

Instructional and Administrative Technology Plan

Diocese of Oakland, Department of Catholic Schools
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"American Catholic Schools for the 21st Century open minds and hearts and doors to an increasingly diverse world, and prepare students' minds and hearts and hands to live wisely and generously in a technological, complex and interdependent world."

National Catholic Educational Association, 1994

Introduction

Experts generally agree that the quantity of information in the world is currently doubling every two to three years and that the skills students will need in the next century to be productive, fulfilled adults are vastly different from what our parents and grandparents needed in this century. In addition to basic skills in reading and mathematics, our students must become self-directed, life-long learners as well as ethical, responsible citizens prepared to meet the increasing challenges of a global, technological, information-based society. They must learn how to access, manipulate, and evaluate information, synthesize concepts, and creatively express their ideas to others using ever increasingly sophisticated technological tools. Moreover, students must learn to use technology in a manner reflective of Gospel values and Catholic social teaching where technology is used to foster the goals of "message, community and service."

Educational technology, when used appropriately, can help to prepare students for this changing world by promoting new and unique instructional capabilities which provide all students with the same opportunities to learn. Technology can bring the world of knowledge within a keystroke by linking students to information sources and other students around the world.

More specifically, technology tools enable teachers to actively engage students through the creation of project-based instruction that promotes cooperative learning, facilitates the sharing of knowledge among and between teachers and students, and engages students in high-level problem solving activities. Technology in the hands of well-trained teachers can unleash creativity and excitement in all our students.

Technology allows teachers to track students' progress more easily and individualize student instruction to better meet the diverse needs of their students. Using technology for record keeping provides teachers with more time to spend with their students and to plan learning activities. Technology can also provide teachers with access to other teachers and subject matter experts from around the world in order to gain knowledge, share ideas and collaborate on lesson planning.

School administration demands on administrators have expanded dramatically over the years. Technology can assist principals by automating and simplifying the school's information management and communication systems. In addition, technology can facilitate communication between school and home allowing for the more efficient and open exchange of information.

Instructional and Administrative Technology Goals

The six identified goals are:

- Goal 1: There will be equitable access to current technology for all learners both within and throughout our schools.
- Goal 2: Teachers, administrative staffs, administrators, and the Department of Catholic Schools personnel will be proficient users of technology.
- Goal 3: Teachers will use instructional technologies effectively to enhance student learning.
- Goal 4: Internet access will be available in all learning environments and administrative offices through the deployment of a local area network at the Department of Catholic Schools and at each school site.
- Goal 5: The Superintendent of Schools and site administrators will ensure that appropriate technology is used to facilitate administrative tasks.
- Goal 6: The Superintendent of Schools, Department of Catholic Schools personnel, site administrators, and site technology coordinators will provide leadership to teachers, staff, and parent communities in the areas of instructional and administrative technology use.

Goal 1. There will be equitable access to technology for all learners both within and throughout our schools.

Equitable access to technology tools for all students and teachers within individual school sites and throughout all schools in the Diocese is the primary key to the effective use of technology in education. Providing students and teachers with equal access to technology tools, regardless of gender, race, or economic status will ensure that all students and teachers achieve their learning goals and objectives.

Providing equitable access requires more than hardware and software however. It necessitates an understanding of how technology benefits learning, making a commitment to provide and attend appropriate training, implementing classroom management and teaching strategies that promote equity, and by utilizing technology resources appropriately and to their fullest capacity within the school setting.

Technology tools should be readily available to students and teachers throughout each and every school day. Ideally, students and teachers should have access to a lab/media center where larger groups of students can work and also to technology tools in their classrooms so that using technology for learning is uninterrupted. With the availability of less expensive portable computing devices, having appropriate tools available no matter where students and teachers are is becoming more of a reality every day.

Department of Catholic Schools

- Strategy 1: Department of Catholic Schools personnel will pursue funding opportunities and programs for all schools in the area of technology. In particular, fund-raising efforts will be focused upon those schools with the greatest financial need.
- Strategy 2: The Director of Educational Technology will pursue district-licensing opportunities in both software and hardware.
- Strategy 3: The Director of Educational Technology will provide inservice opportunities for site administrators and faculties in instructional strategies that promote equitable access to technology for all learners.

