Diocese of Phoenix

Catholic Schools

Technology Plan

August, 2000

Diocese of Phoenix
Technology Plan

Table of Contents

Table of Contents Continued

PREFACE

This educational technology planning guide is the collective work of administrators, teachers, parents, school board members, community members, and professionals in the area of emerging technologies. It provides a structured overview for the implementation of a comprehensive plan for the Diocese and individual schools.

This document is directed toward administrators and those who are responsible for developing the initial stages of technology planning. Users proceeding through the action plan steps, will find accompanying samples and guidelines in the appendices.

Those already involved in implementing a technology plan may find the action plan a helpful tool for assessing and verifying its efforts.

Users may choose to identify additional resources and input for some steps found in this guide. It should also be noted that this guide is subject to ongoing development as technologies continue to change.

PROLOGUE

The following excerpts are from official Church statements reflecting its position on the use of technology.

"Moreover, as the Church always must communicate its message in a manner suited to each age and to the cultures of particular nations and peoples, so today it must communicate in and to the emerging media culture. This is a basic condition for responding to a crucial point made by the Second Vatican Council: the emergence of social, technical, and cultural bonds' linking people ever more closely lends 'special urgency' to the Church's task of bringing all to 'full union with Christ'. Considering how important a contribution the media of social communication can make to its efforts to foster this unity, the Church views them as means 'devised under God's Providence' for the promotion of communication and communion among human beings during their earthly pilgrimage."

"Enjoying more leisure, as they sometimes do, men and women find that the remarkable development of technology and scientific investigation and the new means of communication offer them an opportunity of attaining more easily their cultural and spiritual inheritance and of fulfilling one another in the closer ties between groups and even between peoples."

"A New Era" – Pastoral Instruction/Pontifical Council for Social Communication in 1992

"The student who is able to discover the harmony between faith and science will, in future professional life, be better able to put science and technology to the service of men and women, and to the service of God. It is a way of giving back to God what He has first given to us*."*

Declaration on Christian Education

"The Church is fast approaching the second millennium, where it will address a world different from previous generations in its history. The needs of the church's people are much different than the needs of its people in previous times. Humankind has moved at an accelerated pace, from an industrial age, through this information age, and into the present age of communication. The spread of the gospel and the mission of the church need to use the most current and effective tools available to reach its people.

As we move into the next millennium, we must utilize the emerging technologies, which when properly integrated become valuable tools for communication and learning. In particular, these provide media to aid the human development of our youth as we engage in the fourfold character of the ministry of education, message, community, worship, and service.[4]

Technology is not to be viewed as an end in itself. It is used as a vehicle of communication, analysis, and research in the light of Catholic values and moral decision-making. The Catholic Schools of the Diocese of Phoenix are committed to the integration of emerging technologies to further the Church's mission of spreading the Gospel to all people."

The Religious Dimension of Education in a Catholic School

References

1. John Paul II, Laborem Excerns: Decree on the Instruments of School Communication: Declaration of Christian Education (Vatican II)
2. Pontifical Council for Social Communications, A New Era Actatis Novae; Pastoral Instruction on Social Communications on the twentieth anniversary of Communio et Progressio; Rome 1992©; Libreria Editrice Vaticana, Vatican City.
3. Pontifical Council for Social Communications; Criteria for Ecumenical and Inter-religious Cooperation in Communications, Vatican City 1989©, Office for Publishing and promotional Services, United States Catholic Conference, Washington, D.C.
4. In The Sight Of All, Communications: A Vision All Can Share; Office of Publishing and Promotional Services for the Administrative Board of the United States Catholic Conference, 1986©.

DIOCESE OF PHOENIX
CATHOLIC SCHOOLS

Technology Mission Statement

To educate and empower administrators, teachers, and students to become self-directed, continuous learners, and ethical, responsible citizens prepared to meet the increasing challenges of a global, technological society.

VISION FOR THE USE OF TECHNOLOGY

Commitment

We are committed to:

- Integrating and using effectively current and future technology to further our educational mission and the Church's mission of spreading the Gospel to all people.
- Ensuring that all educational technology will be appropriately and equitably integrated into instruction and management and used by all as an essential element of school improvement and student success.
- Offering the best educational opportunities for all students to reach their potential and to allow them to learn with excitement, a sense of discovery, and a sense of wonder.

Use of Technology

Effective use of technology will occur when:

- A vision of the future is shared by all involved.
- Long-term, sustained, quality staff development and training are used.
- Technology is part of a systematic planning process with an appropriate budget.
- There is a commitment to the effective and efficient use of hardware and software.
- Technology is integrated into each office, department, and classroom.
- Technology serves as a support service to constituents.
- Technology is modeled and mandated in all programs and offices to foster the efficient sharing of information.
- All existing communication and information paradigms are continually evaluated.
- Everyone has access to technical support, adequate hardware, and appropriate types and amounts of software.
- All appropriate types of technology are used collaboratively.
- Technology is monitored and revised based on scheduled feedback from the users.
- Equal access of technology is available for all regardless of gender, socio-economic status, ethnic background, or learning exceptionality.

BELIEFS AND PRACTICES ABOUT THE USE OF TECHNOLOGY

Beliefs

- Technological tools foster the abilities of administrators, teachers, and students, to revolutionize the way they work and think, and give them new access to the world.
- Technology enriches learning experiences by addressing multiple learning styles.
- Technology encourages powerful learning environments through simulation and interactive multimedia, helping students to discover important relationships and construct new knowledge.
- Technology encourages higher order thinking skills and fosters collaborative problem solving and creativity.
- Technology increases personal and organizational productivity.
- Technology streamlines and improves administrative functions.
- Technology creates effective communications through desktop publishing and presentations.
- Technology enables cost savings through electronic publishing and communications.
- Technology connects multiple constituents (parents, teachers, students, and the broader community) through electronic communications.
- Technology creates an understanding and appreciation of the development and applications of technology in the world around us.
- Technology poses challenges to us – to which we must respond.

Practices

- Administrative leadership, support, and modeling are essential.
- Formal ongoing program to evaluate technological tools, hardware, and software.
- A sequence of implementation steps and skills training that start with administrators, then moves to teachers, and ultimately impacts the students and curriculum.
- Other educational organizations' successful training programs should be identified and replicated, looking for the following long-term self-sustaining qualities:
    - Can be adopted and conducted by local educators.
    - Has an appropriate training curriculum (e.g. based on needs and examples designed for educators, by educators.
    - Has a consistency of software across institutions and organizations throughout the Diocese of Phoenix so that a common foundation is established that facilitates sharing and communication.
- Annual on-going support and up-to-date training for educator-trainers is provided.
- Make access to technology equitable for all to achieve success.

GOALS OF TECHNOLOGY PLAN

1. Technology will permeate school facilities, administration, operations, and curriculum.
2. All teachers, staff, and administrators will be able to utilize word processing, spreadsheets, e-mail, presentation software, and desktop publishing for their own use and to share with students.
3. All classrooms within the Diocese shall be connected to the Internet.
4. All classrooms will have a means of communication.
5. Students and teachers will use technology as an integral tool in their school day.
6. Students and teachers will be comfortable with and competent in current technology.
7. Resources and training will be available to all.

COMMITTEE MEMBERS

The members of the **Diocesan Technology Committee** are:

Caryn Meron, Diocesan School Board Member, parent, and Chief Administrative Officer, Intermodal Transportation Division, Arizona Department of Transportation

Jim Burke, Diocesan School Board Member, parent, and Graphic Artist

Chris Adamson, Diocesan School Board Member, parent, and Senior, Director of Engineering, Motorola

Wally Estfan, Diocesan School Board Member, parent, and retired Honeywell Executive

Doug Fogle, Diocesan School Board Member, parent, and pilot for Southwest Airlines

Debbie Ellis, parent, and Development Director, SS. Simon and Jude School

Missie D'Aunoy, parent, and Development Director, St. Vincent de Paul School

Ronald Henderson, Director of Finance, Diocese of Phoenix

Mary Catherine Keating, Assistant Superintendent, Diocese of Phoenix

MaryBeth Mueller, Superintendent, Diocese of Phoenix

Members of the **Diocesan Education Technology Committee** are:

Joe Beringer	Xavier College Preparatory
Kevin Siegal	St. Catherine of Siena School
Beth Heckler	Christ the King School
Barbara Balchumus	Our Lady of Perpetual Help School – Scottsdale
Grant Delph	St. Agnes, St. Gregory, St Louis the King Schools
Patrick Smith	St. Vincent de Paul School
Chris Bellefeuille	Seton Catholic High School
Mary Estrada	Financial analyst, Wells Fargo Bank, NA
Bruce Bennett	St. Daniel the Prophet School
Joe Anderson	Bourgade Catholic High School
Karen Thovson	St. Mary's Catholic High School
Pat Collins	Seton Catholic High School
Sr. Carol Mathe	St. Peters Indian Mission School
Margaret Duffy	St. Francis Xavier School
Diane Meza	St. Mary-Basha Catholic School
Beth Peterson	Pope John XXIII School
Sharon Gibbons	Xavier College Preparatory
Michael Weiland	Xavier College Preparatory

Surveys of principals, teachers, and staff were conducted. The Diocesan Education Technology Committee (ETC) will continue to support the evolution of technology on a Diocesan wide basis. The ETC meets monthly to address the ongoing implementation, assessment, and refinements of technology. The Diocesan School Board will review the Technology Plan on an annual basis as part of the Diocesan School Board Strategic Plan.

Members of the **Diocesan School Board** are:

Christopher Adamson	Jon Paladini
Michele Burke	Marc Perez
Jim Burke	Leigha Renner
Tony Calvis	Cynthia B. Scheller
Tom Coury	Anne B. Wuycheck
Michael Dinan	Rev. Joseph Corpora, CSC
Wally Estfan	Rev. Timothy Davern, JCL
Douglas Fogle	Sr. Dolorette Farias, SSND
Margaret Gillespie	MaryBeth Mueller
Janet Greer-Busbee	Deacon Ronald Henderson
Peter J. Hill	Joanne Johnson
Edward F. Kelley	Mary Catherine Keating
Caryn Meron	

PHASES OF THE TECHNOLOGY PLAN

Technology guidelines are broken into six parts. The parts provide a framework for creating and maintaining facilities for students and teachers that best meets the technology mission for Catholic Schools in the Diocese of Phoenix.

Part 1 - Technology Planning
Part 2 - Infrastructure Implementation, Upgrading, and Maintenance
Part 3 - Computer Hardware
Part 4 - Computer Software
Part 5 - Non-Computer Technology
Part 6 – Training for Teachers and Administrators

Part 1 - Technology Planning

There is a significant amount of pre-planning and assessment that occurs prior to actually determining the specific technology needs of a school. In order to determine what types of technologies must be mapped into the school's future planning, a solid understanding of the school's intended use of the technology for curriculum and education management purposes is essential. Towards this end, the following steps are recommended for both new and existing schools:

1. Review the Technology Integration Standards (Appendix B). Outcomes listed in the document can be charted to identify where technology related skills and concepts should be integrated and taught in the school's curriculum. A review of the Computer Curriculum Guidelines (Appendix C) should help a school in completing this plan.

   The Technology Integration Standards and Computer Curriculum Guidelines can be helpful to categorize thoughts and ideas for eventual inclusion in the Technology Plan. Both the *Curriculum Guidelines* and the *Technology Integration Standards* provide grade by grade suggestions for specific technology criteria. Individual schools may elect to modify these documents based on local school needs.

2. Review and finalize an Administrative Technology Assessment Survey and a Teacher Technology Competencies Assessment Survey (Appendix M). These documents help ensure an understanding of curriculum requirements prior to planning details of the software, hardware, etc. It is necessary that the school that education management needs are also addressed. It is suggested that schools follow these recommended guidelines.

   After these first three steps, new schools should have a strong idea of their technology goals. Based on the identified curriculum and educational management needs, new schools can begin planning for specific hardware, software, and training.

For existing schools, the following additional steps are suggested:

3. Complete a Technology Needs Self-Assessment (Appendix L, Appendix J).

4. Complete a Existing Inventory Survey (Appendix H) to help assess the school's present status in integrating technology into the curriculum and the educational management process.

5. Perform a Gap Analysis based on the results of the Technology Needs Self-Assessment and the Constituent Needs Survey. This gap analysis will help the school determine their needs within the phases discussed in this technology plan. This will help existing school leaders to start serious discussions about future technology activity and planning.

Implementation of the Technology Plan

Evaluating the schools' ability to meet these goals and prioritizing the path in achieving them is the objective. These considerations will help provide the classrooms and administrative offices with computers, hardware peripherals and software, as well as other technology related equipment.

Implementation of the technology plan should begin after thorough review and completion of the steps listed in Appendix A. The following areas can be addressed:

1. Based on each school's particular need, goals and areas of strength and weakness can be identified, and implementation priorities can be established. Areas that require prioritization are:

    - Assignment and training of the technical administrator.
    - Infrastructure path.
    - Upgrading or replacement of hardware.
    - Targeting of curriculum-specific hardware to insure usefulness.
    - Provide path for hardware to be able to adequately handle targeted software.
    - Peripherals capability along plan's path.

2. Implementation steps should be completed holistically, rather than in narrowly focused actions that may solve one problem, but create additional ones.

3. Objective measurement of the implementation plan's success with feedback for improvement are important. This will allow enhancement and upgrades to the plan.

Technical Administrator

The assignment and training of individuals is key to keeping the technology plan on target. Decisions can be made about the plan by personnel who have proper training and understanding of the goals. Responsibilities of this person should include:

- Understanding the existing or proposed infrastructure capabilities.
- Contact person for vendors.
- Security of hardware and software licensing.
- Assignment and on-going training of an assistant with full redundancy.

Part 2 - Infrastructure Implementation, Upgrading, and Maintenance

The proper infrastructure will carry the school into the future. Installation of voice, data, and video infrastructure should follow the schedule determined in the technology plan. The most important thing is to get it right the first time. Whether a new school is putting this infrastructure in for the first time, or an existing school is upgrading its infrastructure, the cost of doing it more than once is prohibitive. It is more cost effective to budget infrastructure at the expense of actual hardware or software.

Implementation plans and discussions with vendors providing the service includes voice, data, and video must be integrated as a whole. As an example, the number of phone lines per classroom is entirely dependent on one's choice of internet connection (phone modem or not). Rooms with fax machines also need additional phone lines. Network jacks are needed for computers and printers.

It is important that the installing vendor has appropriate warranty and service capabilities. With the ever-increasing importance data and voice infrastructure has in day to day instruction and administration, downtime is not an option. Select a vendor who has a clear warranty and proven track record in dealing with issues that may arise.

Outlets

Each school will need at least as many communication outlets per class room for capabilities as they plan on having PC's, modems, televisions, and phones. Phone lines are needed for modems unless cable modems will be used. It is recommended that a school add more of each type of line per classroom than what is actually planned to be used. At a minimum, the recommendation per classroom would be for one television outlet, five network and modem lines for computers, and one line for a telephone.

Upgrading the infrastructure can be planned in a time frame comfortable for the school, but as aggressively as possible. The incremental cost of adding four new lines versus three is much cheaper than adding three now, only to have to return and add another later.

Existing schools with insufficient building infrastructure to support needs identified in the technology plan, should develop long range plans to address such issues as available network jacks or modems per classroom. The relative cost for incremental wiring is worth the small investment and any plans should take a long term perspective.

Network and Internet

Install T1, Cable, or ADSL lines wherever possible. One performance problem that many face is not having the processing power of their computer, or the speed of their connection. The speed these services offer is by factors of 10-100 greater than phone lines, allowing mainstream use of this technology.

If phone modems are to be used, schools should use 56K modems or greater. Confirm connection capabilities with the Internet Service Provider - ISP.

Networks within a school should be completely standardized. In addition, standardizing across schools has tremendous benefit educationally in collaboration and in cost reduction.

A good internet connection plan, along with an appropriate security/firewall strategy, is essential. As more and more educational and administrative uses of the internet continue to proliferate, having a good data infrastructure becomes critical.

