



**BRANT HALDIMAND NORFOLK
Catholic District School Board**

Agenda
Catholic Education Centre
322 Fairview Drive
Brantford, ON N3T 5M8

**Communications and Technology Advisory Committee
Monday, April 18, 2016 – 3:30 p.m.
Boardroom**

Members: Dan Dignard (Chair), Tracey Austin, Cliff Casey, Norm Cicci, Tom Grice, Bonnie McKinnon, Rick Petrella, Chris Roehrig

1. **Opening Prayer** Dan Dignard
 2. **Approval of the Agenda** Dan Dignard
 3. **Approval of the Minutes – June 23, 2015** Dan Dignard
 4. **Declaration of Conflict of Interest** Dan Dignard
 5. **Business Arising from the Minutes**
 6. **Information Items:**
 - 6.1 Communications Department Report, including Board Twitter Process Tracey Austin
 - 6.2 Technology Learning Fund (TLF) Update Michelle Shypula, Brian Englefield, Chandra Portelli
 - 6.3 Bring Your Own Device (BYOD) Update (to be distributed) Michelle Shypula, Brian Englefield, Chandra Portelli
 - 6.4 Information and Communication Technology Operational Plan Update Chart Norm Cicci, Brian Englefield
 7. **Trustee Inquiries** Dan Dignard
 8. **Move to In-Camera Session: n/a** Dan Dignard
 9. **Report on In-Camera Session: n/a** Dan Dignard
 10. **Next Meeting & Adjournment**
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Next Meeting: TBD



**Communications and Technology Advisory Committee
Tuesday, June 23, 2015 – 3:30 p.m.
Boardroom**

Present: Tracey Austin, Cliff Casey, Bill Chopp, Norm Cicci, Brian Englefield, Tom Grice, Carol Luciani, Bonnie McKinnon, Rick Petrella, Chris Roehrig, Michelle Shypula, Linda Luciani (Recording Secretary)

Regrets: Dan Dignard (Chair)

1. Opening Prayer

Rick Petrella opened the meeting with prayer.

2. Approval of the Agenda

Moved by: Carol Luciani

Seconded by: Cliff Casey

THAT the Communications and Technology Advisory Committee approves the agenda of June 23, 2015.

Carried

3. Approval of the Minutes

Moved by: Cliff Casey

Seconded by: Bill Chopp

THAT the Communications and Technology Advisory Committee approves the minutes of April 13, 2015.

Carried

4. Declaration of Conflict of Interest – Nil

5. Business Arising from the Minutes – Nil

6. Information Items

6.1 Revised Terms of Reference

Trustee Petrella reviewed the proposed changes to the Terms of Reference for the Communications and Technology Advisory Committee. Committee members were in agreement with the changes.

Moved by: Bill Chopp

Seconded by: Carol Luciani

THAT the Communications and Technology Advisory Committee approves the revised Terms of Reference.

Carried



6.2 Discussion & Presentation: Information Technology Operational Plan

Norm Cicci reviewed the various components of the three-year Information Technology (IT) Operational Plan, which included:

Wireless Learning Environments

- Bring Your Own Device (BYOD)
 - Phase #1 of BYOD will be in Assumption College School, Brantford; Holy Family, Paris; Our Lady of Providence, Brantford, St. Basil, Brantford; St. Patrick, Brantford; St. Patrick's, Caledonia and St. Stephen's, Cayuga.
 - Some concern was raised that schools in the Norfolk region did not show an interest in this initiative, despite the fact that all schools were given an opportunity to apply.
 - Committee members were concerned about the security of the Board's network, filters, infrastructure, programs, potential viruses, etc. with allowing students to bring their own device to school as well as the IT Department's plans to mitigate these threats.
 - Committee members asked that a meeting be scheduled to have a technical conversation about network architecture and security in general.
 - Some concern was raised about equity and the "have and have not" schools in our system. Chris Roehrig assured trustees that in Phases 2 and 3 of this initiative, organizers will ensure that classes and schools are not excluded.
 - All policies and procedures regarding this initiative have been vetted through the Board's lawyer.

