



## **Technology Plan**

### **Executive Summary**

The primary goal of the Technology Department is to enhance learning through the use of current, practical and relevant technology that meets educational needs as defined by the curriculum. This includes all core subject areas where standardized testing is done, Career and Technology Studies and Information and Communications Technology requirements as directed by Alberta Education. Student achievement is the highest priority of the Technology Department. Ideally, the benefits of technology will be illustrated through improved results in standardized testing such as diploma exams and provincial achievement tests.

One of the keys to achieving the primary goal is to continually improve student and teacher access to the appropriate technology resources. For example, computers should be available for use in both the traditional laboratory environment as well as all classrooms. Videoconferencing systems, Smartboards, LCD projectors, and other audio-visual tools should also be readily available and used to enhance the teaching and learning process. Overall, improving both student and teacher access to technology will help to achieve all curriculum requirements as recommended by Alberta Education.

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## Technology Priorities

The list below represents the Technology Department's recommended priorities for the next 3 years.

1. Expand the number of videoconferencing systems throughout the Division. Videoconferencing technologies can provide greater educational opportunities to students in smaller remote schools. All school sites should have at least one videoconferencing system. Larger schools should have at least two systems. The systems may be in the form of classroom suites and/or smaller office desktop units. Videoconferencing will be used to:
  - a. Enhance teaching and learning by providing greater opportunities for students, e.g. Virtual fieldtrips.
  - b. Increase access to courses for students in smaller rural schools.
  - c. Enable administrative meetings between schools and head office.
  - d. Enable meetings with other organizations e.g. Alberta Education
  - e. Provide professional development opportunities for all employees.
  - f. Connect classrooms using a multipoint connection unit (MCU) that is capable of connecting up to 12 locations simultaneously.
  - g. Implement a videoconferencing recording system (IPVCR) that benefits all students and staff.
  
2. Implement the Microsoft SharePoint Services system for all employees. SharePoint has become a powerful collaboration tool that can be very useful in an education environment. The plan is to start by implementing an internal SharePoint system that is available to all Division employees. Eventually, it is expected that this will evolve to an externally available SharePoint system. Once this has been achieved, the Division will consider implementing a Division wide Learning Management System (LMS) available to students and teachers in all traditional schools. For example, there are several LMSs that run on MS SharePoint 2007.
  
3. Significantly improve wireless network capability throughout the Division. Recent new technologies are providing for significantly increased speed and reliability. This would be very beneficial to both students and teachers where large numbers of notebook computers are used. Ideally, the wireless network should support current needs and future demands. The division currently has complete wireless network coverage in all schools and buildings. However, with the growth in notebook computer use by both students and teachers, the need for a faster and more reliable system has become a priority. The current system, while cheap to purchase and install, has high maintenance costs and also does not provide the capacity required.

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4. Implement a centralized web enabled Student Information System (SIS) that supports students, parents, teachers, head office and also Alberta Education's provincial reporting requirements. The new system must also be in alignment with Alberta Education's PASI committee recommendations. PASI is the "provincial approach to student information". Ideally, any new system would contain such things as student marks, attendance, discipline, fees, and much more. It could also be a great collaboration tool for students, parents, teachers, and administrators and be securely available 24x7x365 using the Internet.
  5. The Technology Department will present annual budget recommendations for new initiatives plus suggested upgrades and/or replacements. Since technology is constantly evolving, careful planning and budgeting must be done. For example, new software generally requires new (or newer) computers for it to run reliably. Thus, regular replacement (evergreening) of computers is needed. Systems older than 5 years should be considered for replacement. Servers should be replaced more frequently if they are to remain reliable. Software and application license agreements should also be reviewed on an annual basis. Annual licenses need to be reviewed for accuracy plus new versions often become available for use. The Division's business systems in particular, TSC – financial, payroll, HR, should be considered for upgrade or possibly replacement.
  6. All teaching staff should receive notebook computers. Notebooks are very powerful teaching and learning tools and offer significant benefits over desktop computers. The cost to purchase has dropped considerably along with the total cost of ownership. Notebooks offer much greater mobility and significant overall cost benefits.
  7. Increase the availability of notebook computers to students. Research shows that notebook computers promote a deeper and more engaged form of learning. Their portable design also offers significant benefits since students can use them in any location at any school site provided they have reliable and secure wireless network access.
  8. Expand the number of Smartboards and LCD projectors in schools. When used properly, these audio visual tools can assist greatly in meeting curriculum objectives. Once teachers have their own notebook computers, they are able to better prepare for the use of these educational tools. Once students have improved access to notebooks, they too can utilize Smartboard technology for learning purposes. Improved access to Smartboards and notebook computers will enhance teaching and learning for both students and teachers.
  9. All schools should have reliable telecommunication and public address (PA) systems and all classrooms should have telephones capable of hands-free operation. Teachers and school administrators should also have voicemail

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- accounts. This philosophy supports good communication within the school, between teachers, parents, and administrators and also provides an improved level of safety and security.
10. To upgrade and expand the MS Exchange system for all school based administrators and office personnel. The goal will be to upgrade from Exchange 2003 to 2007. This should improve communication, scheduling and overall collaboration between schools and Central Office and also offer improved connectivity with SharePoint Services.
  11. Professional development and training in the use of technology will be supported through a combination of:
    - a. On-site face to face meetings.
    - b. Scheduled professional development days.
    - c. Scheduled video-conferencing sessions.
    - d. Online courses.
    - e. Training CDs and DVDs.
    - f. Through the Centre for Learning @ Home.
    - g. Where possible, school technology coordinators.
  12. Where appropriate, the Technology Department in consultation with schools and other stakeholders will coordinate the application for technology grants that are regularly offered by Alberta Education. For example, it is the intent to apply for funds that further enhance videoconferencing, CTS, and other innovative technologies that focus on student achievement.
  13. Increasingly, both hardware and software are being utilized to enhance learning for students with learning disabilities. Using the SETT Framework to identify appropriate assistive technologies has led to both the use of specialized “student specific” tools, such as Kurzweil and Dragon Naturally Speaking, and testing/piloting of other more generalized applications to assist students experiencing difficulty in a particular area, such as reading or writing. Testing will identify a variety of applications that can form an ATL toolkit for use across the Division. The Technology Department will continue to work with the Special Education Department to provide enhanced learning opportunities for special needs students through the use of assistive technologies.
  14. Through involvement in the planning and design process for new school buildings, the Technology Department strives to ensure that the technology infrastructure in new schools will be comprehensive, reliable and scalable. Of particular importance is a robust, manageable and secure wireless network. VOIP capability and the increasing use of videoconferencing are also considerations at the planning and design stage.
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## **Summary**

The goal of technology should be to successfully achieve organizational priorities that are intended to satisfy the needs of students. In the case of Christ the Redeemer Catholic Schools, the goals are educational and clearly defined by the curriculum as defined by Alberta Education.

Christ the Redeemer Catholic Schools has established a tradition of academic excellence. The Technology Department will endeavour to continue that same tradition of excellence.