All schools should put in place a plan to maintain networks as data traffic and technology needs increase and change. Today, T1 lines are almost a necessity and future planning needs should state this as a goal. Networking is the backbone of the school's computer technology. Ideally the network should be invisible and it should not be the limiting factor in how computers are used in school.

Part 3 - Computer Hardware

Review the Criteria for Hardware Acquisition which outlines evaluation, special considerations, and suggestions (Appendix E). The importance of standards cannot be overemphasized. Maintenance, administrative, and training costs are all significantly reduced by operating standard or compatible sets of hardware. In addition, use of such hardware by students, teachers, and administrators is greatly simplified.

Review Computer Hardware Compatibility that lists specific models and capability levels they allow (Appendix E). Besides the significant advantages of having compatible hardware within a school, cross-school collaboration is also made possible.

First, assess or decide if the hardware platform for the school will be:

IBM compatible only
Apple Macintosh only
Apple Macintosh and IBM compatible

If the decision is Apple Macintosh and IBM compatible, determine how each platform will be used, ideally not for the same purpose.

Determine the number of each platform to be acquired. Remember to include needs for the labs and administrators in addition to the classrooms. For existing schools, determine what current hardware falls beneath the minimum standards discussed in the planning phase and is listed in the Computer Hardware Compatibility (Appendix E) document.

Computer Hardware Peripherals

Ideally each computer should have direct access to:

Minimum	Goal
CD-ROM	DVD-ROM
3.5” floppy	Iomega™ ZIP Drive
Network card	Ethernet
2.8 or 5.6 bps modem	Cable based modem
15” RGB Monitor	17”-21” RGB Multi-sync Monitor
Sound Card	Sound Card with external speakers
Video Card	Video Card with accelerator

Minimum standards for these peripherals will be based on the age of the computer and force a need for computers to be no more than three years old. Doing so will ensure that the minimum peripherals standard is generally compatible.

Life of Computer Hardware

Hardware more than three years of age should be evaluated for major upgrade or replacement. This minimizes compatibility issues, lowers maintenance costs, and ensures that students can take full advantage of the increasing technology capabilities afforded on a year to year basis.

Leases are available at very low monthly rates for periods of 18 months to 3 years. This ensures that the hardware is always relatively current in its capabilities and minimizes downtime. Lease equipment can be easily exchanged.

Minimum peripheral requirements listed in the Selection Criteria for Hardware Acquisition (Appendix E) will be updated, based on the three-year guideline to assist local schools in determining acquisition needs and maintenance/enhancement planning.

Computers no longer compatible may be sold or used for tasks that are not critical.

Computers Per Classroom

The number of computers needed per classroom may vary, depending on the average number of students per class, grade, and how computers are used in the curriculum.

This number should be tied to the needs/outcomes identified in the *Integration of Technology into the Curriculum* plan discussed earlier. For example, schools having a lab with 25-35 computers available for general student use allows each student in a classroom access to a computer. Ideally each teacher would be equipped with a computer in addition to 2-8 per classroom.

Computer Hardware Peripherals

Most hardware peripherals should be included as part of the overall hardware purchase/lease. This includes a CD-ROM, disk drive, monitor, speakers, sound, and video cards. With the purchase of a new machine regardless of performance level, these peripherals should be appropriately new and compatible.

Network Connections and Modems

An appropriate network card and modem should be specified. While most new machines come with a 56K modem, if the school is fitted with a T1 line, or other high speed connection such as cable modems or ADSL, this should be reflected in the selection of network card and modem. High bandwidth connections typically have special modems that the providers lease.

The same advantages of standardizing on printers hold true as with the other equipment. This allows easy swapping of printers, minimizes maintenance and supply cost and allows easier printer network set-up. Each classroom would ideally have one printer for teacher use and one for student use (one printer for every five computers).

A plan for printer break down should include back-up printers or designation of non-critical printers to be reassigned until warranty or loaner equipment arrives or equipment is repaired.

Ordering printers along with computers insures compatibility and typically reduces cost.

Peripheral upgrades should be closely tied to computer turnover. In lease situations this should be explicitly the case. In situations where the hardware is owned, upgrading peripherals in order to extend the useful life of the computer should be considered. Besides memory upgrades, adding a higher speed CD-ROM and/or faster connection speed can often extend the life for another 12 months. However, as the cost of new machines continues to drop, this strategy loses some of its return value.

Computer Memory

The number one source of slow response and “aging” of computers is typically computer memory or RAM (Random Access Memory). Specify the maximum amount of memory the budget allows. Additional RAM provides the greatest system performance boost at the lowest cost. It is better and cheaper to get a system with slower chip speed and with lots of memory than get the latest chip speed with minimum memory.

Specify the largest denominator chip of RAM available, as these chips take fewer slots and allow for RAM to be added without disposing of many smaller denominations of RAM that occupy the limited memory slots.

Specify the fastest speed of RAM available, expressed in nanoseconds.

Lease v. Purchase

Once the specific type and quantity of hardware is determined, work with the Diocese or in conjunction with other schools to determine if any lease programs or group purchase plans are available. Lease programs will generally result in lower overall costs per school and significantly less maintenance and support costs. In addition, it is a great way to ensure that overall computer hardware remains within a 18-36 month aging window. If a lease program does not exist, working through the Diocese can result in pooling the specific schools needs along with others to achieve greater quantity discounts.

Generally leasing is done to 1) keep current on technology, 2) minimize maintenance and personnel expense, and 3) keep initial capital outlay to a minimum. The lease period itself usually minimizes the amount of upgrading/enhancing that needs to occur. When it does not, leases can be built that shift the responsibility of keeping the machines upgraded to the lessor.

Upgrades

A plan should be put in place to keep the hardware in working condition and to enhance the hardware, when needed, to extend it's life span. For instance, each year a determination of what amount of memory will be considered minimum may be determined. Machines below this minimum amount should methodically be brought up to standard. The machines themselves would then be made obsolete when the CPU minimum requirement is no longer met. Often times, by upgrading memory and other internal peripherals, another 12-18 months can be effectively "bought free" of any particular CPU. The school's technology committee should constantly review the status of all equipment and continually be acting on enhancements, upgrades, and replacements in a planned fashion.

Donations

Donations can be graciously accepted in the spirit they are given. Donated equipment that does not meet the minimum criteria chosen, should be either re-purposed for other non-classroom, non-administrative needs, offered to another school whose need matches the donation or sold to turn the donation into a cash benefit. There are many marketplaces on the internet where such sales and auctions take place.

The hardware decision and ordering process needs to include decisions on what software is to come standard with the machines and peripherals.

Training

When placing orders, be sure to plan for and include all necessary training necessary for administrators and teachers to function on the new systems. This can be included in the lease or purchase price.

Warranty

When purchasing or leasing, be sure all warranty considerations are discussed prior to signing the agreement. Warranties should include "on-site" service. Vendors should assume as much responsibility for maintenance and replacement as possible. Most are willing to take almost total responsibility. Warranty service should be available for a one to two year period. The speed of warranty or replacement service should be considered when selecting the vendor. One or two system breakdowns can cause major problems. Choose a vendor who guarantees quick replacement of the hardware in question or provides loaner equipment in the interim.

Part 4 - Computer Software

Based on the Software Guidelines (Appendix F) and specific needs, work with the hardware vendor to get as much of the standard software as possible bundled with the standard computer installation. Generally, it is easy to do this with packages such as Microsoft Word, Excel and PowerPoint, e-mail, calendar tools, etc., and an internet browser (such as Netscape Navigator or Microsoft Internet Explorer), Adobe Acrobat, Quick Time, Real Player, NetMeeting, WinZip. Standards may differ for classroom use versus administrative use. It is much less expensive to have one set of standard "base" tools even if some are not used.

Maintenance, administration, and training costs are significantly reduced by operating standard or compatible hardware. In addition, use of such software by students, teachers, and administrators is greatly simplified.

Besides the significant advantages of having compatible software within a school, cross-school collaboration allows maximum flexibility when reassigning or sharing any particular computer equipment .

A school with compatible hardware and software throughout, is a school poised to leverage the benefits of technology to the greatest extent possible, while minimizing the cost. Teachers, administrators, and students can now collaborate without hindrance, while support, maintenance, and licensing can be greatly reduced.

Certain classes of software may be standardized completely, while others should retain some degree of flexibility. Specifically, administrative software can be standardized, while educational software may have somewhat more variation.

Site Licensing

When leasing or purchasing in quantity, software that is not included in a bundled system should be evaluated for site licensing. Usually quantities of five to ten or more qualify. The cost for additional user licenses is almost always significantly less expensive at the time of initial purchase than later. Therefore, order for the planned need, whenever possible.

Collaboration in licensing targeted software on a diocesan basis is very beneficial in terms of cost and maintenance reduction, compatibility across schools for greater collaboration and in increasing flexibility in meeting fluctuating needs. Therefore, sharing your software purchase plans with the Diocese can be helpful in coordinating and ensuring these cross-school benefits.

Upgrades

Determinations as to life span of a particular piece of software is tied to functional capabilities, and so can vary to a greater degree. When planning for software upgrades/replacements, software may be broken into three categories: student based, teacher based, and administrative and operational based software.

Operational software usually has the most frequent upgrade releases. Keep track of major functional changes and continually modify the software plan to reflect them. Actual upgrades should be kept to a minimum (no more than every 12-24 months).

Student, administrative, and teacher specific software upgrades should be planned in advance. For this specialty software, the technology committee should stay in touch with software vendors to remain current on the vendor's plans over a 12-month period.

Schedule software upgrades for summer and winter breaks. Rollback plans should always be in place in case of an upgrade failure due to incompatibility or unforeseen bugs. Verify that the existing hardware base can handle new versions of software prior to approving software upgrades. Since most of this planning is future focused, integrate the hardware and software plans.

Part 5 - Non-Computer Technology

Because of the importance of compatibility in hardware and software, non-computer technology is a great place to encourage and look for donations. It is much less important that schools have the same brands of TV, VCR, DVD, Fax Machines, Overheads, Scanners, Projection Displays, etc., than computer hardware. Obviously technology moves much slower in these areas and product life spans are much longer.

Non-computer items include, but are not necessarily limited to:

Printers
Scanners
Overheads
Data/projection displays (e.g., Proxima's or others)
TVs
VCRs
DVDs
Video Cameras/Camcorders
Digital Cameras
Microphones/intercoms/speaker systems
Fax machines
Video Conference (via PC and NetMeeting)

Maintain an up-to-date inventory of all non-computer items (such as those listed above). Consult the technology plan to determine areas of need. The life span of all such equipment should be significantly beyond that of typical computer hardware. Plan for the ideal number to have on site, and ensure ready access to an additional one in case of equipment breakage or other problems. Decide life spans for purchasing forecasts to avoid emergency replacement.

Part 6 - Training for Teachers and Administrators

Implementation of hardware and software should be in conjunction with, or immediately followed by, appropriate teacher and administrator training.

As students continue to obtain more technology savvy, it is imperative that teachers become very proficient with technology and its appropriate use. The technology committee should review and enhance training requirements, based on changes in technology and in competency requirements for teachers and administrators.

Based on the school's *Integration of Technology into the Curriculum* document and their specific hardware, software, and non-computer needs, a training plan should be created for teachers and administrators. The plan should provide for:

- Training to increase competency in the use of software, hardware and non-computer items. Minimal training in basic maintenance of such items can save a lot of expense and time for simple tasks (such as changing print cartridges, hook-ups for computers, etc.)

- Training in the use and integration of the internet into the curriculum and collaboration amongst teachers, administrators, and students. Use of the internet for video and audio conferencing should be included. Safe and effective use of the internet, how to filter, monitor use, etc. are also important.

- Training materials for teachers and other staff that enables a group of trainers for site based training.

- Evaluation of the training and implementation processes and recommendations for future improvement.

COMPETENCIES AND STAFF DEVELOPMENT

ADMINISTRATIVE/MANAGEMENT COMPETENCIES IN TECHNOLOGY

(Assessment Survey – Appendix J)

Competencies for Administrators

Hardware/Software Skills

- Connect, disconnect, and reconnect a computer and printer (basic skills).
- Understand system, memory, and storage as they apply to software and hardware (basic skills).
- Use and understand the importance of virus protection software (basic skills).
- Be familiar with and use functions of a network.

Program Application Skills (Proficiency)

- Locate, open, and relocate already-saved documents (basic skills).
- Compose, save, and print letters on a computer (word processing).
- Look up student and parent information on a computer (database).
- Send and receive information and files via electronic mail (telecommunications).

Program Application Skills (Working Knowledge)

- Create automated customized letters with student information (mail merge).
- Construct a financial report and produce charts on the computer (spreadsheet).
- Produce memos and certificates with graphics on the computer (graphics).
- Create a slide presentation for parents or school advisory council (slide show, graphics).
- Working knowledge of Internet use (telecommunications).

Competencies for Office Support Staff

Hardware/Software Skills

- Connect, disconnect, and reconnect a computer and printer (basic skills).
- Understand system, memory, and storage as they apply to software and hardware (basic skills).
- Use and understand the importance of virus protection software (basic skills).
- Do system and software installation (basic technical support).
- Troubleshoot computer systems to identify problems (basic technical support).
- Troubleshoot a network to identify problems in printing or communicating (basic technical support).

Program Application Skills

- Locate, open, and relocate already-saved documents (basic skills).
- Compose, save, and print letters on a computer (word processing).
- Create files that store, organize, and report information such as class lists (database).
- Create automated customized letters with local student information (mail merge).
- Construct a financial report and produce charts on the computer (spreadsheet).
- Produce newsletters and certificates with graphics on the computer (graphics).
- Scan text and images for import into documents (multimedia productivity).
- Send and receive information and files via electronic mail (telecommunications).
- Use the Internet (telecommunications).

TEACHER INSTRUCTIONAL COMPETENCIES IN TECHNOLOGY

(Assessment Tool – Appendix M)

Hardware/Software Skills

- Connect, disconnect, and reconnect a computer and printer (basic skills).
- Locate, open, and relocate already-saved documents (basic skills).
- Understand system, memory, and storage as they apply to software and hardware (basic skills).
- Use and understand the importance of virus protection software (basic skills).
- Do system and software installation (basic technical support).
- Troubleshoot computer systems to identify problems (basic technical support).
- Provide and maintain a backup system for data (basic technical support).

Program Application Skills

- Compose, save, and print letters on a computer (word processing).
- Create files that store, organize, and report information such as class lists (database).
- Construct a spreadsheet and produce graphs on the computer (spreadsheet).
- Produce memos, certificates, and bulletins with graphics on the computer (graphics).
- Scan text and images for import into documents (multimedia productivity).
- Take pictures digitally for import into documents (multimedia productivity).
- Access CD reference resources (multimedia productivity).
- Create a slide presentation (slide show, graphics).
- Send and receive information and files via electronic mail (telecommunications).
- Use the Internet (telecommunications).
- Generate attendance, grades, and progress reports electronically (grading)**.**

Curriculum and Technology

- Implement curriculum guidelines to reflect effective use of technology infused throughout a student's K-12 education.
- Develop student assessments to include technology components.
- Provide special needs students with appropriate assistive technology.

- Provide multimedia stations for student use.
- Challenge students to use previously learned technology skills where appropriate to complete their classroom assignments.
- Demonstrate awareness of the hierarchy of technology skills being taught at various levels.
- Utilize the following technologies in their instructional programs:

    - Large screen television/monitors
    - VCR
    - Camcorder/still video camera
    - Video projector
    - LCD panel/projection system
    - Scan converters (computer to TV display devices) videodisk
    - CD-ROM
    - Modem
    - Scanner
    - Video digitizer
    - Distance learning (satellite or fiber optics)

STAFF DEVELOPMENT

A technology staff development program is important for professional reasons and because technology will be an even more essential part of education in the future.

