

Holy Family Catholic Regional Division #37

Technology Plan and Procedures

*Vision of the
School Division
(3 Yr. Ed Plan)*

Holy Family C.R.D. No. 37 will strive to provide a unique and inviting Catholic learning environment that links the home, the parish and the community. Resources will be distributed equally and fairly so all students have an opportunity to learn in a child centered, flexible, safe and caring learning environment.

A strong, well informed teaching staff, with an eye to the future, will provide dynamic and innovative programs in well-planned school facilities. Students will be provided with the opportunity to live the values they are taught. Minorities will be successful, and students with identified needs and disabilities will be accommodated. Graduates will be prepared so they are motivated life-long learners grounded in the Catholic Faith.

*Mission of the
school division
(3 Yr. Ed Plan)*

To improve student learning in a Catholic community guided by Christ, our teacher.

*Vision for
Technology in
Alberta*

Information and communication technology supports Alberta's globally recognized learning community by enhancing learning delivery, knowledge and skill acquisition, learning system management, and innovation.

*Learning and Technology Policy Framework
Alberta Education*

Principles

Learner-centered technology is used to enhance learning opportunities and to support successful learning outcomes for Albertans.

*Learning and
Technology
Policy
Framework*

Accessible technology is used to expand learning opportunities for all Albertans, including non-traditional learners.

Collaborative technology is used to build relationships and foster partnerships within the learning community and with other stakeholders.

*Alberta
Education*

Accountable technology decisions are based on learning system/government priorities and the enhancement of learning outcomes, and are evaluated using established performance criteria.

Responsive technology is used to increase the flexibility of educators to

address individual needs and preferences.

Innovative technology effectiveness is advanced through the identification, evaluation, and, where appropriate, adoption of emerging technologies and promising practices.

Equitable technology infrastructure and applications are consistent and readily available, within reason, across the learning system.

Goals

*Learning and
Technology
Policy
Framework*

*Alberta
Education*

1. Access to quality learning opportunities is expanded

The use of ICT reduces geographical and time constraints, enabling Albertans to access new learning opportunities across the province and around the world. Technology is beneficial in increasing learning options for rural Albertans and reducing barriers to learning for people with disabilities. Stakeholders will have the tools to identify quality online learning opportunities.

2. Learning is enriched

The availability of the Internet and sophisticated multimedia tools is changing approaches to learning delivery – in the classroom, in distance learning, and in other learning contexts. ICT provides new ways to present information and illustrate concepts, and provides educators and learners with access to a broad array of learning resources. It offers learners new approaches to demonstrate their learning. It also facilitates the development of diverse, global learning communities and promotes information sharing and dialogue among learners and educators.

3. Learning outcomes are improved

ICT will be used to improve learner participation, achievement, and satisfaction with the learning process. The ability to adapt learning content, delivery, pace, and structure to individual needs and preferences may be particularly beneficial for non-traditional learners and learners with special needs. ICT will support parents and employers in their efforts to assist learners to meet learning and career objectives. Educator expertise in pedagogy and facilitating learner success will be recognized.

4. Information and communication technology skills of Albertans are enhanced

The ICT skills of Albertans will be improved to ensure their competitiveness in a knowledge economy, and to enable them to use technology to address other interests and needs.

5. The efficiency of learning system management is improved

ICT supports the policy, planning and accountability processes essential to

effective learning system management. Learning information systems and quality data will inform Ministry and learning provider decisions. Administrative burden will be reduced.

6. Research and knowledge creation are advanced

Information and communication technology enhances theoretical and applied research capability and facilitates academic inquiry. The use of technology in the learning system will be informed by new technologies, tools, and practices developed by the education and research communities and the private sector. Mechanisms to disseminate learning and technology research findings will be enhanced.

7. Markets for learning programs, resources and services are expanded

As part of the International Education Strategy, Alberta learning providers will obtain access to worldwide markets for their programs and services. Alberta will be recognized as an international leader in online learning. In addition, innovative technologies, applications, and resources will enhance Alberta's presence in international markets.

The role of the School Division

It is the responsibility of the school division to support technology to ensure that the division meets the technology goals and principles of Alberta Education. This includes all systems related to education including management, student information, and financial systems. Further, the division has a duty to align the technological goals of the province with its vision and mission.

The role of the IT Department

The IT department is responsible for ensuring that the hardware and software components and systems within the division are operating efficiently. The IT department also makes technical recommendations regarding both hardware and software. It is important for the IT department to communicate with schools and stakeholders so everyone is aware of progress, change, and status.

The role of schools

Schools have the responsibility of ensuring that the instructional and functional components of technology are being fulfilled. Teachers are responsible for ensuring that students meet the ICT outcomes. Principals are responsible for ensuring that teachers meet the teaching quality standard related to technology.

