulted in increased printing
Reporting Server Upgrade	20%	May 31 2021	Migrating out of date reporting to Aspen
Sparkrock Finance Transition to Cloud	Deferred	Revisit 21/22	Evaluating other School Districts success
SPEC Ed Service Delivery Optimization	100%	Done	Pre-purchase devices, Just in time delivery
Standardized Computer Imaging and application delivery	20%	Dec 1st 2021	Improved service delivery to admin staff
Student Management System Transition (Aspen)	80%	Core System Implemented	Training, conduit, data and various bugs
Staff Support and Development			
Cyber Security Training Expanded	15%	September 1, 2021	Role Training
ERO PD Booking System transition Apply to Teach	80%	Switched to Talent Ed	Training and Complete April 1st
Green Application Process and Catalog	80%	Process and List	On Web and Staffnet
SFE to Apply to Education	Deferred	Review over 2021-23	To be re-evaluated



Information Technology Five Year Strategic Plan Schedule

[See extensive descriptions of each initiative in this Appendix.](#)

Infrastructure - MYSP 3.a.iii

The Board's infrastructure hardware and systems must be maintained and upgraded on a regular basis to meet the ever increasing demands. This will also prevent system failures and greatly simplify staff support issues and minimize the impact on future year's budgets. Productivity and instruction opportunities are lost if replacements and refreshes are done when existing equipment has already failed, or, is about to fail. With the increasing complexity and interconnectedness of Board operations, it is imperative that the Board's infrastructure be robustly constructed and consistent with current industry standards.

Areas Affected	Initiative	Implementation Years
Secondary Academic	Academic Secondary Server Refresh	2022/23
All Sites	Board Phone Controller Update	2023/24
CEC	CEC & Dutton Drive Computer Refresh	2023/24
Secondary Academic	Cloud Labs	2021-23
Admin	Elementary Desktop, Laptop and Print	2021/22
All Sites	Firewall Infrastructure Refresh	2024/25
All Sites	Increase Internet Capacity	Yearly
All Sites	Movement to Cloud Service/Storage	2021-24
Academic	Network Switch Refresh	Yearly
All Sites	Photocopiers	2021/22 2025/26
All Sites	SDWAN Device Refresh	2025/26
Admin	Secondary Administrative Staff Desktop	2022/23
All Sites	Security Camera Refresh	2022/23 2024/25
CEC	Senior Admin Laptops	2022/23
Business	Smart Phone Refresh	2021 2023 2025
CEC	Storage Area Network Refresh	2024/25
CEC	Technician device refresh	2021/22 2025/26
All Sites	Wireless Evergreen	Yearly
Infrastructure	WREPnet Core Upgrade	2024/2025

Process Improvement - MYSP 3.a.iii

Currently some of the Board's key business systems are not integrated and rely on significant manual processes for populating system data, extracting data and solving connectivity issues. Board system decisions must move from a departmental focus to one which considers system, staff and student needs, vetted through the Board's IT Governance Structure. Current systems should be electronically integrated where possible to provide for automated workflows. As new systems and servers are implemented, automated integration into the Board's electronic business process workflows will be the focus.

Areas Effected	Initiative	Implementation Years
Business	Email & Electronic Records Retention Automate	2021-2024
Business	LaserFiche Process Automation and Forms	2021-23
All Sites	Parent and Student Portals	2021-23
All Sites	Print Reduction	Ongoing
All Schools	School Messenger Safe Arrival and Applications	2021-23
Business	Sparkrock Finance transition to Cloud	2021-23
All Sites	Unification of Administration & Classroom Apps	2021/22



Staff Support and Development - MYSP 1.b.ii, 3.a.i, 3.a.iii

This section includes tools to help our staff and community to effectively receive PD, report absences, access required student information and keep safe utilizing technology. We also place projects for improving staff efficiency in this section.

Areas Affected	Initiative	Implementation Years
All Sites	Cyber Security/Privacy Training Expanded	Ongoing
All Sites	Talent Ed/Apply to Education Investigation	2021-23
All Sites	Green Application Catalog	Ongoing
All Sites	SFE to Apply to Education	2021-23
Business	Student Management System Optimization	2021-23

Next Steps:

The nature of innovation is rooted in the understanding that it is an iterative process that celebrates the learning that comes from success and ongoing challenges. Our IT strategy and Innovation in Learning focus will continue to leverage the opportunities for innovation created through the pandemic response in order to change practices to increase equity of access and equity of opportunity related to innovation and technology.

Specific next steps include:

- Utilizing information gained through community consultation to respond to issues related to equitable access to technology, equitable access to learning opportunities (both students and staff), and equitable assessment and evaluation practices. Our responses will need to take into account what we have learned from the pandemic as we refocus priorities based on input from stakeholder groups.
- Leverage the learning from the virtual school and remote learning experiences and best practices to support the continuation of St. Isidore and extend the learning through the physical schools. For example, consultation regarding the promotion of Brightspace by D2L and Teams as the preferred LMS and meeting tool from a pedagogical and assessment and evaluation standpoint to leverage the Ministry of Education provided professional learning and resources. Additionally, supporting educators in finding and using board provided digital tools and resources available to support curriculum delivery, the development of transferable skills, and cross-curricular and integrated learning.
- Continue to consult our stakeholders and the Ontario IT educational community to adjust the IT 5 year strategic plan to meet our present and future requirements to effectively support both instructional and business needs.

Recommendation:

Report is being provided as information only

Prepared/Reviewed By: Loretta Notten
Director of Education

*Bylaw 4.2 "where the Board of Trustees receives from the Director of Education a monitoring report that flows from a responsibility delegated to the Director under Board Policy – **except where approval is required by the Board of Trustees on a matter delegated by policy to the Board** – the minutes of the Meeting at which the Report is received shall expressly provide that the Board has received and approved of the Report as an action consistent with the authority delegated to the Director, subject in all instances to what otherwise actually occurred."