A Technology Staff Development Plan should be incorporated into each school's overall technology plan and monitored annually by the school principal. This plan should be based on developing the administrative and teaching competencies outlined as well as the working knowledge of the hardware and software available at the school.

The Technology Staff Development Plan should include:

- A timeline for implementation. All administrative and teaching staff should be proficient in the suggested competencies within a timeframe established by the school principal.

- The methods of staff development to be utilized:

    - Training sessions by on-site technology coordinator during the school day or after school.
    - Training sessions by a teacher/consultant from outside the school.
    - Off-site technology classes and workshops.
    - Participation in diocesan training sessions, and/or other methods appropriate to the local school.

- A description of new staff member orientation and training.

- A description of how proficiency and knowledge of hardware/software will be assessed.

FINANCIAL ASPECTS OF TECHNOLOGY

The advent of technology into education presents a budgetary issue that must be addressed, especially in the development of local budgets. While technology may permit a more efficient exercise of work, adequate planning must occur to provide the necessary financing for hardware and software acquisition, maintenance, security, utility charges, staff training, and future purchases. It prompts schools to think new thoughts, and often to reallocate financial resources to successfully accomplish school/Diocesan goals. The following recommendations, list of funding sources, and acceptance of gifts policy are offered as beginning points for acquiring the necessary resources.

Guidelines

Personnel

- Principal designates one person on site as technology coordinator, to be responsible for school computer hardware and software.
- Principal selects one faculty member and appropriate volunteers to assist technology coordinator in development of a three – five year technology plan that includes a vision statement, budget and implementation timeline.
- Principal encourages continuing training in technological competency for faculty and staff.
- Technology Coordinator will assist the Principal in decisions about purchasing, and upgrading, maintenance of equipment, and maintenance of on-site inventory of all hardware and software.

Budget

- The school allocates sufficient financial resources for technology through annual line item designation in the budget, enabling staff to plan and prioritize building modifications, marketing, security, and the acquisition of hardware and software.
- The school allocates a budget line item for hardware upgrade and maintenance.
- The school allocates funding for telecommunications line charges and service fees.
- The school allocates financial resources for faculty and staff training and seeks innovative opportunities for faculty release time to training opportunities.
- The school supports attempts to fund innovative, individual teacher projects that utilize technology.
- The school takes advantage of discounted prices on hardware and software provided by central purchasing or other cooperative purchasing.
- The school assures fair and equitable assignment of funds among grade levels and subject areas as well as plans for redeployment of equipment throughout the system.
- The computer curriculum budget has a sufficient amount budgeted for software, hardware, equipment maintenance and repair, and equipment and software upgrades.

Funding Sources

Possible funding sources:

Grants
Computer Fees
Lease/Purchase Plans
Individual Donors
Workshop/Evening Matching Programs
Student/Technology Ambassador
Title VI Funds
Pilot Projects
Service/Parent Associations
Alumni Reunion Gifts
Fundraisers Corporate Matching Programs

POLICIES

This policy document is to be used as the generally accepted minimum policy for schools under the supervision of the Diocese of Phoenix Catholic Schools Office.

Network

Network Acceptable Use Policy

Intra-School and Intra-Diocese and Inter-Net - Use of the Diocese of Phoenix Network is to promote the exchange of information to further education and research and is consistent with the mission of the Diocese of Phoenix Catholic Schools.

1. The network is not for private commercial business use or political purposes.
2. Any use of the network for illegal activity is prohibited.
3. Use of the network to access obscene or pornographic material is prohibited.
4. Sending material likely to be offensive or objectionable or harassing the recipients is prohibited; this includes discriminatory or abusive material.
5. Using programs that infiltrate a computing system and/or damage the software components are prohibited.
6. The most efficient use of network resources to minimize interference with others is required.
7. Any use of The Diocese of Phoenix Network or the School site that accesses outside resources must conform to Diocesan “Acceptable Use Policy”.
8. Subscriptions to any bulletin boards and on-line services must be pre-approved by the local Catholic school administration and be in conformity with the Diocese of Phoenix policies regarding this service.

Interpretation, application, and modification of this Acceptable Use Policy are within the sole discretion of the Diocese of Phoenix Catholic Schools Office. Violation of any conditions of use described here may be cause for disciplinary action. See appendix for sample agreements of letters of permission. (Appendix N)

Security

To protect the network system and the information stored on the network from corruption, all security is to be maintained by the school administration.

1. No student is to be allowed to maintain security files or access levels.
2. Respect of the rights and property of other is paramount. No improper access to and/or misuse of files, data, or information of others will be tolerated.
3. All accounts and passwords are confidential and should not be accessible to others. This insures and protects the ownership of information, safeguards the data and storage of said data while honoring all dimensions of confidentiality.
4. Passwords must be changed regularly, using combinations of letters and numbers; avoiding Standard English names and words.
5. Back-up copies of documents are the responsibility of the user.
6. Knowingly or inadvertently permitting the spread of computer viruses in the school or Diocesan network is a serious violation of all policies.

Software

Both operating systems and program applications must be approved by the school administration and installed by the Technology Coordinator.

1. Each user is responsible for taking precautions to prevent viruses on their own equipment as well as school and/or Diocesan equipment.

2. The illegal installation of copyrighted software or files for use on school or Diocesan computers is prohibited. Please see the school's Technology Coordinator to install any software on school computers; following the license agreement.

3. The Technology Coordinator will secure all license agreements on file.

E-Mail

The Diocesan Information Systems Office provides E-Mail for the sole purpose of exchanging information consistent with the mission of the Diocese of Phoenix and the Diocesan Catholic Schools Office**.**

1. E-Mail cannot be used for private commercial offerings of products or services.

2. E-Mail cannot be used for political purposes.

3. E-Mail messages are subject to diocesan or school review at any time.

The Roman Catholic Church Diocese of Phoenix publication "Stewardship Through Technology Policies and Procedures" (Appendix P) contains a section on E-Mail that should be followed in conjunction with the above.

Copyright

It is the policy of the educational programs governed by the Diocese of Phoenix Catholic Schools Office that all employees, volunteers, and students are to abide by the federal copyright laws.

Employees, volunteers, and students may copy print or non-print materials allowed by:

1. Copyright laws, see Appendix R for example.

2. Fair use guidelines, see Appendix R for example.

3. Specific licenses or contractual agreements, see Appendix R for example.

4. Other types if permission is given in writing.

Employees, volunteers, and students who willfully disregard copyright laws are in violation of this policy, doing so at their own risk and assuming all liability.

Acceptance of Gifts Guideline

Each school will adopt the following guideline for the acceptance of gifts. All potential gifts are to be evaluated by a review committee; established by the school administration that is to include the Technology Coordinator. Gifts will be evaluated upon the ability to meet the following criteria:

- Supportive of the mission and philosophy of the school.
- Appropriate to the mission and purpose of the local program.
- Appropriate to the developmental level of the students affected.

- Are within one year of the current equipment level for compatibility and are compatible with the current and planned platforms at the school.
- Create no unanticipated or excessive financial burden for the school/program (construction, wiring, additional equipment, etc.)
- Comply with all tax rules and regulations governing gifts.
- Require limited maintenance.
- Carry no unreasonable restrictions by the donor.
- Become the property of the recipient.
- Create no unanticipated additional staff requirements.
- Accepted gifts will be acknowledged in writing.

Internet

It is the policy of the Diocese of Phoenix, the Diocesan Catholic Schools Office, and the specific school to require the ethical use of the Internet and related technologies by all employees, volunteers, and students. These policies are set forth below in the Term, Conditions, and Regulations for the use of the Internet and related technologies. Access privileges may be revoked, school disciplinary action may be taken, and/or appropriate legal action taken for any violations that are unethical and may constitute a criminal offense.

Internet Terms, Conditions, and Regulations

Acceptable Use

The use of the Internet and related technologies must be in support of education and research consistent with the educational objectives of the Diocese and the school. Use of other organizations' networks or computing resources must comply with the rules appropriate for these networks.

Unacceptable Use

Transmission of any material in violation of any U.S., State Board or Diocesan policy is prohibited. This includes, but is not limited to, copyrighted materials, threatening, violent, or obscene material, or material protected by trade secret. Use for commercial activities is not acceptable. Use for product advertisement, political lobbying, game playing, gambling, unauthorized chat, or chain letter communication is also prohibited. Other examples of unacceptable information are pornography, information on bombs, and inappropriate language and communications. Acts of vandalism are prohibited. Vandalism is defined as any malicious attempt to harm or destroy data of another user or to damage hardware or software. This includes, but is not limited to, the uploading or creation of computer viruses. Unauthorized use of another person's computer, access accounts, and/or files is prohibited.

Privileges

The use of the Internet and related technologies is a privilege, not a right, and inappropriate use may result in cancellation of those privileges. Each user who is provided access to the Internet and related technologies will participate in a discussion with assigned staff person(s) concerning the proper use of the network. The faculty, staff, or parent/guardian may request the administrator or designee to deny, revoke, or suspend a specific user's access to the Internet and related technologies due to unacceptable use.

Warranties

The educational programs governed by the Diocese of Phoenix Catholic Schools Office makes no warranties of any kind, whether expressed or implied, for the service it is providing and will not be responsible for any damages users suffer. This includes loss of data resulting from delays, non-deliveries, mis-deliveries or service interruptions. Use of any information obtained via the Internet and related technologies is at the user's own risk. The educational programs governed by the diocese and the Schools' Advisory Board specifically deny us any responsibility for the accuracy or quality of information obtained through its services. The student or parent/guardian will be responsible for any financial obligation incurred through the use of the Internet and related technologies that is not previously approved as part of the local budget.

The Diocese of Phoenix Catholic Schools Office succinctly describes "acceptable use" of its network and requires network users to agree to abide by its policies.

Instruction – Technology in Curriculum

Teachers and students shall be instructed in the use of technology in the curriculum with an understanding of the implications of its use as a tool of communication, analysis and research. The school administration shall adopt a plan for the efficient and effective use of technology in the instructional program. The plan shall provide for the understanding and use of current technology by staff and students and shall include a procedure to review the school's utilization of technology as a teaching and learning tool, in conjunction with Diocesan curriculum guidelines.

Instruction – Library/Media Center

The administration is responsible for materials used by the school. The administration collaborates with qualified media specialists/aides, in cooperation with the staff, for the selection of instructional materials for the library media center. The selection of materials is ongoing and involves other members of the school community.

In selecting materials to purchase for the library media center, the media specialist/aide will evaluate the existing collection and the curriculum needs and will consult with reputable professionals for prepared aids and other appropriate sources. The materials selected:

1. Are related to the program and curriculum.

2. Are age appropriate.

3. Are viewed as acceptable by professionals.

4. Are reflective of the philosophy of the school.

5. Are in accord with Diocesan standards and policies.

The media specialist shall assess the instructional materials. All non-functional, worn, or lost materials will be replaced appropriately, considering the needs of students and faculty.

Web Page/Web Site Access

The Diocese of Phoenix and the Diocesan Catholic Schools Office hosts a web page for each school site and encourages each site to maintain their web page and to use the web sites as a resource. The Diocese has a web editor and hosts all web pages. Each site is to obtain and maintain, as part of this policy, a copy of the diocesan web policy (Appendix P).

DEVELOPMENT GUIDELINES

E-Mail

E-Mail provides an avenue of enhanced, efficient, and economical communication with the school's constituents. It should be viewed as an effective companion to personal contact, but should not replace direct contact with constituents. Electronic modes of communication facilitate the timely transfer of information.

Development Guidelines

The following areas should be addressed in development of a system:

- Identify person(s) who will be responsible for managing the e-mail software. This should include the responsibility for policies and procedures including the ethical use of information.
- Software must be approved by the school administrator and installed by the Technology Coordinator.
- Determine who will have access to the communication system.
- Establish a process to alter user information as needed.
- The software selected should have the ability to make each person an independent user, provide closed e-mail system to avoid junk mail, and generate group mail and address book capability. The software selection should be determined by the use. (Do you want to check e-mail off site? Will your e-mail address be easily accessible to outside parties? Can others access your e-mail at your computer?)

Use Guidelines

- Encourage administration, faculty, and staff to communicate electronically.
- Encourage faculty and parents to communicate electronically.
- Staff meetings should include regular technology updates in all areas, especially acquisitions, grants, and workshops.

Network

Networking at each school should facilitate the use of common software tools, have the ability to communicate with others efficiently, and allow access to the internet for students and faculty members. The infrastructure is crucial to many factors – cost, security, maintenance, and the ease of use.

Development Guidelines

The following areas should be addressed in development of a system:

- Facilitate considerations are important. (How long are the cable connections? Where is a secure location for the server? Are the parish and school on the same network?)
- A T-1 line should be considered for internet usage and Cat 5 wire run between buildings for connecting all computers on the network.

- Identify person(s) who will be responsible for managing the network. This should include responsibility for the development of policies and procedures, including the ethical use of information.
- Operating systems and programs applications must be approved by the school administrator and installed by the Technology Coordinator.
- Determine who will have access to the network.
- Determine what type of information will be shared via the network.
- Establish a uniform system for user identities and how they will be published.
- Provide adequate training sessions.
- Develop a level of security that defined appropriate access based on user identities.
- Determine if there are others outside the organization who need to be connected to the system.
- Establish a process to alter user information as needed.

Web Page Communication

A Web Page is an electronic storage folder where school information is stored either locally or commercially for access by constituents.

Guidelines

Web /Site Usage

- Store documents from the organization in an electronic format.
- Gather information from constituents.
- Publish events and happenings about the school.
- Publish information about the school.
- Provide live audio/video downloads and interactive chatting/conference.

Planning Decisions

- Seek competent technical advice in the early stages of planning.
- Identify the school Web Maker.
- Become familiar with specific terminology related to the Web Site.
- Electronically visit other Web Sites to gather ideas.
- Map out what type of information the school will post on their site.
- Decide if the school will use a provider or maintain their own site.
- Decide what level of access your site will provide.
- Decide who will have access to what type of information on the school's site.
- Decide who will be responsible for maintaining the content of the site.
- Decide the process for updating the content of the site.

Implementation Steps

- Establish a timeline to implement the planning decisions.
- Secure the necessary human and technological resources to implement the site.
- Establish a marketing program to acquaint the school's constituents about the site.
- Conduct training sessions for the site.
- Determine how to access the site.
- Convey protocols for constituents who want to publish on the site.
- Develop the organization site.
- Establish a timeline for assessing the site's usage and, seek input from constituents as to the on-going purpose of the site.

REPAIR, MAINTENANCE, AND UPGRADING

There is the need to create a multi-level plan for on-site maintenance. Maintenance should include a designated on-site employee, contracted services and volunteer expert advice. It is recommended that low performance equipment be moved to locations where the need for powerful machines is not required. A standard level of technology will be maintained throughout the school.

Acceptable Use Policy and Guidelines

The school will:

- Have an on-site employee trained to do minimal maintenance on existing hardware and software.
- Secure maintenance contracts when determined to be cost-effective.
- Establish a software and copyright policy. This should be distributed to each staff member.
- Use only school licensed software and school owned/leased hardware.
- Include in the budget a commitment for purchase of equipment to replace older low performance equipment that is equitable among all grade levels.
- Have a procedure established for new equipment and software purchases that includes investigation, vendor presentation, site visits, building site considerations, and needs.
- Evaluate maintenance procedures, repair forms, and equipment standards annually.
- Have an on-site employee maintain an inventory of all hardware and software.
- Encourage the purchase of lab packs, multiple use, and site licenses.
- Have a repair technician or maintain a relationship with several vendors and/or repair services.
- To clarify problems, distribute a written repair form to all staff.
- Inform staff of procedures for requesting equipment purchase, repair, or maintenance

SECURITY

Network security is a vital part of the technology plan. It must be integrated in the early stages of the planning process. Local security procedures in partnership with the diocese should be established and communicated to all.