Schools and teachers are encouraged and have the opportunity to present innovative projects by submitting proposals to the technology department.

Schools will consult with the IT Department about purchasing technology that is connected to the network. The purchase of the equipment will be done by the IT department.

*Purpose of the
Division
Technology
Plan*

Effective technology relies upon a solid infrastructure, one that is consistently stable. If the infrastructure is unstable, both at the school level and with the network, teachers and students will be unable to effectively meet their learning goals. The division technology plan addresses issues and standards necessary to develop and maintain a solid infrastructure. The application of technology will be the focus of school plans. Both division and school plans will reflect provincial policy and initiatives. The division plan will be reviewed on an annual basis.

Funding

The division will maintain a centralized technology budget and technology capital reserve to fund the purchase of technology required to meet division outcomes.

Schools can purchase additional workstations and equipment above the division ratio but must do so out of school-based funds. Additional purchases must be approved and purchased through the technology department.

Equity

Access to technology should be provided on an equitable basis within each school board and throughout the province. School boards need to achieve equitable access to technology that will be used to improve student learning. Boards are required to have a policy to address equity of access.

Alberta Education

A long term funding program is in place to ensure that all students in the division have access to technology on a baseline ratio established by the division.

The baseline student/computer ratio has been set at 4:1. Students in Kindergarten will count as a ½. Schools can enhance the ratio out of school budgets to a 3:1 ratio. The baseline teacher/computer ratio is set at one computer per classroom. Offices for student services and special programming will have computers in them. Schools can enhance and purchase additional teacher computers from their school based budgets.

Staff Workroom/Teacher Prep: 1:15 FTE

Libraries will have computers outside the 4:1 ratio. Library ratio 1:75

Small schools will have a minimum of 20 student computers.

The life cycle has been set at 5 years for desktops and 4 years for laptops.

The long term funding program will include the various hardware and software components as established by the division.

Schools ensure students within their school have equity of instruction through their school-based plans. These plans address the manner in which ICT outcomes will be taught, assessed, and reported. School plans also address teacher competency.

Teacher Owned Devices

Schools and the division will support teachers with tech support should they wish to purchase technology with their own money for use in the classroom. Teacher purchased technology brought into the classroom is intended for teacher use and not student use. Use, wear and tear, damage, and hardware costs are at their own expense and will not be the responsibility of the school or division.

Staff Development and Skills

Teachers apply a variety of technologies to meet students' learning needs.

Teachers use teaching/learning resources such as the chalkboard, texts, computers and other auditory, print and visual media, and maintain an awareness of emerging technological resources. They keep abreast of advances in teaching/learning technologies and how they can be incorporated into instruction and learning. As new technologies prove useful and become available in schools, teachers develop their own and their students' proficiencies in using the technologies purposefully, which may include content presentation, delivery and research applications, as well as word processing, information management and record keeping.

Teachers use electronic networks and other telecommunication media to enhance their own knowledge and abilities, and to communicate more effectively with others.

Teaching Quality Standard Government of Alberta

The teacher:

- a) uses a variety of teaching/learning resources and maintains an awareness of emerging technological resources
- b) integrates available media and technology to enhance opportunities for students' learning and effective communication
- c) develops his/her own and students' proficiencies in using the technologies purposefully

HFCRD #37 Teacher Evaluation Procedure 421

*3 Phases
Of
Educational
Technology*

There are 3 phases to the incorporation of technology in teaching and learning. The phases are not hierarchical and no one phase is more important than another. Although phase 3 is more advanced, good technology integration includes elements of all three. A single lesson could have elements of all three phases. They are:

1. Using technology for presentation. This involves using a projector to present video, PowerPoint and can possibly involve an interactive whiteboard.
2. Students use technology to access content knowledge. This typically involves doing web searches, web quests and accessing other online sources.
3. Teachers develop lessons that allow students to create, communicate, and collaborate using technology. Students produce information using various technologies like video or podcasts, publish the product to the web or a larger audience, allowing for collaboration, and then review each other's work.

The school division will have a tool that will allow teachers to self-evaluate their competency level in all three phases as well as other technological skills. Administrators will be able to use these surveys to plan professional development for teachers.

Teachers will be encouraged to include a technology goal as a component of their growth plans.

Teacher planning reflects the Learning and Technology Policy Framework goal to "integrate ICT into a wide variety of learning experiences to ensure that all learners have equitable opportunities to develop ICT skills."

ICT skills can and should be embedded into content instruction and integrated appropriately into content-area outcomes across the curriculum/program. Resource selection and development should reflect the infusion of ICT into course content. Assessment of learners' progress in meeting ICT outcomes must be integrated into and aligned with other assessment of student progress.