School Sites

- Strategy 4: Site administrators will provide access for all learners to computer and video technologies. This will include but is not limited to:
 - multimedia capable computers
 - video technologies
 - printers

In addition, schools may wish to provide:

- digital cameras and scanners
- portable computing devices and word processors

Strategy 5: Site administrators will ensure that every teacher has access to a presentation station that consists of a multimedia computer connected to:

- a large monitor or projector for whole class viewing
- a VCR or DVD player
- the Internet

Strategy 6: Site administrators will ensure that students and faculty have access to appropriate software tools and other resources for teaching and learning. This will include but is not limited to:

- word processors
- database, spreadsheet, charting and graphing tools
- draw/paint tools
- multimedia authoring tools
- graphical organizers
- internet connection
- Internet browsing tools
- content-rich software
- reference software

Strategy 7: Site administrators will ensure that faculty and staff employ appropriate instructional strategies in learning activities to ensure that all students have equitable access to technology tools.

Goal 2. Teachers, administrative staffs, administrators, Department of Catholic Schools personnel will be proficient users of technology.

Only when teachers are proficient technology users themselves will they be able to guide their students' use of technology within the context of curricular goals and objectives. Moreover, in order for teachers to better engage students in learning, manage student information, and communicate with their parent community, teachers need to be proficient with a wide variety of technology tools.

Administrators must be proficient technology users in order to model, guide, and evaluate technology use for their faculty and staff. Administrators must also facilitate the appropriate use of technology for administrative purposes. Administrative staff must be able to effectively carry out the multitude of tasks involved in the daily operations of the school and therefore must also be proficient technology users.

In order for the Department of Catholic Schools personnel to manage information for and communicate efficiently and effectively with school sites, Department of Catholic Schools personnel must be proficient users of technology.

Department of Catholic Schools

- Strategy 1: The Director of Educational Technology will provide support for basic technology skill training.
- Strategy 2: Department of Catholic Schools personnel will support and encourage continuing growth in technology proficiency by providing information regarding technology inservice opportunities and by finding demonstrations and training sessions as appropriate.
- Strategy 3: Department of Catholic Schools personnel will pursue technology inservice opportunities as appropriate to their job requirements.

School Sites

- Strategy 4: The site administrator will pursue inservice opportunities for faculty and staff members. The site administrator in consultation with the Superintendent of Schools and the Director of Educational Technology, will choose appropriate inservice based on the specific needs of each school.
- Strategy 5: Site administrators will provide opportunities for their faculties and administrative staff to attend technology inservices and facilitate their attendance.
- Strategy 6: Site administrators, administrative staff, and teachers will pursue technology inservice opportunities.

- Strategy 7: Site administrators and their faculties will demonstrate proficiency in basic technology skills as defined by the Department of Catholic Schools.
- Strategy 8: Site administrators will take an active role in evaluating their teachers' basic technological skill levels and encouraging continued growth.

Goal 3. Teachers will use instructional technologies effectively to facilitate student learning.

Technology when integrated into all content areas provides new and unique instructional and learning capabilities for all students. In classrooms where technology tools are appropriately integrated into curriculum, students recognize the power of these tools to help them learn and are able to use them with the same ease that they use pencils, paper, books and maps.

Yet in order for teachers to be able to successfully integrate technology into learning situations, they need standards of technology use, on-going training, continued technical support, encouragement, and time to share their challenges and successes with other teachers.

Department of Catholic Schools

- Strategy 1: The Assistant Superintendent of Curriculum and the Director of Educational Technology will facilitate the integration of instructional technology into all curriculum guidelines.
- Strategy 2: The Assistant Superintendent of Curriculum and the Director of Educational Technology will provide inservice opportunities for implementing new curriculum guidelines and technology-rich instruction.
- Strategy 3: The Director of Educational Technology will provide site administrators with training in providing leadership in the area of curriculum and technology integration.
- Strategy 4: The Assistant Superintendent of Curriculum and the Director of Educational Technology will develop a process whereby there is continued articulation between appropriate elementary school and high school personnel in the area of student technology standards.

School Sites

- Strategy 5: Site administrators and teachers will pursue technology inservice opportunities that promote the appropriate integration of technology into all content areas.
- Strategy 6: Site administrators and teachers will implement the Department of Catholic Schools's Technology Curriculum Guidelines and all other subject specific curriculum guidelines which incorporate technology integration in all areas and grade levels.
- Strategy 7: Site administrators will evaluate teachers' proficiency in curriculum integration strategies on an annual basis by including

curriculum integration as part of the annual evaluation and goal setting process.