Acceptable Use Policy and Guidelines

- Technology users, e.g., staff volunteers and students, will sign an ethics agreement before gaining access to the system.
- The principal and technology resource person are responsible for the development and maintenance of technology security issues including record keeping of signed ethics agreements.
- The principal will educate technology users regarding security concerns at the beginning of each school year.
- All new employees should attend an orientation covering security, proper use of the network computers, and an introduction to software currently used by the school. A copy of the technology plan should be given to each new employee so they will better understand the goals of the school.
- A policy on computer use by terminated employees and their access rights must be developed at the school level.
- All schools will keep a copy of inventory off campus, as well as, in the school office.
- Security procedures, including users identities, will be reviewed annually.
- Networks should be backed up nightly and tapes stored in a fireproof environment.
- Networks need to be set-up with multiple levels of access. No student will be allowed to maintain security files or access levels.
- Respecting the rights and property of other is paramount. No improper access or misuse of files, data, or information will be tolerated.
- Passwords must be changed regularly, using combinations of letters and numbers; avoiding standard English names and words.
- Knowingly, or inadvertently, permitting the spread of computer viruses in the school or Diocesan network is unacceptable.
- Each school is responsible for taking precautions to prevent viruses on their network.

EVALUATION

Evaluation is essential throughout all aspects of the technology plan. The Technology Needs Assessment (Appendix D) should be used at the beginning of the process with a follow-up at the end of the school year to verify that positive change has actually taken place. The following areas need continuous evaluation:

- Management and assessment
- Instruction and instructional design
- Productivity and staff development
- Moral and ethical issues
- Administrative use and application

In addition, it would be important to identify specific criteria and indicators for other areas such as:

- Student learning
- Review of policies and procedures
- Review of hardware acquisition
- Software guidelines
- Building modifications
- Budget expenditures

APPENDICES

Step by Step Action Plan

The following are necessary to achieve the successful implementation of the beliefs and practices set forth previously. Stages should be followed in sequence, although some line items may not apply to all situations.

Stage 1. Prerequisites

- Establish a technology vision.
- Review successful organizational/diocesan training models in order to establish attainable goals and timeline (Appendix I).
- Assess obstacles and barriers to successful implementation.
- Identify key individuals and educate them about your vision and goals to gain their support and commitment (e.g. pastor, administrators, teachers, parents, board members).
- Educate and enlist the support of organizational/diocesan professional staff and school administrators.
- Develop a plan for communicating progress to constituents (staff, donors, etc.).
- Preliminary technology needs assessment (Appendix D).

Stage II. Preparation

- Review the selection criteria and establish the local standards for software, hardware, and building specifications (Appendix E, F, G).
- Survey constituent software, hardware, and building specifications needs (Appendix E, F, G).
- Determine funding needed for software, hardware, and building specifications.
- Address financial implications and secure funding sources.
- Establish ordering procedures for hardware, software, and supplemental items.
- Secure the necessary resources to support the training goals and timeline.
- Establish expectations and procedures for the use of technology by all local and Diocese administrators.
- Develop a standardized approach to addresses for electronic communication.
- Establish policies related to the ethical use of technologies (copyright, acceptance of gifts, use of software) (Appendix P).
- Establish and include technological competencies in administrative job descriptions at all levels.

Stage III. Implementation

- Conduct the training sessions for administrators.
- Facilitate a “buddy system” for ongoing personal support.
- Coordinate marketing of program (Appendix K).
- Develop electronic versions of all school/diocesan materials.
- Conduct training of administrative support staff separate from the administrators.

Stage IV. Maintenance

- Incorporate technology into administrative communications, gatherings, and activities.
- Establish a plan for providing ongoing training for current and new administrative users.
- Maintain a helpful/responsive diocesan/school office demeanor to respond to questions/concerns
- Review and revise standards for administrative hardware/software as technology changes.
- Establish a plan for redistribution of existing hardware/software as technology changes.
- Incorporate technology into diocesan/school and local budgets.
- Include technology as part of school/diocesan annual administrative review.
- Conduct ongoing self assessment of the use of technology (Appendix L).

Stage V. Next Steps

- Establish and organize a school electronic web site.
- Begin to transmit electronic forms via file enclosures.
- Offer elective advanced skills training.
- Sponsor technology gatherings to showcase emerging technologies and their practical application.
- Invite/encourage affiliated constituencies to engage in a similar usage of technology.
- Develop a network of support personnel from within the organization.
- Establish teacher competencies in technology (Appendix M).
- Conduct teacher training.
- Establish student and program learning objectives related to technology (Appendix B).
- Facilitate the process for integrating technology into curriculum (Appendix B, O).

TECHNOLOGY INTEGRATION STANDARDS (TIS)

Moral, Ethical, Social, and Human Issues

- Students understand and practice the moral and ethical issues related to technology.
- Students develop positive attitudes toward technology that support lifelong learning, collaboration, personal pursuits, and productivity.
- Students evaluate the impact of technology on individuals, society, and the environment.

Basic Operations and Concepts

- Students demonstrate an understanding of the nature and operation of technology systems.
- Students are proficient in the use of technology.

Technology Productivity Tools

- Students use technology tools to enhance learning, increase productivity, and promote creativity.
- Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.

Technology Communication Tools

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

Technology Research Tools

- Students use technology to locate, evaluate, and collect information from a variety of sources.
- Students use technology tools to process data and report results.
- Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.

Technology Problem-Solving and Decision-Making Tools

- Students use technology resources for solving problems and making informed decisions.
- Students employ technology in the development of strategies for solving problems in the real world.

*Wording of the Technology Integration Standards and Performance Indicators is used with permission of the National Educational Technology Standards Projects.

Diocese of Phoenix Technology Integration Standards are available at www.diocesephoenix.org/catholic schools.

Appendix C

COMPUTER CURRICULUM GUIDELINES

PHILOSOPHY

Technology and Computers in Catholic Education
"The only constant is change"

The students of today are the citizens of the future in a world of rapidly changing technology. The daily skills that were sufficient for our parents are changing rapidly for our children. It is our responsibility to train our students for a work experience in which it is anticipated that they will change occupations several times during their working careers. Computer education develops each individual student for a place in society.

The emphasis in learning has changed from memorizing facts to learning how to acquire information. Our changing technology demands that we provide the tools necessary for our students to be able to access this information. Computer education is a tool which supports academic instruction and enhances critical thinking skills in a stimulating environment. This education helps the student to achieve objectives of self-realization, social competence, economic efficiency and Christian and civic responsibilities. These skills prepare our students for the workplace, and enhance their academic pursuits.

GOALS FOR COMPUTER INSTRUCTION

- To introduce students to computer's role in society, including the past, the present, and the future
- To familiarize students with programming languages, computer operations and terminology
- To develop a working knowledge of commercially prepared software
- To promote ethical values pertaining to the use of the computer
- To prepare students for future technological challenges
- To enhance problem solving skills
- To create an environment for interdisciplinary learning
- To stimulate student potential for creativity

Wherever possible use of the computer and related skills should be integrated into all academic subject areas.

COMPUTER COMPETENCY SKILLS
CATHOLIC SCHOOLS OFFICE
DIOCESE OF PHOENIX
MATRIX GRADES K – 8

In addition to the maintenance of computer skills previously mastered, students should be able to demonstrate the following skills at the grade levels indicated.

		K	1	2	3	4	5	6	7	8
A.	**COMPUTERS IN SOCIETY – HISTORY AND ETHICS**									
A-01	List uses of computers in a variety of situations	*	*	*	*	*	*	*	*	*
A-02	Identify computer related careers, including training Requirements and the impact of automation on the job market	*	*	*	*	*	*	*	*	*
A-03	Define computer ethics and the purpose of ethical standards					*	*	*	*	*
A-04	Explain unethical use of computers, including illegal Copying of hardware and software, and as in relation to an individual's privacy rights					*	*	*	*	*
A-05	Reinforce and maintain computer ethics, morals, and standards	*	*	*	*	*	*	*	*	*
A-06	Describe security measures for preventing computer misuse							*	*	*
A-07	Define artificial intelligence and explain the difficulties involved, the by-products, and the applications							*	*	*
A-08	Classify types of computers such as PC's, mainframes, and micro-computers, and the advantages for their applications in various settings							*	*	*
A-09	Understand the uses, limitations, and attributes (i.e. speed, accuracy, color, sound) that make computers appropriate tools in a variety of situations							*	*	*
A-10	Understand the meaning of virus as it relates to computer technology								*	*
A-11	Describe the methods people used to perform calculations and keep records prior to the use of mechanical devices									*
A-12	Describe the development of mechanical calculating devices									*

		K	1	2	3	4	5	6	7	8
A-13	Describe how electro-mechanical calculating devices led to the development of first generation computers									*
A-14	Identify the chief characteristics of each of the four computer generations									*
A-15	Predict the changes for the fifth generation computers									*
B.	**COMPUTER USAGE**									
B-01	Identify the following terms: computer, monitor, disk drive, keyboard, printer, and diskette	*	*	*						
B-02	Recognize the location of the on/off switch on the monitor and the CPU	*	*	*						
B-03	Demonstrate proper handling and care of hardware	*	*	*	*	*	*	*	*	*
B-04	Demonstrate proper care and use of a diskette	*	*	*	*	*	*	*	*	*
B-05	Demonstrate the proper sequence to boot up a disk and/or access program network	*	*	*	*	*				
B-06	Access and use independently various types of educational software	*	*	*	*	*	*	*	*	*
B-07	Review and evaluate software							*	*	*
C.	**KEYBOARD SKILLS**									
C-01	Recognize letters and numbers on the keyboard	*	*	*						
C-02	Locate and use numbers and letters on the keyboard		*	*						
C-03	Locate and use punctuation on the keyboard				*	*				
C-04	Recognize and use the special function keys as needed: RETURN, SPACE BAR, ESCAPE, ARROW KEYS, SHIFT KEYS, CONTROL KEY, BACK ARROW/DELETE KEY	*	*	*	*	*				
C-05	Identify home row			*	*	*				
C-06	Memorize home row				*	*				
C-07	Use appropriate posture at the keyboard	*	*	*	*	*	*	*	*	*

		K	1	2	3	4	5	6	7	8
C-08	Use two hands on the keyboard, use HOME ROW as a base and reach for keys with appropriate fingers				*	*	*			
C-09	Type simple words and short sentences				*	*	*			
C-10	Type sentences and short paragraphs from written material					*	*	*		
C-11	Type an entire page of text with minimal errors						*	*		
C-12	Type for improved accuracy						*	*	*	*
C-13	Type for improved speed						*	*	*	*
D.	**Word Processing**									
D-01	Define a word processing program and describe its applications						*	*	*	*
D-02	Define word processing terminology and demonstrate related skills						*	*	*	*
D-03	List the steps involved in creating a document with word processing						*	*	*	*
D-04	Save a word processing file						*	*	*	*
D-05	Add an existing word processing file to memory						*	*	*	*
D-06	Create an original document						*	*	*	*
D-07	Move the cursor around the screen easily as needed						*	*	*	*
D-08	Insert text						*	*	*	*
D-09	Delete words, characters, and text						*	*	*	*
D-10	Copy and move blocks of text								*	*
D-11	Use commands to create new page breaks								*	*
D-12	Produce a printed copy of a document						*	*	*	*
D-13	Add multiple files from disk to memory						*	*	*	*
D-14	Use printing option to format a document								*	*
D-15	Use commands to move between files								*	*

		K	1	2	3	4	5	6	7	8
D-16	Reset TAB stops in a document								*	*
D-17	Use commands to move between files						*	*	*	*
D-18	Set margins								*	*
D-19	Center headings						*	*	*	*
D-20	Use justification						*	*	*	*
D-21	Recognize the application of word processing by producing a document in another content area							*	*	*
D-22	Recognize and use proofreading marks						*	*	*	*
D-23	Use spell check program						*	*	*	*
E.	**Data Base**									
E-01	Define a data base and describe its applications								*	*
E-02	Define data base terminology and demonstrate related skills								*	*
E-03	Load a data base program								*	*
E-04	Create a file and assign filed attributes								*	*
E-05	Edit data base entries								*	*
E-06	Save data base								*	*
E-07	Search and sort records from a data base for a specific need								*	*
E-08	Delete records from a data base file								*	*
E-09	Add new fields to an existing data base								*	*
E-10	Print data base reports								*	*
E-11	Print using the label and/or table format								*	*
E-12	Create data base reports integrated into curriculum subject areas								*	*

		K	1	2	3	4	5	6	7	8
F.	**FLOWCHARTS**									
F-01	Understand the purpose of a flowchart						*	*		
F-02	Read and draw a simple flowchart						*	*		
F-03	Write steps in logical sequence						*	*		
F-04	Identify errors and unneeded steps						*	*		
F-05	Understand the symbolism of, identify, and draw an oval, rectangle, and arrow						*	*		
F-06	Identify and use the decision symbol						*	*		
F-07	Create a flow chart and write a logical sequence of steps needed to perform a task within a computer program						*	*		
F-08	Recognize and correct the errors in a flowchart						*	*		
F-09	Identify and use the input/output symbol						*	*		
F-10	Use flowchart steps involving more than one decision						*	*		
F-11	Understand and apply GOTO statements in a flowchart						*	*		
F-12	Understand and apply IF/THEN statements in a flowchart						*	*		
F-13	Understand and apply FOR/NEXT statements in a flowchart						*	*		
G.	**BASIC**						*	*	*	*
G-01	Define BASIC terminology and demonstrate related skills (see Glossary)							*	(*)	(*)
G-02	Define BASIC as one computer language							*	(*)	(*)
G-03	Understand the importance and use of line numbers in a program							*	(*)	(*)
G-04	Use PRINT statements to print numbers, words, mathematical expressions, and blank lines							*	(*)	(*)

		K	1	2	3	4	5	6	7	8
G-05	Read through a simple sample program							*	(*)	(*)
G-06	Write a simple program							*	(*)	(*)
G-07	Demonstrate ability to label programs with REM statements							*	(*)	(*)
G-08	Demonstrate ability to list programs and section of programs to printer							*	(*)	(*)
G-09	Understand and demonstrate the use of quotation marks in a program							*	(*)	(*)
G-10	Understand and demonstrate the use of commas, colons, question marks, and semi-colons in a program							*	(*)	(*)
G-11	Understand and demonstrate the use of variables in a program							*	(*)	(*)
G-12	Run a hard copy of program output							*	(*)	(*)
G-13	Differentiate between string and numerical variables							*	(*)	(*)
G-14	Demonstrate the ability to choose a logical sequence of steps to perform a task							*	(*)	(*)
G-15	Correlate flowcharting with programming							*	(*)	(*)
G-16	Write and test a program to solve a specified problem							*	(*)	(*)
G-17	Predict the outcome of a given program							*	(*)	(*)
G-18	Use GOTO statements as infinite loops							*	(*)	(*)
G-19	Find and edit (debug) errors in student-made or given program							*	(*)	(*)
G-20	Use GOTO statements for program direction							*	(*)	(*)
G-21	Use IF/THEN statements							*	(*)	(*)
G-22	Use mathematical symbols for equality and inequality							*	(*)	(*)
G-23	Use FOR/NEXT statements to delay loops							*	(*)	(*)
G-24	Use FOR/NEXT statements to delay loops							*	(*)	(*)

		K	1	2	3	4	5	6	7	8
G-25	Write a simple subroutine using GOSUB and RETURN							*	(*)	(*)
G-26	Generate random numbers for READ/DATA statements							*	(*)	(*)
H.	**GRAPHICS/BASIC**									
H-1	Define graphics terminology and demonstrate related skills (see Glossary)									(*)
H-2	Write and design a plot program for specific output with geometric shapes using a grid									(*)
H-3	Identify the plot coordinates of specific single square									(*)
H-4	Predict graphic output of horizontal lines, vertical lines, and plot programs									(*)
H-5	Construct diagonal lines using FOR/NEXT loops									(*)
H-6	Construct letter/number characters									(*)
H-7	Create an original graphic, using various colors and shapes									(*)
I.	**GRAPHICS/OTHER**									
I-1	Create, edit, print and save using graphics software if available									(*)
J.	**SPREADSHEET**									
J-01	Define a spreadsheet and describe its applications								*	*
J-02	Define spreadsheet terminology and demonstrate related skills								*	*
J-03	Load a spreadsheet								*	*
J-04	Move the cursor easily along rows and columns								*	*
J-05	Enter and change values and labels								*	*
J-06	Use function commands to perform operations on rows and columns									

		K	1	2	3	4	5	6	7	8
J-07	Insert into or delete from two columns and/or rows into an existing spreadsheet								*	*
J-08	Format labels for a block of cells								*	*
J-09	Copy the contents of one cell to another, one column to another, one formula to another cell								*	*
J-10	Change the cell widths of an existing spreadsheet								*	*
J-11	Align column right, left, or centered								*	*
J-12	Change number style according to needs (general, percent, dollar, or exponential)								*	*
J-13	Use the locking-cell function								*	*
J-14	Use a spreadsheet for a specific purpose, such as computing grade averages								*	*
J-15	Recognize the application of spreadsheets by producing a document in another content area								*	*

(*) – optional

COMPUTER COMPETENCY SKILLS
High School

Student completing ninth grade in a Catholic High School in the Diocese of Phoenix should be able to demonstrate the following skills:

- Use the keyboard for general typing skills with a minimal proficiency of 35 words per minute
- Create a typical term paper using functions necessary to format, modify, edit and correct the paper; including margins, tabs, double spacing, spell check, footnotes, bibliographies, etc.
- Demonstrate knowledge of computer literacy (history and use of computer and operating systems)
- Integrate computer use in all subject areas

A sample introductory course follows:

KEYBOARDING/WORD PROCESSING

KEYBOARD: Use of the keyboard for general typing skills

WORD PROCESSING:

This course will focus on the use of the computer and word processing program to create a typical term paper. Students will need to be able to use the functions necessary to form, modify and correct the paper, including margins, double spacing, spell check, footnoting, bibliographies, and editing functions.