Board Portal

- The Board Portal is a host for employee demographics, vacation and attendance, pay stubs, benefits, training and qualifications, mileage, lieu time, etc.
- Trustees were concerned about security of the portal, procedures to mitigate risk and response times should a breach occur.

Upgrading Learning Spaces

Providing Learning Opportunities beyond the Physical Classroom

- Office 365 was chosen over Google Docs as the path to the interactive directory is more straightforward. Since the Board is already using Office 365, they did not want to use two platforms.

Managing Student and Board Administrative Data

- Users no longer need multiple logins and information is no longer in silos so that it can be easily manipulated for reporting purposes.
- Some concern was raised as to where the data is stored (perhaps an off-site data storage / disaster recovery site), the life cycle of storage and the costs to replicate this data.



Technology to Support Innovation and Special Projects

- An approval process has been established so that devices can be supported by all parties, i.e., curriculum, IT, school, etc.). As there is usually a budget element to these projects, Administration is now aware of how the project will be funded and how it will be utilized in the future.
- Committee members wondered if a formal follow-up process should be established to evaluate the effectiveness of the initiative, the impact on learning, etc.
- Once again, trustees expressed some concern regarding equity and the “have and have not” schools in our system.

Evidence Informed Decision Making

- Approximately \$178,000 was spent to buy devices for BYOD, which were distributed to the schools.
- Committee members asked that the BYOD Ministry report be brought to the next meeting, which outlines the scope, etc. of the project.

Discussions will continue at the next meeting of the Committee with the Promoting Safe, Effective and Appropriate Use through Governance and Policy of the IT Operational Plan.

- 6.3 Discussion & Presentation: Technology Footprint** – to be discussed at the next Committee Meeting.
- 6.4 Discussion & Presentation: Technology and Learn Fund – Goals and Impact** – to be discussed at the next Committee Meeting.
- 6.5 Discussion: Communications Department Report, including Board Twitter Process** – to be discussed at the next Committee Meeting.
- 6.6 Discussion & Presentation: Cloud Technology** – to be discussed at the next Committee Meeting.
- 7. Trustee Inquiries** – Nil.
- 8. Move to In-Camera Session** – n/a
- 9. Report on the In-Camera Session** – n/a
- 10. Adjournment**
Moved by: Carol Luciani
Seconded by: Cliff Casey
THAT the Communications and Technology Advisory Committee adjourns the meeting of June 23, 2015.
Carried

Information and Communication Technology Operational Plan Update Chart

Developed by: Norm Cicci & Brian Englefield

Last Revision Date: February 24, 2016

Wireless Learning Environments			
Actions:	Details:	Status:	Update:
Complete the installation and configuration of wireless controllers in all schools	Meru Wireless controllers installed in all board locations.	Complete	
Create/provide segmented public wireless access to the Internet	BYOD staff network created and implemented. BYOD student network to be in place for fall of 2015	Complete	
Create pilot projects to test and inform the implementation	Pilot for student BYOD access begins in Fall of 2015	Complete	
Board Portal			
Actions:	Details:	Status:	Update:
Use feedback from staff to guide enhancements to the user interface and functionality	Improvements made to Student Achievement Team site.	On-Going	
Promote the Portal as a means to realize efficiencies in work processes	All corporate departments and schools now have individual SharePoint team sites that are being utilize for documentation and collaboration. Additional promotion of use of the portal will be on-going.	On-Going	
Promote the Portal as a professional learning resource	Participants of various learning initiatives shown how to make use of the site. Beginning to scale use.	On-Going	
Promote the Portal as a collaboration resource	Portal being promoted as collaboration tool through the use of OneDrive/O365 and the ability to work on documents simultaneously and in real time for both staff and students.	On-Going	
Explore how to provide access to similar resources for students (i.e. SkyDrive, cloud-based productivity suite, collaboration spaces)	Access to OneDrive and O365 application suite has been provided to students.	Complete	
Explore how the Portal can be used to enhance communication with our community partners (i.e. parents, community agencies)	We are currently exploring complimentary products that would help to re-inforce the functionality of SharePoint for external user groups (Parents).	On-Going	