Strategy 8: Site administrators will make available to teachers appropriate professional journals and memberships into professional organizations that focus on educational technology.

Goal 4. Internet access will be available in all learning environments and administrative offices through the deployment of a local area network at the Department of Catholic Schools and at each school site.

In order to engage our students in authentic learning activities with easy access to resources it is vital that students and teachers have access to computers, scanners, printers, the Internet, and other technology tools wherever learning occurs. As students and teachers move from the classroom to the library to the science room they need to be able to retrieve their work and access current, up-to-date resources at any time and from anywhere within the school site.

Guided Internet use allows students to become members in learning communities that are distant and different from their own. It prepares them for a future in which they will be part of a global community where information and ideas are shared across continents and cultures. Internet access allows teachers to communicate and collaborate with other educators and subject-matter experts anywhere in the world.

Together local area networks and telecommunication services allow students, teachers, and administrators to have access to current, up-to-date resources and information both within the school site and the world outside. Connecting to the school library or the outside world should be transparent, user friendly, and available for everyone in our school environments.

Department of Catholic Schools

- Strategy 1: The Director of Educational Technology will assist schools in planning for the installation and maintenance of local area networks.
- Strategy 2: The Director of Educational Technology will continue to facilitate, develop, and maintain the FirstClass intranet system that is the primary method of communicating, transferring, and posting information to and from schools.
- Strategy 3: The Director of Educational Technology will continue to facilitate, develop, and maintain the Department of Catholic Schools website.
- Strategy 4: The Department of Catholic Schools office will maintain a secure, local area network as well as a fast and stable connection to the internet in order to facilitate the sharing and movement of information within the department and through out the diocese.

School Sites

- Strategy 5: Site administrators will oversee the implementation of a site local area network with Internet access in order to facilitate the sharing and movement of information both within and through out the school.

- Strategy 6: Teachers, staff, administrators, and appropriately supervised students will have access to the internet and electronic mail.
- Strategy 7: Site administrators will ensure that the acquisition of new technologies, the upgrade and maintenance of existing technologies, and staff development in the area of technology use are all part of the yearly planning process and are reflected in the annual budget.
- Strategy 8: Site administrators will ensure that all hardware and software is properly cared for and maintained at the school site and that proper documentation is recorded and available.

Goal 5. The Superintendent of Schools and site administrators will ensure that appropriate technology is used to facilitate administrative tasks.

It is the Superintendent of Schools and site administrators who are the keys to the implementation of effective administrative technology use by establishing guidelines and providing a rationale for use. While the Superintendent of Schools and site administrators are responsible for organizational management, they needn't be the experts at information management. These tasks should be delegated as much as possible to administrative assistants and secretarial personnel. The role of the administrator must be to direct the work of the administrative staff, and to provide appropriate hardware, software, technical support, and training to insure that the administrative staff is able to work efficiently.

In addition, the Superintendent of Schools and the site administrator must set standards of technology use for all administrative staff and in the areas of information management, communication, and productivity.

Department of Catholic Schools

- Strategy 1: Where appropriate and in consultation with site administrators and the Director of Educational Technology, the Superintendent of Schools will set standards for administrative software to be used at the Department of Catholic Schools and at school sites in order to facilitate the sharing of information and ease of communication among schools and between schools and the Department of Catholic Schools.
- Strategy 2: The Superintendent of Schools and the Director of Educational Technology will ensure that appropriate software and hardware tools are available to accomplish administrative tasks at the Department of Catholic Schools.
- Strategy 3: The Director of Educational Technology will provide sufficient training for site administrators and their administrative staff to become proficient in communication, productivity, and information management technologies.
- Strategy 4: Department of Catholic Schools personnel will attend appropriate inservices in order to maintain their level of expertise in communication, productivity, and information management technologies.

School Sites

- Strategy 5: Site administrators will attend and provide opportunities for their administrative staff and teachers to attend training to become proficient in communication, productivity, and information management technologies.

- Strategy 6: Site administrators, administrative staff, and teachers will use technology to facilitate the effective communication between and among all school constituents.
- Strategy 7: Site administrators, administrative staff, and teachers will use technology to manage information and maximize productivity and efficiency in order to accomplish administrative tasks.
- Strategy 8: Site administrators will ensure that appropriate software and hardware tools are available to accomplish administrative tasks.