*Components of
Teacher Skills
addressed in
School Plans*

Teacher technology skills are twofold: operational skills needed to make the hardware do what you want it to and integration skills which are needed to support learning outcomes. School technology plans need to address ways to increase the competency of teachers in both areas.

*Division
Standards*

Adherence to standards is of utmost importance and is a key underpinning to the success of the network and its infrastructure. Hardware, software configuration, servers, network components and other services will be

standardized to the greatest degree possible. The establishment of the stated standards is agreed upon through consultation with key stakeholders. The technology department maintains the standards, general and specific, for computers and the equipment that connects to them, as well as for software. Documentation on the part of the technology department is critical.

Operating System

The support provided by the technology department is maximized when the school division operates with a single operating system. Therefore, Holy Family CRD will have one operating system. As technology advances new operating systems will be implemented and brought on stream. The technology department will be responsible for this process.

Hardware Standards

Holy Family CRD will make every effort to standardize all hardware components.

Manufacturers will be minimized and sole-source purchasing will be maximized.

Deviation from hardware standards will only occur when an instructional need is identified. Implications for maintenance and support will be scrutinized before a final decision is made.

Software Standards

Software in the division is standardized and maintained through release management principles. The division process allows for some school based flexibility.

Core software – required for all computers and includes the office suite, internet browser, mail client, file server client, acrobat reader, and anti-virus software.

When core software is changed under Release Management, it will be done to all users at the same time, thus ensuring standardization and enhanced collaboration possibilities.

Extended software – tested software that is supported by the technology department. Not all schools or sites need to install the extended software and the decision is site-based.

To add software to the extended package the following will happen:

1. A technician will install the software on a local instructional workstation. The school or teacher will then test the software for function.
2. If the software is deemed to be functionally effective, the site will nominate the software for technical testing with a brief description of the product, how it supports student learning, and its curricular fit.
3. The technology department will test the software for compatibility.

4. Principals will be made aware of the software and that it is on the extended list. Unless there is objection at this level, the software will be available for deployment to any school's configuration.

Administration workstations will be more restrictive. Only when a staff member or group demonstrates a legitimate need for a piece of software will it be considered for addition to the extended administration software list.

HFCRD Network

The division network is a shared resource and all schools in the division have access to it. The network is managed by the technology department and hardware in the schools and at central office will be strategically planned, budgeted, and deployed.

Staff of Holy Family CRD will have access to the network both at school and at home. When access is remote, safeguards will be used to ensure network security. The technology department will make all efforts to ensure ease and simplicity of access without sacrificing security.

All infrastructure is installed and maintained by the technology department. Schools will not modify network infrastructure or independently contract network modifications. If work is contracted it will be supervised by the technology department.

When major electrical work is required the principal, maintenance supervisor and a technician will meet to strategically plan and carry out the project.

All schools will have wireless networks as well as wired networks.

Hardware and software should be effectively maintained and upgraded on a planned, ongoing basis in order to meet changing curriculum and administrative needs. Hardware and software integration should be planned and managed on a jurisdiction wide basis, and within the context of provincial technology directions, standards, and guidelines.

Alberta Education

Data Storage and Restoration

Each staff member will have a 10GB soft cap for data storage. Users will be notified when they have reached or exceeded their allotment.

Data can be restored from the previous 2 days. This can be accomplished within 30 minutes. Data from the last 3 weekly backup tapes can be restored. This process will take a minimum of 26 hours.

Instructional Workstations

HFCRD will deploy new workstations in an equitable fashion. Although technology needs vary from grade to grade, schools with lower grades will not be disadvantaged by redeploying machines from higher grades/schools to lower grades/schools.

The technology department will attempt to form vendor alliances with the goal to take advantage of such things as fixed percentage mark-up, factory training, access to factory technicians, and other factors advantageous to the division.

Administrative Workstations

A high degree of standardization with hardware and software is essential for the protection of privacy and security of confidential information.

Workstations are configured the same throughout the division. Deviation from the standard is only done in unique circumstances.

Every attempt will be made to have workstations of the same age and capability throughout the division.

Administrative services will, wherever possible, be server based.

Evergreen Plan

HFCRD will maintain a Technology Capital Reserve Fund which will ensure that the division can meet the baseline student to computer ratio as well as the life cycle target. Schools will contribute on a per capita formula to ensure equity and fairness.

Supporting student outcomes will be the focus on all decisions regarding hardware. Collaboration will be maximized due to consistent and limited configurations.

The technology department will coordinate and purchase all hardware for the jurisdiction. Sole-source purchasing will be the ideal. These efforts will reduce duplication, saving time, and will aide in standardization.