- Students will develop fluency in the operation of a computer, an understanding of computer word processing techniques and personal skills in operating and using a word processing system.
- Students will keyboard at the rate of 35 wpm

Associated Skills:

1. System loading procedure
2. Checking out the computer system
3. File-saving procedures
4. Properly turning off the keyboard
5. Cursor movement
6. Create and edit only
7. Upper and lower case characters
8. Deleting text
9. Restoring last deleted text
10. Text blocks: delete, duplicate, move
11. Search and replace
12. Tabs: clearing and setting
13. Free memory check
14. Print previewing
15. Halt printing
16. Returning to the menu
17. Formatting commands
18. Justified and unjustified margins
19. Paragraph indentation
20. Use a variety of printing styles
21. Subscripts
22. Superscripts

Advanced computer courses at the high school level may include, but are not limited to the following:

COMPUTER LITERACY

This course will develop basic word and data processing skills, such as: log software into the disk drive; operating computer equipment; formatting letters, reports and tables; document and data processing, including printing and editing of text, database management and spreadsheet operations.

Course Competencies

- Students will develop fluency in the operation of a computer, and understanding of computer word processing, data base management and spreadsheet techniques, including integrated operations and personal skills in the operation and use of a word processing system.

- Students will keyboard at the rate of 35 words per minute.

Associated Skills

1. System loading procedure
2. Checking out the computer system
3. File-saving procedures
4. Cursor movement
5. Create, edit and save a document
6. Print a document
7. Retrieve a document
8. Delete a document from disk
9. Set page margins
10. Set line spacing
11. Page breaks
12. Tabs: clearing and setting
13. Justify paragraphs
14. Print previewing
15. Center lines of text
16. Use search and search/replace
17. Copy, move, save and delete blocks
18. Create page headers and footers
19. Use automatic page numbering
20. Printing styles
21. Identifying cells in a spreadsheet
22. Key in cell values
23. Edit cell contents
24. Create spreadsheet formulae
25. Copy cell values and formulae
26. Print a spreadsheet
27. Change spreadsheet layout
28. Insert, delete and move rows/columns
29. Perform “what if” analysis
30. Design and create a database
31. Edit database records
32. Sort a database
33. Search for specified criteria
34. Create and print reports
35. Create a simple form letter
36. Integrate database records
37. Integrate a spreadsheet

MS-WORD (Microsoft Word 2.0 for Windows)

This course emphasizes the skills and concepts needed to take advantage of a full featured, icon driven word processor for Windows. Beginning with creating and editing documents, replacing selected text, the course goes on to include creating and editing tables, automatic spelling and grammar checking, use of the thesaurus, converting text into newspaper style columns, inserting pictures, frames and WordArt. Alphabetical and numerical sorting of data in columns, and form letters and mail merge functions are included in the second quarter.

- Students will develop increased capability to change previously spreadsheet formats.

  Associated skills

  1. Change column width
  2. Use global format
  3. Use range format
  4. Use the help key
  5. Use the escape key
  6. Use the @ functions
  7. Use automatic recalculation
  8. Insert and/or delete rows and columns

- Students will create and use templates and macros to simplify spreadsheet preparation and worksheet data entry.

  Associated skills

  1. Use pre-designed templates
  2. Plan a template design
  3. Create and use a template
  4. Create a macro
  5. Name a macro
  6. Use a macro

INDEPENDENT STUDY

For juniors and seniors options for special independent study may be offered based on capability and need. These courses are designed to allow independent pursuit of study involving an increase of the student's computer skills. A student proposes a goal and the steps necessary to achieve the goal. Examples of independent study include, but are not limited to the following:

- Computer Programming
  - Fortran
  - Basic
  - Turbo C++
- Autocad
- Music Prose and CuBase
- MS-Word
- Excel
- Lotus 1-2-3
- PowerPaint
- Frelance Graphics
- CorelDraw
- Mathcad

For complete Computer Curriculum Guidelines, see www.diocesephoenix.org/catholic schools.

Appendix D

TECHNOLOGY NEEDS ASSESSMENT

This instrument can be used to assess an individual school/diocese's present status in integrating applications of information technology into the curriculum or educational management process. This instrument may also be used with school/diocesan leaders to start serious discussion about future technology activity and planning.

Management and Assessment

1. Our school/diocese uses technology applications to assess student performance of learner outcomes.

   (Not Very Well) 1 2 3 4 5 (Very Effectively)

2. Our school/diocese uses technology to manage and group students for instruction based upon assessment of student performance of learner outcomes.

   (Not Very Well) 1 2 3 4 5 (Very Effectively)

3. Our school/diocese uses technology to report student progress and performance in accomplishing learner outcomes to parents/guardians/community.

   (Not Very Well) 1 2 3 4 5 (Very Effectively)

4. Our school/diocese uses technology in daily operations for the management of student information and records.

   (Not Very Well) 1 2 3 4 5 (Very Effectively)

Instruction and Instructional Design

5. Our school/diocese uses technology to design and develop individualized educational plans (IEPs) and personalized learning plans (PLPs).

   (Not Very Well) 1 2 3 4 5 (Very Effectively)

6. Our school/diocese integrates, not relates, the applications of technology, outlined in the district curriculum guide document, into all course and/or grade level learner outcomes.

   (Not Very Well) 1 2 3 4 5 (Very Effectively)

7. Our school/diocese uses technology to manage print and non-print information resources used to provide instruction based upon learner outcomes. Our system has a plan to help share media center resources among all schools in my system.

   (Not Very Well) 1 2 3 4 5 (Very Effectively)

8. Our school/diocese has provided easy access to and appropriate amounts of information technology for students to use in accomplishing learner outcomes.

   (Not Very Well) 1 2 3 4 5 (Very Effectively)

9. Our school/diocese has developed an integrated information technology curriculum based upon identified exit Outcomes. This means that all students make effective, routine use of computer graphics, hypermedia, desktop presenting, spreadsheets, databases, video production, word processing, desktop publishing, and other applications of technology that increase a student's personal power and productivity.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

10. Our school/diocese has studied and applied the effective uses of distance learning technology for the delivery of instruction, and has implemented it when appropriate.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

11. Our school/diocese integrates and uses technology applications as more than "Electronic Workbooks" in the instructional process. Our use of CAI (computer aided instruction) is solidly based upon research and is used as a supplement to "conventional" instruction to help students master basic skills.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

12. Our school/diocese provides students and teachers access to data available through computerized information retrieval systems and online databases.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

13. Our school/diocese recognizes that information technology can be helpful to TAG/special needs children and to children at risk. We have made a commitment to provide appropriate hardware.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

14. Our school/diocese recognizes that computers can contribute to and/or help alleviate some equity issues. We have made a substantial effort to ensure equity in technology access and types of use. For example, we have been careful to avoid using drill and practice software mainly for lower socioeconomic status homes, while using more sophisticated applications mainly with higher socioeconomic status students.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

Productivity and Staff Development

15. Our school/diocese has developed an information technology plan. The plan is based upon learner outcomes as well as our system's vision of our educational future.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

16. Our school/diocese has developed a technology program for teachers which places the use of technology to empower teachers. Teachers have good access to technology and software for their professional use.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

17. Our school/diocese has a well-qualified media/technology coordinator(s) who provide on-site support to me when I have technical problems or questions. These technology specialists have a leadership role in shaping the use of information technology in our school/district/diocese.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

18. Our school/diocese encourages and supports staff development, workshops, and professional development activities in information technology. Good incentives have been provided to encourage teachers to increase knowledge and skill in making effective use of computers.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

19. Our school/diocese provides technology purchases based upon requests and innovative funding proposals developed by teachers. We have access to any instructional technology needed to design to provide instruction based upon learner outcomes.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

Moral and Ethical Issues

20. Our school/diocese teaches computerized technology in an environment that models and teaches values and ethical principles.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

21. Our school/diocese has developed policies related to the ethical uses of computerized technology.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

22. Our school/diocese makes substantial effort to ensure gender equity in the use of computerized technology.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

23. Our school/diocese makes substantial effort to ensure cultural/racial equity in the use of computerized technology.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

Administrative Use and Application

24. Our school/diocese requires that all staff use and model the effective and appropriate use of technology.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

25. Our school/diocese has integrated the effective use of technology into all administrative and managerial functions.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

26. Our school/diocese has a lived plan for integrating the appropriate use of technology into all aspects of our organization.

(Not Very Well) 1 2 3 4 5 (Very Effectively)

Results and evaluation of survey findings should serve as a foundation for establishing a technology plan for the school/diocesan program.

Points To Consider

- Arrange responses according to individual scores.
- Survey points scoring in the 1 or 2 range need to be looked at first; if applicable, long and short range plans should be established to work on these areas.
- Survey points scoring in the 3, 4, and 5 range need to be evaluated for the next steps and these steps need to be incorporated into your long and short-range plan.

Appendix E

SELECTION CRITERIA FOR HARDWARE ACQUISITION

Hardware

This appendix deals with the acquisition of technology hardware. This may include, but is not limited to the following: computers, monitors, printers, scanners, modems, modem servers, routers, CD-ROMs, equipping a computer lab, interactive classrooms, VCR's, televisions, videodisc players, cameras, FAX machines, CAD/CAM classrooms, photography, Projection devices, adaptive technologies, labs/classrooms, satellite hook-up, library/media management hardware, administrative technology hardware. Plans for preventive maintenance, security, and protection of all equipment should be included. Evaluation Criteria Components:

Compatibility and Industry Standards

- Is the hardware compatible and futuristic in regard to other pieces of hardware in your technology plan?
- Are there industry standards for similar hardware components?
- Is transfer of operating knowledge from other technologies applicable?

Ease of Operation

- Can hardware be installed and maintained by local staff persons?
- Are adult and student users able to access/use hardware with minimal additional technology competencies?
- Can hardware be serviced, maintained, and upgraded locally?

Support

- Is technical support provided by vendor at minimal cost and available in a variety of mediums?
- Are printed and electronic manuals written and understandable?
- Does the vendor have a strong Research and Development Department?
- Does the vendor have a strong commitment to the Educational Community?

Cost

- Is the cost competitive within the market place for like specifications?
- Are the required/requested components included in the purchase price?
- Are detailed and renewal warranties available?

Specific Considerations

- Is there the capability for and ease of using multimedia?
- Is the equipment net-workable?
- Does the hardware includes sound utilities, video input/output, etc?
- Is the built in memory sufficient and expandable?
- Is the hard drive storage adequate and expandable?
- Are computers and printers compatible?
- Are there adequate electronic devices available for backup and storage of data?
- Are printers adequate to handle current and future job loads?
- Are monitors ad projection devices adequate for small and large groups?
- Do presentation systems have quality sound in and out capabilities?

Ordering Suggestions

- Occasionally group purchases/bundles are available; investigate current or pending offers
- Hardware packages may not provide adequate memory for necessary program functions; consideration should be give to the savings of the package vs. the cost of additional memory upgrades.
- Consideration must be given to whether a line of equipment is being discontinued; what implications does the discontinuance have on issues such as maintenance.
- Review the type of warranty that is provided on the hardware.
- Maintain copies of all warranties.
- When purchasing software, it is recommended that companies offering a 30 day preview of software be used whenever possible.

Appendix F

SOFTWARE GUIDELINES

This appendix deals with the acquisition of software. All software acquisitions should interface with the current and future hardware components of the technology plan. When evaluating software the following points should be kept in mind:

- Reliability and track record of the vendor
- Options for technological support
- Compatibility of software with current and future hardware
- History of product updates/revisions
- Preview/sample options
- Compatibility with other programs being used
- Ease of operation and installation

Sample Software Guidelines

Widespread interest in the educational application of computerized technology indicates the on-going need to comment on its application in the schools of the Phoenix diocese. These comments assume that school/parental emphasis and use are placed within the context of ethics and use of technology. At present, there are six areas that must be addressed:

1. Teaching Productivity Software.

2. Teaching with Computerized Technology.

3. Computer Assisted Instruction.

4. Facilitating Information Access with Technology.

5. Teaching Computer Programming.

6. Staff and Administrative Use of Technology.

7. Technology Assisted Instruction.

Teaching Productivity Software

Teaching productivity software includes the use of keyboarding, word processing, data bases, spreadsheets, telecommunications, graphics, and desktop publishing. Application of skills and using software is the goal, not merely mastering the use of the program itself. For example, teaching word processing to students should be related to the teaching of the writing/revising process and application of those word processing skills should be an expectation for those students. Or, teaching the use of a database management package should be related to a project involving organization and analysis of information.

<u>Application:</u>

Productivity or application should be a major goal of the computerized technology curriculum in the schools.

Teaching with Computerized Technology

Computerized technology has specific capabilities that make it an ideal teaching tool for many classroom situations, but it is not the ideal medium for all classroom instruction. If the focus of a lesson were hypothesis formation and testing, deductive reasoning, analysis, sequencing, classifying, or categorizing the instructive nature of technology does make it an ideal teaching tool. In this situation, the technology helps focus understanding by providing feedback to the students in which they may use to modify their thinking strategies.

Application:

Teacher use of computerized technology in the classroom for instruction in the various subject areas is a goal toward which schools should consistently move.

Computer Assisted Instruction

Computer assisted instruction considers the computer as a means to help the student reinforce the basic subject matter in the curriculum. In this interactive application it could be used to:

1. Develop and reinforce skills and proficiency (as in spelling and mathematics).

2. Increase understanding in a variety of subjects through supplementary exercises and problem solving activities as well as;

3. Manage information efficiently.

The usefulness of any computer-assisted instruction for enrichment and deeper understanding of basic subject matter is primarily dependent upon the appropriateness of the software and the teacher's ability to incorporate the software into the lesson design/plan.

Computer-assisted instruction software needs to be evaluated or prepared in accord with the norms one would use in the critical evaluation of any supplementary instructional materials, e.g.:

- degree of relationship between the objective of the supplemental program and the concept/skill being taught in the basic curriculum
- interaction between student and subject matter (or teacher)
- quality use of time
- motivational level
- level of thinking involved
- clarity of instruction
- sequentially progressive program versus repetitious presentation/practice
- single lesson versus part of a larger program
- method of feedback to student
- ease of teacher monitoring/record keeping

One of the differences between computer software and most other supplementary materials seems to lie in its complexity. Most computer software offers various skill levels. The student is only required to learn enough about the operation of the computer to manipulate the software. Thus, the decision to use a computer for computer-assisted instruction rests essentially on the evaluation of the quality and quantity of the software available and its compatibility with the program of basic instruction.