Upgrading Learning Spaces

Actions:	Details:	Status:	Update:
Continue to implement and support the 21st Century project	All hardware and software for 21st century project currently installed and being supported.	Complete	
Continue to improve images, devices, and infrastructure to support learning activities	Amount of necessary images needed has been consolidated and significantly reduced	On-Going	
Continue to refine technology footprint in schools to support changing teaching and learning practices	First round of elementary footprint is complete. All schools now have standard compliment of computers that reflects the formula of 3 per primary classroom and an additional set of machines equal to largest class size. Mobile devices distributed to schools in carts of 7 at approximately 12:1 ratio.	On-Going	Entering second year of refresh cycle for elementary footprint. Exploring feasibility and value of moving to larger mobile footprint. Reviewing projector needs and refresh strategy.
Continue to engage with elementary and secondary staff to identify software, hardware, and infrastructure needs as well as solutions that will enable meeting key learning priorities	Brian and Norm visit each school scheduled to get equipment upgrades. We meet with the principal and key staff and receive feedback on the incoming equipment. Software image input process established and used to facilitate on-going development.	On-Going	Building staff capacity to use devices and software to meet key learning priorities through email, video, and weekly webinars.
Engage with staff and students to pilot and evaluate Netbook cart projects (e.g. wireless needs, durability, textbook/paper cost savings, impact on engagement, impact on student achievement)	School-funded Netbook projects in place. Devices from TLF-funded HP Stream project distributed. PD for current year completed. Monitoring and supporting of projects on-going.	Complete	Students and staff using Board-provided mobile devices to support learning.
Explore solutions that ensure classroom teaching and learning technology is fully accessible	Introduction of HP Streams reported to have significant impact on accessibility of technology for learning. Use of technology to change nature of learning opportunities advancing as a result of the Transforming Learning Project. Reinforcement of wireless and BYOD will help increase access to learning via technology.	Complete	Students and staff using Board-provided mobile devices to support learning.
Inventory existing projectors, identify projected life, explore solutions, plan for next steps	Elementary inventory of projectors complete. Secondary to be completed in 2015-2016 school year.	In Progress	
Inventory existing sound systems, identify projected life, explore solutions, plan for next steps	Elementary inventory in progress with 50% of schools complete. Secondary to be completed in 2015-2016 school year.	In Progress	
Refine processes to more effectively evaluate the impact of technology investments	Introduced processes using OneNote to enable feedback and sharing of impact of technology investments on student learning. These processes support the sharing of innovative ideas as well.	On-Going	
Inventory non---teaching staff technology, identify needs, and establish plan to enable a manageable refresh cycle both from a budgetary and human resource standpoint	To be completed by June 2016	In Progress	

Providing Learning Opportunities Beyond the Physical Classroom

Actions:	Details:	Status:	Update:
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Continue to promote effective teaching and learning practices in the LMS environment	Using email, shared OneNote Help Binder, and videos to support staff use. Investigating how the Video component of Office 365 could further enhance the supports provided to staff and students.	On-Going	Building staff capacity to use devices and software to meet key learning priorities through email, video, and weekly webinars.
Continue to develop eLearning model for Board	Staff feedback and learning from other Ontario Districts guiding refinements to eLearning approaches.	On-Going	
Integrate eLearning resources into literacy and numeracy workshops and instructional materials	Integrated into the ePortfolio learning workshops.	On-Going	Student achievement staff modeling the use of eLearning resources to support staff and student use of D2L, our current eLearning platform. Staff training to support use of ePortfolio to meet Ministry expectations has taken place and is on-going.
Develop a central access point within the eLearning system to enable users to seamlessly access other digital resources provided by the Board and the Ministry of Education (e.g. email, Ontario Education Resource Bank, Gizmos, etc.)	Development almost complete on student portal resource within D2L to enable quick access to all the electronic learning tools available. Plan to launch this for 2015-2016 school year.	Complete	Students able to connect to online tools provided by the Ministry and our Board through their class pages in our eLearning platform. Staff able to use integrations with SIS to efficiently create class OneNote resource.
Explore using the D2L platform to provide summer school courses	Summer school courses now offered using D2L.	Complete	
Explore integration of additional learning and communication resources	Successfully integrated D2L with both Active Directory and PowerSchool. Continue to explore additional ways of integrating more effectively with O365	On-Going	
Explore expansion of online course opportunities for students	On-going through Catholic Consortium.	On-Going	