All hardware will be asset tagged and inventoried. Computers will be bought in batches to maximize efficiencies such as leverage, standardization, and purchasing power.

Workstations will be supported, for hardware and configuration, for the entirety of the designated life-cycle.

When computers are to be removed from schools, district procedure AP 518 will be adhered to.

Schools Requesting Stand-Alone Computers

At year end, schools can make a request to have stand-alone computers, not connected to the network, to operate specific software or applications. Requests will be reviewed by the tech department. Approval will be on a case by case basis.

Donated Computers

Donated computers are discouraged unless unusual circumstances present themselves. Supporting donated computers is the responsibility of the school. Donated computers will not be networked.

Internet

The internet is an invaluable tool to both the backbone of the network as well as for student learning. Every effort will be made to optimize internet services while still blocking inappropriate material.

Firewall and virus protection strategies will be used and maintained.

The district will use only one internet browser. Changes to the browser will follow release management protocols.

In cases of indecision or controversy, the technology department will not block access to websites or applications unless the principals have advised it to do so. Recommendations by principals to block sites should be forwarded to the Assistant Superintendent of Technology and, if necessary, will be discussed at the monthly Principal's Meeting.

Email

Email is a communication service provided by the division to its users. Communication via division email is to be business related. Users should refrain from and make alternate arrangements for the receipt of personal email.

To keep the mail server running efficiently users must understand that size limits will be placed on their mailboxes. Also, the division may see fit to clean mailboxes periodically. This will usually be done in the summer and notice will be given. All email sent to and from the division is archived on our Arcmail server. Each user currently has 2GB e-mail storage. Deleted items will be removed after one day. Sent items will be removed after 30 days.

Acceptable Use

Acceptable use agreements are put in policy and will be enforced to ensure the protection of privacy, student safety, and the conservation of resources. The policy strives to secure the network, limit access to inappropriate materials, reduce vandalism, curb criminal activities, and maintain an environment of safety conducive to student learning.

All users of the Holy Family CRD #37 network will have agreed to the terms and conditions put forth in the *Technology Acceptable Use Contract* (AP 140)

Schools will review procedure AP 140 with staff and students, at minimum, on an annual basis. Users need to understand that using the internet and email, as well as any other HFCRD network functions, requires strict adherence to the acceptable use agreement.

Training

Training is essential in ensuring the technology department staff is able to provide appropriate levels of support to users.

No one member of the technology department staff should be the only member with the skill or knowledge required for any of the key operational systems.

The technology department will work to ensure its technicians have appropriate vendor and industry certifications.

Annual training plans will take into consideration the needs of its technicians as outlined in their annual growth plan. Budgets will be a factor in training.

*Service
provided by the
Technology
Department*

The technology department strives to support student learning as outlined in the vision and mission of Holy Family Catholic R.C.D #37

The range of support services will be minimized through standardization.

All schools have equitable access and support from the technology department.

An electronic ticketing system will be in place to submit work orders and to track work needs and completion.

Work will be completed in a timely manner with key operational systems having priority. Other service requests will be completed with the guideline of first-come, first-served.

Service disruptions that directly and immediately impact students will be higher priority.

The technology department will monitor the volume of work orders to identify systemic issues and will strategize and put measures in place to address these issues.

The technology department will be involved in provincial initiatives where possible to ensure the division is current with standards and direction.

*Software
Licensing*

When software is purchased for large scale use and is district wide, efforts will be made to investigate the advantages to division licensing. The technology site will negotiate such licenses.

Division licensing will reduce cost in both purchasing and in maintenance.

Whether software is licensed on a division or school level, copyright legislation will be strictly adhered to.

Software that is licensed at the division level (core and extended) will be tracked and maintained by the division. If software is no longer cost-effective the technology department, in consultation with principals, will discontinue the license.

What is covered by the pooled technology reserve

Technician salaries and expenses.

Instructional workstations and deployment necessary to meet the district ratio.

Administrative workstations and deployment at all school sites.

All Servers in the division

Wireless Access Points

Core Software, for both instructional and administrative workstations, purchasing, deployment and licensing

Smart boards

Projectors

Routers

Switches

What schools need to fund

Instructional workstations above the district ratio.

Purchasing and deployment of software beyond the district ratio.

Purchasing and deployment of software that is extended and localized.

Replacement parts as a result of misuse, abuse or vandalism.

Printers and Cartridges

Projector Bulbs

Peripherals – document cameras, video cameras, and digital cameras.

Security

Every effort will be made to maintain a secure network with minimal restriction or hampering of student learning.

Workstations, both instructional and administrative, will have desktops that are locked and that will restrict users from downloading software.

When laptops are being transported they should never be left unattended, even in a locked vehicle.