Application:

Computer-assisted instruction is essential in today's society and needs to be further developed.

Facilitating Information Access with Technology

Providing access to a vast array of information resources is a primary skill students will need to be successful in life. Emphasis should be given to teaching these information retrieval skills through the existing media/library curriculum. Students should be exposed and have experience in a variety of programs and services; these should include but not be limited to: commercial online services, commercial program/curriculum services, web sites/pages, laser disks, CD-ROMs, on line libraries/resources, e-mail programs, video conferencing, chat forums, etc.

Application:

Exposure and real life experiences in electronic information retrieval/sharing needs to be integrated in the existing curriculum.

Teaching Computer Programming

Teaching computer programming is appropriate for those students who have the interest and the aptitude. The formal structure and abstract conceptualization in programming make learning to program inappropriate for some students. However, for the students who have the aptitude for it, learning to program can help them develop skills in logic and analysis which can be of value in various problem-solving situations.

Application:

Teaching computer programming is for those students who have the interest aptitude for it. All students may be introduced to programming, but not all students need to study it in-depth.

Staff and Administrative Use of Technology

Computerized technology can greatly facilitate the many staff and administrative tasks which are part of a school. In looking to hardware and software for school use, it is good to keep the following in mind:

- schools should decide what tasks and reports are needed and purchase hardware and software that will accomplish these.
- school personnel need to be trained in accord with the equipment to be used.
- when hiring personnel, preference should be given to applicants with knowledge and experience in computerized technology.
- cost factor (initial expense, time saved performing tasks, long range benefits, tasks for which it is used).

Application:

Staff and Administrative use of computerized technology is encouraged when it is efficient and cost effective

Technology Assisted Instruction

Technology assisted instruction considers computerized technology as a means to enhance the student's understanding of the subject matter in the curriculum. In this interactive application it can be used for retrieving information, building skills, processing information, producing media, and communicating current messages. Technology assisted instruction also takes into consideration student motivation, learning styles, special needs, multi-cultural awareness and futuristic education.

Application:

Technology assisted instruction should be used to enhance the thinking processes in organizing, analyzing, and interpreting information and developing evaluative skills in order to become an intelligent consumer of information for the purpose of solving problems and making decisions.

Sample Software Evaluation Form/Instrument

Reviewer's Name: _____
Date: _____
Program/Software Title: _____
Copyright Date_____
Vendor: _____
Author(s)/Designer(s): _____
Cost: _____
Program Operating Requirements: _____
Necessary Additional Software: _____
Program Components: _____
Purchase Options: _____

Program Overview and Description

Curriculum area(s) and specific topic: _____
Prerequisite skills necessary: _____
Appropriate users _____

Type of Programs	Yes	No
Teaching Productivity Software		
Teaching With Computers		
Computer Assisted Instruction		
Teaching Computer Science		

Office Use
Instructional group size: *Individual* *Small Group* *Class*
Is this program an appropriate instructional use of the computer? *Yes* *No*

Briefly list the programs objectives_____
_____
_____
_____
_____

	Yes	No	NA
Are the objectives clearly stated in the program or in the documentation?	____	____	____
Are they educationally valuable?	____	____	____
Are they achieved?	____	____	____

Briefly describe the program.

Please check Yes, No, or Not Applicable (NA) for each question below. To add information or to clarify answers use "Comments" at the end of each section:

Educational Content	Yes	No	NA
Is the program content accurate?			
Is the content appropriate for intended users?			
Is the difficulty level consistent for interest and vocabulary			
Is the content consistent with National Curriculum Standards for the particular program areas?			

Is the content able to be integrated into current program as opposed to a separate add on component?			
Is the content free of racial, gender, ethnic, political bias and other stereotypes?			
Is the content presented in an interactive medium incorporating higher level thinking skill processes?			
Is the content presented to multiple learning intelligence?			
Comments:			

Presentation	**Yes**	**No**	**NA**
Is the program free of technical problems?			
Are the instructions clear?			
Is the material logically presented and well organized?			
Do graphics, sound, and color, if used, enhance the instructional presentation?			
Is the frame display clear and easy to read?			
Comments:			

Teacher Use	**Yes**	**No**	**NA**
Is record-keeping possible (within the program or through documentation worksheets)?			
Does a teacher have to monitor student use?			
Can teachers modify the program?			
Is the documentation clear and comprehensive?			
Does the vendor provide technical support?			
Comments:			

Overall Evaluation (Check one)
_____ Excellent program. Recommend without hesitation.
_____ Pretty good program. Consider purchase.
_____ Fair. But might want to wait for something better.
_____ Not useful! Do not recommend purchase.
Comments:

Appendix G

BUILDING MODIFICATION GUIDELINES

As the site/diocese plans to integrate technology into their program, emphasis needs to be given to modifying existing space and facilities to accommodate technology. If the site/diocese is planning on new construction the following points should be considered. Building committees/commissions should be aware of the physical needs and utilities necessary to accommodate technology. A requirement for awarding construction job(s) to an architect should include an awareness of the role of technology in education when:

Connectability

Internal - Network Design

- Provisions for transmitting data between stations: twisted pair, coax, fiber; best recommendations: 10Base T or 100Base (Fast Ethernet)
- In new construction conduit needs to be laid so adding wire will be least expensive
- Analog and digital phone lines
- Face plates in each room to accommodate a variety of networking/wiring options
- Provisions for decided network topology (star, bus ring).
- Location and selection of hubs bridges, switches, routers, and modems. *
- Location of equipment/wiring closets.*

External - Internets: Wide Area Network (WAN) and Intranets: Metropolitan Area Networks (MAN)

How a site/diocese will connect between buildings and other remote sites need to be considered when planning a WAN.

- Provisions for Internet connections: direct or dial up.
- Provisions for modems, modem servers, and Dial Servers.
- Provisions for router options: Router: 56K, T1, T3 Lines; CSU/DSU; LAN to LAN access; Dial on Demand (DOD).
- Provisions for Building to Building Links: DOD; spread spectrum over a network bridge; Microwave; ATM (Asynchronous Transfer Mode); FDDI (Fiber Distribution Data Interface).

Presentation

- Provisions for large screen colored monitors with computer and VCR connections for instruction and presentations.
- Provisions for LCD projection devices.
- Provisions for room darkening for better display resolution.
- Provisions for auditorium type screen/projection for large group presentation.
- Provisions for flexible computer lab set up.
- Provisions for adequate grounded electrical outlets, with options for expansion.
- Provisions for audio and video conferencing.
- Provisions for adequate sound systems.

Atmosphere Control

- Provisions for climate control for air conditioning, heat, and dust control in all areas where advanced technology will be used.
- Provisions for adequate and appropriate lighting.
- Provisions for marker boards to decrease dust.

Space Design

- Provisions for furniture that will accommodate all technologies correctly.
- Flexible spacing which will allow for a variety of arrangements using a variety of technologies.
- Equipment positioning/location for the age appropriateness of the user/learner.
- Provisions for adding future networks and hubs with minimal redesign.
- Adequate and expandable storage options.

Security

- Provisions for the safe use of all equipment/services.
- Provisions for the security of all equipment and software.
- Provisions for the security of all user's data and information.
- Provisions for the security of all connect sites/webs to the LOAN.

*Knowledge of network fundamentals and rules is essential

Appendix H

EXISTING INVENTORY SURVEY

Component A

Hardware

This component deals with identifying all existing technology hardware. This may include but is not limited to the following: computers, monitors, printers, scanners, modems, modem servers, routers CD-ROMs, equipping a computer lab, interactive classrooms, VCR's, televisions, videodisc players, cameras, FAX machines, CAD/CAM classrooms, photography labs/classrooms, satellite hook-up, library/media management hardware, administrative technology hardware.

Item	Make	Model	Purchase Date	Specifications	Location	Time Use

Component B

Software

This component deals with existing computer software, laser discs, CD-ROM discs, and/or information retrieval programs.

Program	Platform	Version	Vendors	Copyright	Location	Requirements License

Component C

Building Modification

This component deals with outlining any building modifications that will be required to facilitate all the phases of components A and B. Areas to be included in this component are wiring for network systems, two-way distant learning, modem hook ups, satellite reception, other buildings/institutions; climate control to accommodate optimum learning and technology usage; location of computer centers, video labs, CAD classroom, media centers; location of central server systems, technologies in the individual classrooms/departments; and furniture to support the technology plan. If a new building or addition is undertaken it is recommended that many of these technology specifications be incorporated into the original building plan since it is more cost effective to incorporate when building as opposed to adding later. It is recommended that those responsible for decisions concerning building modifications have a basic knowledge of types of networking, cabling specifications; federal, state, and local building codes; fire codes, communications mediums, etc.

Location	Modifications	Cost	Time

SUCCESSFUL ORGANIZATION TRAINING MODELS

Technology provides powerful tools for educational management, communication and teaching. These tools have become increasingly critical success metrics for the administrator, teacher and student. The biggest question facing most educators is not about the value of educational technology but where to obtain training in computer skills that will have high relevance and consistent quality.

Training Criteria

The criteria that diocesan training programs should be measured against are:

- Training sessions are taught by educator/trainers from within the organization.
- Educator-trainers are selected based on teaching as well as technical skills.
- Educator-trainers serve for at least two years to ensure continuity.
- The training curriculum is based on programs and examples designed for educators.
- The effectiveness and quality of the training curriculum has been well demonstrated.
- Training curriculum has a consistency across institutions so that a common foundation is established that facilitates sharing and communication.
- There is a "wholistic" approach to training that sequences skills appropriately and sees the broad context for skills.

There are clear timelines, goals, rewards (practical outcomes) for training participants. Extraordinary training programs will also:

- Provide the planning system, timeline and curriculum for your in-service training.
- Train your own internal personnel as trainers who will facilitate the in-service training in your school.
- Offer relationships and resources with a sponsoring education institution or technology company that will ensure long-term support and on-going professional development for the educator-trainers.
- Have a training curriculum consistency across institutions and systems locally and nationally to facilitate broad sharing and communication.

Examples

<u>Intel ® Teach to the Future</u>

The Intel® Teach to the Future program is a worldwide initiative that brings together resources from leading high-tech companies to improve technology use in the classroom. This program was designed to address the challenges teachers face in effectively applying computer technology to enhance student learning. The training incorporates the use of the Internet, Web page design and multimedia software.

The technical content expertise and the instructional skills of the Master Teacher are critical to the success of the program. The Local Education Agency (LEA) nominates Master Teachers to the Regional Training Agency (RTA). LEAs may include school districts, private schools, or a school consortium. The RTA selects the Master Teachers and manages the program. Master Teachers must apply directly through their LEA.

Objectives

- Increase effective integration of computers in the classroom.
- Build and sustain a critical mass of technology savvy teachers in local schools.
- Provide access to technology in under-served schools.

Curriculum/Components

- Provides flexible curriculum delivered in 10, four-hour modules by the Master Teachers. Training modules must be delivered in consecutive order and should allow time for teachers to practice in between training sessions.
- Includes face-to-face, hands-on applied training.
- Focuses on student use of technology to enhance learning through research, communication, and productivity.
- Incorporated teacher teamwork, problem solving and peer unit-reviews.

Benefits

- Master Teachers receive training stipends at the conclusion of each training (first training - $900, second training - $1,000, third training - $1,500 and each consecutive training – a $1,500)
- Master Teachers receive a $7,000 equipment grant and a one-year subscription to the SchoolKit* Web site from the Bill and Melinda Gates Foundation.
- LEAs receive a laptop computer, Hewlett-Packard CD burner and Microsoft* Office 2000 and Microsoft* Encarta* for the use of each Master Teacher.
- Master Teachers receive Intel Master Teacher Certification and opportunities for graduate credit.

Master Teacher Responsibilities

- Recruit and train a minimum of 22 qualified participant teachers each year for three years.
- Participate in five consecutive days of Master Teacher training as well as a three-day
- Gates Foundation weekend seminar on standards integration.
- Perform other duties as assigned including uploading unit plans, program evaluation and program paperwork. For a complete list of Master Teacher responsibilities, check with your LEA.

New Frontiers for Catholic Schools Project

The New Frontiers for Catholic Schools (NFCS) project is a collaborative effort of the NCEA and the Center for Religious Communication at The University of Dayton. The project supports Catholic schools in the design and implementation of integrated interdisciplinary technology plans to enhance excellence in the curriculum. Each summer 10 to 12 Catholic schools are invited to participate in the NFCS Conference and join the NFCS International Network. For more information about the conference, publications, video resources, and networking with the NFCS project, contact:

Sr. Angela Ann Zukowski, MHSH, D.Min.
The University of Dayton
513-229-3126

Appendix J

ADMINISTRATIVE/MANAGEMENT COMPENTENCIES IN TECHNOLOGY ASSESSMENT TOOL

Assess individual and organizational computer-based management competencies by asking the following questions:

Is every administrator able to:

1. Connect, disconnect and reconnect a computer and printer? (basic skills)
2. Locate, open and relocate already-saved documents? (basic skills)
3. Understand system, memory and storage as they apply to software and hardware? (basic skills)
4. Use and understand the importance of virus protection software? (basic skills)
5. Compose, save and print letters on a computer? (word processing)
6. Look up student and parent information on a computer? (data base)
7. Create automated customized letters with your student information? (mail merge)
8. Construct a financial report and produce charts on the computer? (spreadsheet)
9. Produce memos and certificates with graphics on the computer? (graphics)
10. Create a slide presentation for parents or school/district board? (slide show, graphics)
11. Send and receive information and files via electronic mail? (telecommunications)
12. Use the Internet? (telecommunications)

Is every office support staff member able to:

1. Connect, disconnect and reconnect a computer and printer? (basic skills)
2. Locate, open and relocate already-saved documents? (basic skills)
3. Understand system, memory and storage as they apply to software and hardware? (basic skills)
4. Use and understand the importance of virus protection software? (basic skills)
5. Compose, save and print letters on a computer? (word processing)
6. Create files that store, organize and report information such as class lists? (data base)
7. Create automated customized letters with local student information? (mail merge)
8. Construct a financial report and produce charts on the computer? (spreadsheet)
9. Produce newsletters and certificates with graphics on the computer? (graphics)

10. Scan text and images for import into documents? (multimedia productivity)
11. Send and receive information and files via electronic mail? (telecommunications)
12. Use the Internet? (telecommunications)
13. Do system and software installation? (basic technical support)
14. Troubleshoot computer systems to identify problems? (basic technical support)
15. Troubleshoot a network to identify problems in printing or communicating? (basic technical support)
16. Provide and maintain a backup system for data? (basic technical support)

Is every teacher able to:

1. Connect, disconnect and reconnect a computer and printer? (basic skills)
2. Locate, open and relocate already-saved documents? (basic skills)
3. Understand system, memory and storage as they apply to software and hardware? (basic skills)
4. Use and understand the importance of virus protection software? (basic skills)
5. Compose, save and print letters on a computer? (word processing)
6. Create files that store, organize and report information such as class lists? (data base)
7. Create automated customized letters with student information? (mail merge)
8. Construct a financial report and produce charts on the computer? (spreadsheet)
9. Produce memos, certificates and bulletins with graphics on the computer? (graphics)
10. Scan text and images for import into documents? (multimedia productivity)
11. Take pictures digitally for import into documents? (multimedia productivity)
12. Access CD reference resources? (multimedia productivity)
13. Create a slide presentation? (slide show, graphics)
14. Send and receive information and files via electronic mail? (telecommunications)
15. Use the Internet? (telecommunications)
16. Generate grades and progress reports electronically? (grading)
17. Do system and software installation? (basic technical support)
18. Troubleshoot computer systems to identify problems? (basic technical support)
19. Troubleshoot a network to identify problems in printing or communicating? (basic technical support)
20. Provide and maintain a backup system for data? (basic technical support)

Appendix K

MARKETING GUIDELINES

Bragging Rights--A Practical Guide to Promoting Your Successes Through Public Relations

There's an old saying--"advertising is what you pay for, PR is what you pray for." Public Relations can make your successes visible in the media so others can learn from them and your school/diocese can receive the recognition it deserves.