Managing Students and Board Administrative Data			
Actions:	Details:	Status:	Update:
Continue to develop Data Services staff expertise in the new SIS software	Data Services staff continue to develop their skills in PowerSchool.	On-Going	
Continue building data connections between systems	Connectors have been established between PowerSchool and the Board Portal. Currently exploring the possibility of having PowerSchool fully AD enabled.	On-Going	
Continue training office and teaching staff	Office and teaching staff training on-going. Key secondary personnel are trained yearly on scheduling in PowerSchool.	On-Going	
Develop in-house report building expertise	Data services staff currently being trained in application development in a SharePoint environment so current PHP enabled reports can be migrated.	On-Going	

Technology to Support Innovation and Special Projects			
Actions:	Update:	Status:	Update:
Continue to monitor and support innovative projects	As of Feb. 24th, 25 project requests submitted using the electronic tool. 23 approved. 2 rejected. 0 pending approval. Improvements in inventory control, standardization, and technical support realized. Innovation leading to system learning.	On-Going	This process has increased our return on investment by enabling IT Services and Program Staff to review device requests before money is invested in devices we are not in a position to support. Program staff are able to connect with innovators to understand their needs and support them to meet their goals using devices and software we do support. This has also benefitted students by promoting greater consistency.
Use feedback from staff to refine the application process	Using feedback from staff to refine and streamline the New Technology Request Form. New form will have more dynamic fields that can provide additional detail based on specific criteria.	On-Going	
Enhance the Portal to simplify the ordering of technology items	Working in conjunction with Purchasing department to streamline and automate many of the processes that go into purchasing technology equipment. Ease of quotation and standardizing various equipment purchases are outlined as priorities.	On-Going	Working with approved vendors to provide "real-time" shopping experience, simplifying end-user experience while promoting purchasing best practices.

Evidence Informed Decision Making

Actions:	Details:	Status:	Update:
Create unique graphical and data--rich dashboards for all staff	Reports and input tools developed to support ELL system teachers. Dashboard and new reports for Student Achievement Team developed.	On-Going	New assessment and analysis tools for ELL system staff and teachers being developed to support the assessment for learning processes promoted through our Board Strategic Plan.
Link reports to resources that support achievement of key priorities	Student Achievement dashboard used to realize significant improvements in process, supporting achievement of key priorities. Examples include PD Calendar, and staff reports.	On-Going	Data Warehouse reports used to start conversations in school improvement planning activities facilitated by system support staff. Staff providing training on how to access reports, understand what is presented, and how to use that information to support their students. Feedback from end-users facilitates refinements to existing reports and development of new ones.
Provide training opportunities and electronic resources to increase effective use	OneNote Help Binder and IT documentation site are current being developed. O365 Video Portal and Yammer are also being explored to assist with training.	On-Going	Building staff capacity to use devices and software to meet key learning priorities through email, video, and weekly webinars.
Continue to develop inventory and asset management tools for IT Services	Inventory and asset management process was constructed internally and implemented. All technology related equipment is received by the IT department, inventoried and then distributed to the appropriate school.	Complete	
Train key staff in report development tools within PowerSchool (Board SIS)	Data Services staff continue to develop their skills in PowerSchool including the development side and report construction.	On-Going	