Goal 6. The Superintendent of Schools, the Department of Catholic Schools personnel, site administrators, and site technology coordinators will provide leadership to teachers, staff, and parent communities in the areas of instructional and administrative technology use.

It is the responsibility of the Superintendent of Schools and the Department of Catholic Schools personnel, in conjunction with site administrators and technology coordinators to develop a vision for instructional and administrative use of technology based upon current educational research. It is the responsibility of the Superintendent of Schools and the Department of Catholic Schools personnel to communicate that vision to all members of the school community and to develop programs and inservice opportunities that support that vision.

It is the responsibility of the site administrator to ensure that technology use at the school site is in accordance with this vision. Establishing direction and communicating an action plan for the use of technology is primary to its successful integration into all learning environments and administrative tasks. In addition, the site administrator models the use of technology and provides the appropriate resources and training for the entire staff.

The site technology coordinator advises the site administrator in all areas of technology use. The site technology coordinator is instrumental in promoting technology use at the school site that is in alignment with current information and research regarding educational technology and which is consistent with the vision of technology use as set forth by the Superintendent of Schools and the Department of Catholic Schools personnel.

Department of Catholic Schools

- Strategy 1: Department of Catholic Schools personnel in conjunction with members of the school and business communities will develop and revise as necessary an *Instructional and Administrative Technology Plan*.
- Strategy 2: The Director of Educational Technology will be available to site administrators to assist in local site technology planning and implementation.
- Strategy 3: The Director of Educational Technology will provide direction to site technology coordinators via regularly scheduled meetings, electronic mail, and other inservice opportunities.
- Strategy 4: The Director of Educational Technology will be available to schools for inservicing faculty and staff in technology use and integration and to assist and advise in yearly site technology use evaluations.

- Strategy 5: The Superintendent of Schools will ensure that all Department of Catholic Schools personnel are informed about and demonstrate ethical use of technology.
- Strategy 6: The Superintendent of Schools and the Director of Educational Technology will provide information to site administrators and site technology coordinators concerning the ethical use of technology within an educational setting.
- Strategy 7: Department of Catholic Schools personnel will be responsible for ensuring all involved in technology implementation are informed concerning technology issues via electronic mail, administrators' conferences/meetings and site technology coordinators' meetings.

School Sites:

- Strategy 9: Site administrators will be responsible for ensuring all involved in technology implementation are informed and inserviced appropriately.
- Strategy 10: Site administrators will facilitate the development of a site technology plan. Site plans will be reviewed annually, updated as necessary by school site personnel and submitted to the Department of Catholic Schools.
- *See Technology Plan guidelines below.*
- Strategy 11: Site administrators will ensure that technology use in all areas is evaluated annually.
- Strategy 12: Site administrators will inform their school community of site technology planning and implementation.
- Strategy 13: Site technology coordinators will advise site administrators about the implementation and use of instructional and administrative technology.
- Strategy 14: Site administrators will ensure that all faculty, staff, students, and parent volunteers are informed about and demonstrate ethical use of technology during school hours.
- Strategy 15: All site administrators, faculties, staff, and volunteers using technology at a school site within the Diocese of Oakland will sign the Department of Catholic Schools Ethical Use Agreement.
- Strategy 16: All students along with their parents or guardians will sign a site specific Ethical Use Agreement.

Technology Plan Guidelines for school sites:

In order to compete for e-rate discounts, school site technology plans must:

- 1- Establish clear goals and a realistic strategy for using telecommunications and information technology to improve education or library services.
- 2- Have a professional development strategy to ensure that staff know how to use these new technologies to improve education or library services.
- 3- Include an assessment of the telecommunication services, hardware, software, and other services that will be needed to improve education or library services.
- 4- Must provide for a sufficient budget to acquire and maintain the hardware, software, professional development, and other services that will be needed to implement the strategy.
- 5- Include an evaluation process that enables the school or library to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise.
- 6- Be for at least three (3) years.

In order to apply for an e-rate discount, schools must comply with both parts of the Child Internet Protection Act.

<http://www.cybertelecom.org/cda/cipatext.htm>

Schools must have the following to meet this requirement:

- 1- A policy statement signed by parents and students on appropriate Internet/computer use.
- 2- The school must have in place software programs sufficient to block access to inappropriate sites on the internet