Publicity is a powerful tool when it's used effectively. The following paragraphs provide ideas on how you can create the "magic" behind generating favorable publicity. It also provides guidelines on how to handle the press should they approach you.

Let's start by defining publicity--think of it as a way of disseminating information to attract public attention. While publicity doesn't require a large cash outlay, it does require time. And even by investing your time, publicity is not always easy to obtain. It takes practice, energy and endurance.

Let's say your school/district has just acquired new technology. The computers have been bought and installed and great things are happening. You want your community to know about these successes. How do you go about publicizing them?

First, start with a plan. What are your objectives? Deciding what you want publicity to do for you up front will help you stay on track. Some other questions to ask yourself are:

1) Is the time right?

   There's no use promoting your success if people can't relate to or react to it. Are there any sensitivities in the community that would make your news controversial?

2) Is the message right?

   Ensuring your image is right is critical. For better or for worse, publicity can stick and affect your reputation. Put yourself in the shoes of your target audience as you craft your message.

3) Are there resources available?

   To approach the media effectively, it is important that you have someone who can create high quality releases and someone who is comfortable communicating with the media.

Building a PR Plan

Begin by listing your *Objective*s. For example, are you promoting a fund raising effort, increasing community awareness of a school/district program, establishing perceptions of your school/district being a good community citizen, etc.

Next, list your *Strategie*s. These are specific steps on how you will accomplish your objectives. Include those responsible for each action and the timetable for the completion of each step.

Describe your *Target Audience* so you're clear on who you want to reach with your message. Think carefully about your objectives and focus your efforts toward those who will be interested in your message.

Define the *Target Media* you plan to use. Once you know what message you want to get across to your audience, you can start to think about what media to use. Calculate which publicity efforts will reach the key people you wish to influence.

- Newsletter (for parents, for diocese, the general public)
- Conference
- Public Appearance (school/diocese board meetings, local businesses, other school/dioceses)
- Seminar/Workshops
- Local/Regional or National newspaper
- Radio
- Television

Compiling Your Own Media List

Now that you have a plan, it's time to approach the media. Some people believe that the key to public relations is "contacts-knowing the right people." While that is helpful, it's not essential. Having a professional approach is the real key. Part of that is knowing who to approach and how.

In most situations, a good listing of local media is all you will need. If you're in a large city, you can often buy a copy of a local media list that has been compiled by a public relations firm.

To compile your own list, you may way to use a format like this:

++

Newspaper Sample Listing

Name:_____
Frequency: Daily_____ Weekly_____Other:_____
Mailing Address:_____
Street Address:_____
Managing Editor:_____
Business Editor:_____
Assignment Editor:_____
Community Affairs Editor:_____
Photo Editor:_____
Deadlines:_____

++

Creating a Press Release

So now it's time to work your plan. The first step is to create a press release. This is essentially a brief article designed to stimulate media coverage. Regardless of how good your effort is, do not assume that it will be printed verbatim, although it can happen. Some people disregard press releases as they see them as advertisements. Others see them as good idea generators. Just the same, a press release is the primary tool of public relations. Three ways to make yours stand out are:

1) Don't send too many.

2) Write them in the style of a news story. Make sure they answer the five basics: Who? What? When? Where? Why? and when appropriate, How?

3) Present the release on one or two pages, perfectly typed and double-spaced.

An excellent structure for a press release is the "inverted pyramid" since it is an ideal way to tell a story.

- Lead (Your most important item)
- Second most important item
- Third most important item
- Fourth most important item
- Fifth most important item

Conclusion

The lead should start your story with a nugget that summarizes the point of your release. It might seem logical to "build up" to more important aspects as magazine feature articles often do, but it is better to follow a "newspaper" example and "cut from the bottom" to keep your release brief and powerful. A good press release will allow a reader to rapidly glance through the information to assess if the story is of interest.

Some questions to ask yourself to get your release started:

1. The purpose of your release?
2. The main point of your release? (this will become your lead)
3. The elements: Who? What? When? Where? Why? How?
4. Which of the above elements do you include in the press release?

Leave out items you don't want to promote. Don't include negative information. Make sure your information is accurate. If you can't verify it, don't include it. If you aren't certain about your skills in this area, work with someone who will ensure these items are professionally handled.

Media Follow-Up Calls

Once you have sent materials to the media, your job is only half finished. A follow-up call is crucial to the success of a publicity campaign. Some PR gurus make it a practice to limit the information provided in this phone call to two minutes. If you go longer, it is likely that the person isn't listening. Do not open your call with "Did you get information?" Instead say, "I recently sent you information in _____, and would like to provide some additional information. Do you have a minute?"

You've Got An Interview

You've done it. You will be interviewed by the local newspaper. Much of your work is done but here are some tips to ensure the interview goes smoothly.

- If a reporter calls you for an interview you did not initiate, determine why he/she is calling. Ask for the deadline and say that you will call back before the deadline.
- If you feel unprepared and uncertain, do not let the reporter interview you at that time. Ask if you can reschedule it at a later time.
- Don't let a reporter tour your school unless everything is in very good shape and the staffed is prepared. It is difficult to change a first impression.
- Interviewees who are unskilled in diplomacy or insecure will benefit from rehearsal. Practice so that the kinks are ironed out before the real interview.
- There is no such thing as "off the record". Do not say anything that you would not want to read in print.

You've now seen what it takes to elevate your school to a higher level of recognition. You have learned how to use the tool of public relations so that people will know and talk about your successes. Publicity is a prime part of marketing. It is also more. It is that good feeling when your institution profits because of good publicity; or when your school/ district's cause makes a positive impact on the community. That is when publicity power it at it's best.

Appendix L

DIOCESE/SCHOOL TECHNOLOGY SELF-ASSESSMENT

The following items reflect the components of a successful integrated technology plan, and may be used in a variety of formats. (e.g. checklist, yes-no responses, ranking (1-5), etc.)

Technology Committee/Planning Group/Task Force

1. Our diocese/school has a technology committee/planning group in place.

2. The technology committee/planning group has regular meeting times-minimum: once per quarter.

3. The technology committee/planning group is made up of not less than six and not more than 15 members.

4. Membership on the technology committee/planning group represents various constituencies with a range of technology expertise; i.e., classroom teachers from each building, each level, a variety of subject areas, media specialists, school board members, community members, and administrators.

5. The Media Specialist serves on the diocese/school/system technology committee/planning group.

6. Each teacher, administrator, and board member is provided with a list of technology committee/planning group members and is encouraged to give input to the appropriate member.

7. Membership terms are staggered to allow for a variety of leadership and views over time.

8. Compensation for meetings outside the school day is provided to technology committee/planning group members. (It may include trade time, extra pay, opportunities for further training, etc.)

9. The technology committee/planning group meets at a variety of times to accommodate schedules of the members.

10. There is an established procedure for setting the agenda for each technology committee/planning group meeting.

The Diocese/Site Technology Committee/Planning Group

1. Determines the vision of technology based on diocese/school system goals and desired student learning and/or out come.

2. Develops a multi-year technology plan that includes an annual listing of priorities and cost projections.

3. Revises the district/site system Technology Plan annually.

4. Makes staff development recommendations to administrators and district/site system staff development committee/planning group.

5. Makes recommendations to administrators and/or school board regarding technology purchases and utilization.

6. Establishes and maintains communication with staff through various avenues such as: faculty meetings, distribution of meeting minutes, and a technology newsletter.

7. Addresses special needs technology and equity issues.

8. Recommends an annual technology budget that provides for each building and grade level.

9. Develops, articulates, and educates staff about a school software policy and ethical guidelines.

10. Insures diocese/school compliance with state/regional accreditation standards if applicable.

11. Ensures that every building, grade level, and subject area is afforded technological opportunities through fair and equitable assignment of resources.

12. Conducts a needs assessment periodically that includes community, staff, board, and student components.

Technology Staff Development and In-Service

1. Staff development is driven by identified teacher needs.

2. Training is offered on a variety of topics for teachers at each grade level and subject area.

3. The technology training is integrated into the curriculum.

4. A comfort level is established for technology use.

5. Staff is made aware of emerging technologies.

6. In-service activities address various levels of staff expertise.

7. Staff development is delivered in large and small groups.

8. The diocese/school calls upon in-house experts, regional institution/college personnel, vendors, community people, and out of area trainers for presenters.

9. Some in-service is planned to instruct students and teachers at the same time.

10. The diocese/school annually establishes a separate staff development and in-service budget.

11. Creative options for staff development are explored-Fiber Optics, use of rotating substitutes, summer institutes, etc.

12. Staff is afforded the opportunity to attend local/regional/state/national conventions and workshops that have strong technology components.

13. Technology in-service is ongoing throughout the year.

14. The diocese/school encourages site visits and/or contacts with other schools integrating various technologies before making major decisions.

15. Staff is provided adequate time to practice/perfect skills introduced.

16. Each teacher has access to a computer for personal productivity.

17. Teachers are allowed to use diocese/school equipment at home for school related activities (classes, learning new programs, writing curriculum, previewing software, etc.).

18. Effective use of technology is a factor in performance evaluation of staff.

19. Administrators and presenters model the effective use of technologies when presenting.

20. Telecommunications access to remote information services and/or Internet is maintained and encouraged.

Technology Coordination

1. The diocese/school has a Technology Coordinator with adequate time to perform duties related to technology.

2. Each building media specialist/director supports technology use by staff and students and works closely with the Technology Coordinator.

3. The diocese/school has a Technology Coordinator job description with specific duties and responsibilities defined.

4. The Technology Coordinator and other building resource people are provided with professional development opportunities.

5. The Technology Coordinator is a member of the technology committee/planning group.

6. The Technology Coordinator partners with teachers to support their curriculum based use of technology as a tool for instruction.

7. Each building administrator encourages and supports the infusion of technology into subject area curricula.

Site System Communication

1. Staff is aware of the existing diocese/school resources-equipment, hardware, and software.

2. There is a current inventory list of hardware and software that has building wide distribution.

3. The diocese/site has a technology newsletter or another vehicle for communicating with staff about new technology acquisitions, tips, available grants, possible workshops, and site system expectations.

4. Parents/guardians throughout the diocese/school are aware of the technology available to their students in the school and how that technology is used for learning.

5. Staff meetings include a regular technology update.

Equipment Repair, Maintenance and Upgrading

The diocese/school:

1. Has an annual commitment for purchase of equipment.

2. Has a schedule for equipment upgrade and replacement that ensures equity between buildings and grade levels.

3. Has a procedure established for new equipment and software purchase that includes investigation, vendor presentation, site visits, and building license considerations.

4. Has established a software and copyright policy that is distributed to each staff member.

5. Encourages the purchase of lab packs, multiple use and site license

6. Has the necessary equipment to hack up essential computer data.

7. Secures maintenance contracts when determined to be cost-effective.

8. Designates an individual to do regular maintenance and basic diagnostic procedures before sending equipment out for repair.

9. Has a repair technician or maintains a relationship with one or several vendors and/or repair services.

10. Has a written repair procedure distributed to all staff.

11. Has a repair form to clarify problems.

12. Informs staff of procedures for requesting equipment purchase, repair, or maintenance.

Budget and Funding

The diocese/school:

1. Allocates financial resources for technology through annual line item designation in the budget, enabling staff to plan and prioritize acquisition of hardware, software, and training.

2. Has an annual budget allocation for equipment upgrade, repair, and maintenance.

3. Actively evaluates and pursues alternative funding sources such as grants, business partnerships, chapter funds, support levies, computer fees, pilot projects, and lease/purchase plans.

4. Attempts to fund innovative individual teacher projects that utilize technology.

5. The diocese/school allocates funding for telecommunications line charges and services fees.

6. Takes advantage of discounted prices on hardware and software provided by central purchasing or other cooperative purchases.

7. Assures fair and equitable assignment of funds among building, grade levels, and subject areas.

8. The Media Center budget has separate line items and sufficient amounts budgeted for:

    - hardware
    - equipment repair
    - equipment and software upgrades
    - telecommunications costs
    - network installation and maintenance.

Administrative Uses of Technology

Technology is used for administrative tasks such as:

- word processing, database files, spreadsheet computation
- grade/progress reporting
- attendance
- school lunch programs
- inventory
- accounting/payroll
- transportation services
- bus routing
- bus and other vehicle maintenance

Various forms of technology can be used to communicate with parents/guardians, students, and community members:

- computerized calendar programs
- cable TV
- electronic bulletin boards
- fax machines
- telephone answering machines and voice mailboxes
- automated telephone message machines
- electronic message boards

Technology in Instruction

1. Curriculum frameworks and course guidelines reflect effective use of technology infused throughout a student's K- 12 education.

2. The system buildings have a combination of computer labs and classroom clusters of computers in classrooms, departments, and the media center.

3. Student assessment includes technology components.

4. Technology access and use by young women and minorities is encouraged and promoted.

5. Students can check out computers for school use at home.

6. Special needs students are provided with appropriate assistive technology.

7. Each classroom and library media center has a telephone.

8. Online services are annually evaluated and available for students and faculty use to support curricular projects.

9. The school has separate phone lines for telecommunications.

10. The diocese/school takes advantage of programming offered at fiber optic sites.

11. There is a computer with appropriate software in every classroom.

12. The school has desktop publishing stations available to students.

13. The school has multimedia stations available for student use.

14. Teachers expect students to use previously learned technology skills where appropriate to complete their classroom assignments.

15. Teachers are aware of the hierarchy of technology skills being taught at various levels.

16. Teachers in our school utilize the following technologies in their instructional programs:

    - large screen television/monitors
    - VCR
    - camcorder/still video camera
    - video projector
    - LCD panel
    - scan converters (computer to TV display devices)
    - videodisc
    - CD-ROM
    - modem
    - scanner
    - video digitizer
    - CDI
    - distance learning (satellite or fiber optics)

17. Classrooms are connected together via:

    - computer network
    - in-house television network
    - intercom system

Certain technologies are utilized in the following areas:

<u>Art</u>
- graphics/drawing programs
- video digitizers
- scanners
- computer graphics tablet
- digital cameras
- computer animation

<u>Business</u>
- computer use such as spreadsheets and databases
- word processing classes
- computerized accounting programs
- desktop publishing with digitizing and scanning
- telecommunication instruction such as telephones and FAX

Early Childhood
- adaptive keyboards (such as Muppet Learning Keys)
- TouchWindow
- interactive books on CD-ROM
- early learning software
- computers with audio capabilities
- cassette tape recorders

Foreign Languages
- CD-ROM
- videodisc
- videophone
- satellite programming
- audio cassette/CD players
- electronic dictionaries/translators

Home Economics
- computer software for food analysis, diet, budget
- calculator use for budgeting
- video use for class projects, interviews
- computerize sewing machines
- microwave ovens
- video discs for health awareness

Language Arts/Communications
- word processing hardware/software
- telecommunication
- interactive books on CD-ROM
- camcorder
- desktop publishing software
- graphics software
- computers with audio capabilities
- cassette tape recorders

Math
- beginning calculator use
- fraction calculators
- graphing calculators
- scientific calculators
- computer software for drill and practice
- computer software for teaching concepts such as graphing

Music
- audio cassette/CD players
- synthesizers
- computer MIDI devices
- composition programs
- CD-ROM
- voice amplification system
- MIE program keyboards
- audio mixers

Science/Health

- computer interface devices for lab experiments
- microscopes
- videodisc
- microscope camera for TV display
- electronic balances/scales
- telecommunications
- lasers
- specialized chemistry of physics apparatus
- TIP/DART or TIP/AIDS units
- weather tracking equipment

Social Studies

- videodisc
- CD-ROM/CD-I
- telecommunications (using modems)

Media Center

1. The media center has an automated catalog. The media center has an automated circulation system.

2. Students have CD-ROM access in the Media Center.

3. The CD-ROM access is networked, allowing several people to use the same item at one time.

4. The media center has stand alone computers available for student use.

5. The media center has a separate phone line for telecommunications.

6. The media center affords students and teachers an opportunity to check out:

    a) video programs
    b) laptop computers
    c) CD-ROM programs.