Promoting Safe, Effective and Appropriate Use Through Governance and Policy

Actions:	Update:	Status:	Update:
Review and refine Internet access policies to enable key learning priorities	Internet access policies being reviewed to accommodate the BYOD initiative. Changes include student access to resources such as streaming media and twitter.	On-Going	All procedures and policies in the 600 series are being reviewed to promote clarity and consistency.
Engage computer site administrators to develop best practices for social media and related resources	The Ministry of Education through OSAPAC and several other educational sites have done this work for us. Model of effective use and related resources being developed through the Transforming Learning and BYOD initiatives.	Complete	Ministry of Education through OSAPAC has provided Digital Citizenship resources. Catholic Boards have created and shared resources to connect Digital Citizenship to our Catholic Graduate Expectations.
Train staff and students on the implementation of policies for social media	Is happening within the Transforming Learning Project and will be imbedded in the BYOD initiative commencing fall of 2015.	On-Going	
Develop procedures with respect to bring your own device (BYOD)	Committee chaired by Michelle Shypula developed draft administrative procedure for BYOD. Procedures to be completed, approved, and communicated by Fall 2015.	Complete	AP 600.34 developed and distributed to Phase 1 BYOD schools. Key staff from those schools were integral to the development of the document.
Development of standards and policies to enable secure access to Internet-based applications and information	Standards established for strong passwords and password changes. Staff and student training on importance of strong passwords and using caution when using email and accessing websites on-going.	Complete	Protocols in place to have staff change passwords at regular intervals and to ensure their passwords follow best-practice guidelines. Video created to promote BYOD to students included information on passwords.
Communication/enforcement of administrative procedure for new technology	Established and enforced.	Complete	
Communication and enforcement of policies to promote security of information and network	On-going as new threats emerge.	On-Going	Information distributed by program staff to educate staff about emerging threats they may receive through email.

Building System Capacity

Actions:	Details:	Status:	Update:
Continued refinement of the Portal and Learning Management System to align with the Board’s key learning priorities and needs identified through feedback	Portal and D2L being used to support and enhance how staff and students meet our key learning priorities. Significant advances being made through the work of the Transforming Learning Project. Portal and D2L both being examined for possible front-end updates or common branding.	On-Going	
Train program staff on the use of key technology resources to achieve the Board’s key priorities	Being achieved through the Transforming Learning Project. We will continue to refine and scale this work next year.	On-Going	Program staff meet regularly to explore how the devices and software provided by the Board can be used to promote efficiency and to achieve strategic goals. They use those strategies with classroom educators and report back challenges to help drive the improvement cycle.
Integrate the use of technology to enhance instructional strategies and student engagement in literacy and numeracy professional development activities	Being achieved through the Transforming Learning Project. We will continue to refine and scale this work next year. Ran math software CIL project to better understand what value can be achieved through various software solutions.	On-Going	The use of technology is integrated into professional learning activities when appropriate.
Promote collaboration and knowledge sharing	Using O365 as primary collaboration mechanism. Looking to further expand with the use of Yammer and Office Videos.	On-Going	Program staff promote collaboration and are a key vehicle for knowledge sharing through their PLC work. They make use of technology to support this when appropriate. Because technology is used to facilitate the work, the learning about technology is incidental rather than the focus.

Enterprise Applications and Corporate Communications

Actions:	Update:	Status:	Update:
Continue to refine the Board's Portal to support and enhance communication, collaboration, and knowledge sharing	Currently investigating templates that can be used with O365 to improve the presentation of the data on the portal. Looking at migrating features of Gateway over to SharePoint.	On-Going	The video app in the Office 365 is becoming a popular way to provide professional learning and knowledge sharing. OneNote and OneDrive are key tools being used to enable collaboration.
Continue to refine the student learning management system using feedback from students and staff	Currently investigating templates that can be developed/purchased to improve end-user experience of D2L	On-Going	Templates created. New functionality added to provide mechanisms to support meeting Board strategic goals.
Complete migration of staff and student devices from Windows XP to Windows 7	All equipment that is capable of moving to Windows 7 have been migrated. Remaining equipment will be phased out.	Complete	Migration to Windows 10 in progress for staff and student devices.
Upgrade all hardware and software for board databases including an update to latest revision of Microsoft SQL Server	New hardware for SQL databased has been purchased and installed. 90% of current databases have been successfully migrated. Remaining 10% will be done in summer of 2015.	Complete	
Implement Microsoft Systems Center suite over the next three years in a phased implementation beginning with Configuration Manager	SSCM to be test this summer to deploy images to secondary schools. Aiming for January 2016 for inventory capability and March 2016 for elementary imaging.	In Progress	SCCM installation and configuration has started. Full usage in production environment anticipated for July 2016
Explore a document management solution	Waiting on OEMC decision on province wide RFP for document management solutions before we proceed.	In Progress	RFI issued to gather information regarding document management.
Explore enhanced web development tools and resources to refine the corporate and school websites to meet the needs expressed by the community	Board and school websites have been updated to reflect new template. Additional work being done on content and populating areas. September 2015 aim for full utilization.	Complete	

Disaster-Recovery Strategy

Actions:	Details:	Status:	Update:
Investigate the use of an off-site redundant data centre	Secondary data center is currently being implemented at the CEC. Completion expected by January 2016	Complete	
Investigate the use of private cloud based backups to supplement current backup practices	Initial research done on viability of cloud backups using Microsoft Azure and HP. Will continue to analyze the viability for our board and the maturation of the product.	On-Going	Exploring possibility of Azure AD replication to provide redundancy for our Active Directory.
Use of Virtual Machines for key systems to reduce the time and complexity of server restoration in case of system failures	Migration of physical servers over to virtual is complete. Veeam has been purchased to allow for easier backup of virtual machines.	Complete	
Review of current back-up strategies to ensure alignment with disaster-recovery plan	Disaster Recovery committee created and started initial meetings.	On-Going	Disaster recover committee meeting quarterly. Looking at expanding participation to include non-IT staff.

Infrastructure Reliability

Actions:	Details:	Status:	Update:
Annually review demand on network resources and increase bandwidth as needed to enable access to rich Internet content	Sacred Heart was upgraded in 2015. St. Bernard of Clairvaux is currently being examined.	On-Going	Process of RFP for WAN services to begin in March 2016.
Use technology to allocate resources most effectively and ensure uptime and security of critical systems	Use of Microsoft SCCM to streamline imaging and inventory process to begin in Summer of 2015 and continue through the year.	On-Going	SCCM installation and configuration has started. Full usage in production environment anticipated for July 2016

Continually upgrade network infrastructure to ensure reliability	Elementary Fiber sites all upgraded to 50Mbps. Elementary non-fiber sites upgraded as per available services. Speeds range from 15Mbps to 100Mbps	On-Going	
Conduct security audits and external penetration tests once every two years	Internal and External audits being completed yearly by outside security experts	On-Going	2015 Audits completed in May of 2015. 2016 audits to be schedule for May/June of 2016
Upgrade to fiber links wherever possible	All locations where fiber is available are complete. Continuously exploring options for all sites to improve connectivity	Complete	No additional sites have become fiber ready in 2015.
Add second Internet lines to each of the Secondary schools to support additional traffic from BYOD initiative.	Second Internet line dedicated to student BYOD project to be in place for Fall of 2015	Complete	
Explore greater access to streaming media by staff and students to meet learning goals	Pilot of streaming media access for students to begin in Fall of 2015	Complete	

Improving Technical Support Mechanisms and Teaming

Actions:	Details:	Status:	Update:
Continued investment and development of the IT Help Desk	Helpdesk continues to develop. They now receive all technology equipment in the board that has been purchased. Inventory and labeling is done before gear is sent to schools.	Complete	
Review infrastructure management needs and identify specialized technical support roles	Purchased two tools for to assist with infrastructure management and provided training to network administrator	Complete	
Use proximity of work spaces, regular meetings, and electronic collaboration tools to promote teaming between IT and program staff	Office 365, Skype, and Adobe Connect currently being utilized by BHNCD SB staff.	On-Going	Regular ICT Team meetings occur. Project work and related resources stored in Office 365 tools and shared to improve collaboration and access to most current information.
Review of IT department staff organization and responsibilities.	Staff re-organized in 2014 to reflect additional demands on back-closet support.	Complete	

Complete	Deferred
In Progress	Not Started
On-Going	