7. All available software is cataloged and listed in the media center catalog. .

8. Software licenses, documentation, and archival disks are stored in the media center.

Appendix M

ASSESSMENT OF TEACHER INSTRUCTIONAL COMPETENCIES IN TECHNOLOGY

Every teacher is able to...

1. connect, disconnect and reconnect a computer and printer. (basic skills)
2. locate, open and relocate already-saved documents. (basic skills)
3. understand system, memory and storage as they apply to software and hardware. (basic skills)
4. use and understand the importance of virus protection software. (basic skills)
5. compose, save and print letters on a computer. (word processing)
6. create files that store, organize and report information such as class lists. (data base)
7. create automated customized letters with student information. (mail merge)
8. construct a financial report and produce charts on the computer. (spreadsheet)
9. produce memos, certificates and bulletins with graphics on the computer. (graphics)
10. scan text and images for import into documents.(multimedia productivity)
11. take pictures digitally for import into documents. (multimedia productivity)
12. access CD reference resources. (multimedia productivity)
13. create a slide presentation. (slide show, graphics)
14. send and receive information and files via electronic mail. (telecommunications)
15. use the Internet. (telecommunications)
16. generate grades and progress reports electronically. (grading)
17. do system and software installation. (basic technical support)
18. troubleshoot computer systems to identify problems. (basic technical support)
19. troubleshoot a network to identify problems in printing or communicating. (basic technical support)
20. provide and maintain a backup system for data. (basic technical support)
21. create curriculum frameworks and course guidelines reflect effective use of technology infused throughout a student's K - 12 education.
22. develop student assessments to include technology components.
23. provide special needs students with appropriate assistive technology.
24. provide multimedia stations available for student use.

25. challenge students to use previously learned technology skills where appropriate to complete their classroom assignments.

26. demonstrate awareness of the hierarchy of technology skills being taught at various levels.

27. utilize the following technologies in their instructional programs:

- large screen television/monitors
- VCR
- camcorder/still video camera
- video projector
- LCD panel
- scan converters (computer to TV display devices)
- videodisc
- CD-ROM
- modem
- scanner
- video digitizer
- CD-I
- distance learning (satellite or fiber optics)

Appendix N

INTERNET SAMPLE USE LETTERS

STUDENT AGREEMENT

As a condition of using the Diocese of Phoenix network, I understand the use of this equipment and access to the public network (i.e. The Internet) is a privilege and agree to the following:

1. I will abide by such rules as adopted by Diocese of Phoenix Catholic Schools Office, including my schools Acceptable Use Policy and the Roman Catholic Church of Phoenix Stewardship Through Technology Policies and Procedures (Appendix P).

2. The Diocese of Phoenix Catholic Schools Office has the right to review any material/information stored on any system provided by the school or diocese and to edit or remove any material. I hereby waive any rights, which I may otherwise have in and to such material.

3. All information and services available on The Internet and the Diocesan network are placed there for informational purposes. I use these at my own risk.

4. The Diocese of Phoenix and the Diocesan Catholic Schools Office does not warrant the function of its network or the internet through the school to meet any specific requirements I may have, or that this equipment or network will be error free or uninterrupted. Diocese of Phoenix Information System and Catholic Schools Office staffs are not liable for any damages incurred in connection with the use, operation, or inability to use this resource.

5. In consideration for using this equipment and network and having access to public networks, I here-by release the Diocese of Phoenix and the Diocesan Catholic Schools Office and its officers, employees and agents from any claims and damages arising from my use, or inability to use network and equipment.

6. I have read and agree to comply with the Acceptable Use Policy and Roman Catholic Church of Phoenix, Stewardship Through Technology Policies and Procedures. I also understand that any violation of the regulations is unethical and may constitute a criminal offense. Should I commit any violation, my access privileges may be revoked and disciplinary action taken.

Print User's (Student) Name: _____ _____ School: _____

User's Signature:_____ Date: _____/_____/_____

SPONSORING TEACHER AGREEMENT

I have read the Acceptable Use Policy and the Roman Catholic Church of Phoenix, Stewardship Through Technology Policies and Procedures and agree to promote this agreement with the student. Because student use may vary for individual work or in the context of another class I cannot be held responsible for student use of our equipment and network. As the sponsoring teacher I do agree to instruct students on acceptable use of this equipment and network and proper network etiquette.

Print Teacher's Name_____

Signature_____ Date_____/_____/ _____

Return completed forms to your building's Technology Coordinator.

School Copy _____ Date ____/ _____/ _____

PARENT OR GUARDIAN RELEASE FORM

(If you are under the age of 18, a parent or guardian must also read and sign this agreement.)

As the parent or guardian of this student, I have read the Internet Terms, Conditions and Regulations of the Acceptable Use Policy. I understand that this access is designated for educational purposes. However, I also recognize it is impossible for the Diocese of Phoenix Catholic Schools Office to restrict access to all controversial materials and I will not hold them responsible for materials acquired on the network. Further, I accept full responsibility for supervision if and when my child's use is not in a school setting. I hereby give permission to issue an account for my child and certify that information on this form is correct.

Print Parent or Guardian's Name: _____

Signature: _____ Date: ____/____/____

PARENT LETTER

Dear Parents:

Your child has qualified to receive an Internet account and needs your permission to do so. Your child will be able to communicate with other schools, colleges, organizations and students around the world. An Internet account allows your child the opportunity to reach out to many other people to share information, learn concepts, and research subjects.

With this educational opportunity also comes responsibility. It is important that you and your child read the enclosed Access Release form and the Acceptable Use Policy and discuss it together.

When your child is given an account and password to use on the computer, it is extremely important that the rules be followed. Failure to follow the rule will result in the loss of the privilege to use this educational tool.

Remember that you are legally responsible for your child's actions. Please stress to your child the importance of using only his or her own account and password, and the importance of keeping it a secret from other students. Under NO circumstances should your child let anyone else use his or her account and password!

Although we have established acceptable use policies, please be aware that there may be unacceptable material or communications on the Internet that your child can access. We cannot control material available on other computer systems.

After you have read and discussed this with your child and if you agree to allow your child to have an Internet account, please sign the Authorization form and return it to your school.

Sincerely,

School Staff

Appendix O

Grid for Assessment of Integration of Technology into Curriculum

The following list of concepts and skills can assist a school/diocese in identifying where technology related skills/concepts are integrated and taught in the curriculum. The instrument could be used as an "inventory" to assess gaps in a program and identify the scope and sequence where skills should/could be covered/integrated. The listing could serve as a documentation instrument for identifying where skills are covered/integrated. The listing could be used to challenge teachers/units/departments to integrate skills/concepts into the curriculum/program. Concepts/skills should be added/deleted to adapt the listing to the local situation.

Option A	**The Arts**	**Health Physi-cal Ed.**	**Modern Langu-ages**	**Langu-age Arts**	**Science**	**SS, History Geo-graphy Civics**	**Theology / Religion**	**Vocationa l/ Career Education**	Other
Option B	Grade/ Unit/ Dept.:	Grade/ Unit/ Dept.:	Grade/ Unit/ Dept.:	Grade/ Unit/ Dept.:	Grade/ Unit/ Dept.:	Grade/ Unit/Dept .:	Grade/ Unit/ Dept.:	Grade/ Unit/ Dept.:	Grade/ Unit/ Dept.:
1. MORAL, ETHICAL, SOCIAL, AND HUMAN ISSUES									
Demonstrate positive moral, ethical, and social behaviors when using technology. (Pre-K – 2)									
Practice responsible use of technology systems and software. (Pre-K – 2)									
Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom. (Pre-K – 2)									
Discuss basic issues related to moral and responsible use of technology and information and describe personal consequences of inappropriate use. (3 – 5)									
Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide. (3 – 5)									
Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse. (6 – 8)									
Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. (6 – 8)									

Demonstrate knowledge of changes in information technologies and the effect those changes have on the workplace and society. (6 – 8)									
Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information. (9 – 12)									
Make informed choices among technology systems, resources, and services. (9 – 12)									
2. BASIC OPERATIONS AND CONCEPTS									
Communicate about technology using developmentally appropriate and accurate terminology. (Pre-K – 2)									
Use input devices (e.g., mouse, keyboard, and remote control) and output devices (e.g., monitor, and printer) to successfully operate computers, VCRs, audio-tapes, and other technologies. (Pre-K – 2)									
Use developmentally appropriate multimedia resources (e.g., interactive books, educational software, and elementary multimedia encyclopedias) to support learning. (Pre-K – 2)									
Use a variety of media and technology resources for directed and independent learning activities **(**Pre-K – 2)									
Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide. (3 - 5)									
Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively. (3 – 5)									
Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. (6 – 8)									

Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving. (6 – 8)									
Make informed choices among technology systems, resources, and services. (9 – 12)									
Analyze advantages and disadvantages of widespread use and reliance of technology in the workplace and in society as a whole. (9 – 12)									
Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs. (9 – 12)									
3. TECHNOLOGY PRODUCTIVITY TOOLS									
Use a variety of media and technology resources for directed and independent learning activities. (Pre-K – 2)									
Use technology resources (e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories. (Pre-K – 2)									
Create developmentally appropriate multimedia products with support from teachers, family members, or student partners. (Pre-K – 2)									
Use general-purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum. (3 – 5)									
Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, and scanners) for individual and collaborative writing,									

communication, and publishing activities to create knowledge products for audiences inside and outside the classroom. (3 – 5)									
Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. (6 – 8)									
Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. (6 – 8)									
Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, and correspondence). (9 – 12)									
Investigate and apply expert systems, intelligent agents, and simulations in real-world situations. (9 – 12)									
4. TECHNOLOGY COMMUNICATION TOOLS									
Use technology resources (e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories. (Pre-K – 2)									
Gather information and communicate with others using telecommunications, with support from teachers, family members, or student partners. (Pre-K – 2)									
Use telecommunications efficiently and effectively to access remote information, communicate with others in support of direct and independent learning, and pursue personal interests. (3 – 5)									
Use telecommunications and online resources (e.g., e-mail, online discussions, Web									

environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom. (3 – 5)									
Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, and scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom. (3 – 5)									
Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom. (6 – 8)									
Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences. (6 – 8)									
Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity. (9 – 12)									
Select and apply technology tools for research, information analysis, problem-solving, and decision-making in content learning. (9 – 12)									
Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works. (9 – 12)									
Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses,									

purchases, and correspondence). (9 – 12)									
5. TECHNOLOGY RESEARCH TOOLS									
Use technology resources (e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories. (Pre-K – 2)									
Use technology resources (e.g., calculators, data collection probes, videos, and educational software) for problem-solving, self-directed learning, and extended learning activities. (3 – 5)									
Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems. (3 – 5)									
Use telecommunications and online resources (e.g., e-mail, online discussions, Web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom. (3 – 5)									
Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. (6 – 8)									
Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. (6 – 8)									
Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. (6 – 8)									
Collaborate with peers, experts, and others using telecommunications and collaborative tools to									

investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom. (6 – 8)									
Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom. (6 – 8)									
Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity. (9 – 12)									
Evaluate technology-based options, including distance and distributed education, for lifelong learning. (9 – 12)									
Investigate and apply expert systems, intelligent agents, and simulations in real-world situations. (9 – 12)									
Select and apply technology tools for research, information analysis, problem-solving, and decision-making in content learning. (9 – 12)									
Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works. (9 – 12)									
6. TECHNOLOGY PROBLEM-SOLVING AND DECISION-MAKING TOOLS									
Use technology resources (e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories (Pre-K – 2)									

Use technology resources (e.g., calculators, data collection probes, videos, and educational software) for problem-solving, self-directed learning, and extended learning activities. (3 – 5)									
Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems. (3 – 5)									
Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources. **(**3 – 5)									
Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. (6 – 8)									
Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems**.** **(**6 – 8)									
Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving. (6 – 8)									
Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. (6 – 8)									
Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity. (9 – 12)									
Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works. (9 – 12)									

Investigate and apply expert systems, intelligent agents, and simulations in real-world situations. (9 – 12)									

STEWARDSHIP THROUGH TECHNOLOGY
POLICIES AND PROCEDURES

COMPUTER INFORMATION BACKUP POLICY

Policy No. CIPB001

1.1 Purpose

The purpose of performing computer backups is to ensure safety and integrity of information.

2.0 Responsibilities

2.1 Information Systems Office

It is the responsibility of the Information Systems Office (ISO) to ensure the safety and integrity of all Chancery system information that resides on the diocesan network servers. Backups of network servers will be performed cyclically; daily, weekly, month end or as needed to ensure the integrity of the software and data files.

2.2 Departmental, Parish, or Other Agency Data Backups

It is the responsibility of each Chancery department, parish, or agency to perform **data** backups of all applications and files residing on their local networks or PC's. Backups **must** be performed cyclically (i.e. daily, weekly, etc.) The frequency of data backups should be determined by activity performed in each application. Moderate to high activity on a daily basis in applications suggests that the data on the system should be backed up at the end of the working day. Light weekly activity in applications would indicate that the data on the system should be backed up once a week. It is important that whatever cycle that is determined should be adhered to on a consistent basis. Activity level may change over time, a review of backup procedures is recommended every quarter. Date and type of backup should be recorded on each tape or diskette.

It is the responsibility of each Chancery department, parish, or agency to document in their procedure manual: (1) Which software is used to backup the systems and how the data is backed up: all software and data files, partial backup of files, and software programs, or all files updated since a certain date. Chancery department supervisors are responsible for filing initial copies of backup procedures and any updated copies with ISO for review. These procedures should include the procedure used to back up local PC hard drives.

2.3 Storage Of Software Programs and Data Files

Backup system software programs and data files and store them in a **secured fire-proof vault rated for magnetic media** or offsite at a bank deposit box. Ensure that more than one person in the department, parish, or agency knows where the backups are stored. Backups are not to be stored in desks, file cabinets, etc. (most fire-proof cabinets are rated for paper, not magnetic media). If you are a Chancery department you will have a shelf assignment in the diocesan fireproof vault, contact Information Systems Office for more information.

2.4 Backup Policy Violations

It is imperative that all diocesan employees adhere to this policy. Loss of computer information due to failure to perform software program or data backups, according to the policy and procedures, could result in negative consequences on performance reviews, up to and including loss of employment.

COMPUTER SECURITY POLICY

Policy No. CSP001

1.1 Purpose

The purpose of the Diocesan Computer Security Policy is to maintain a high level of security. Information Systems Office (ISO) has set various levels of security on all networks in order to insure that no breech of security occurs. Diocesan employees should familiarize and understand the importance of computer security.

1.2 Responsibilities

It is the responsibility of ISO Technical Support/LAN Specialist to assign network security codes to employees to access the diocesan network. Passwords are required to be eight characters in length at a minimum. It is the employee responsibility to use the password and protect it from unauthorized use of others.

The user of the system will be prompted and required every thirty (30) days to change their password as an ongoing precautionary measure to protect the security of the network and data. Passwords are required to be eight characters in length at a minimum.

1.2.1 Application(s) Security

It is the responsibility of the department supervisor to issue and maintain application security codes to the employees of his or hers department and review these security codes on a quarterly bases with ISO. The access level to the application is determine by the department supervisor and is based on the need to access data. Questions regarding access levels to application data should be addressed to the department supervisor.

1.3 Outside System Access

Any installation and use of modems to perform outside system access, ***i.e. modem dial in/out software*** to communicate with outside vendors or business associations, must be performed, configured, and secured by ISO. Department supervisors must notify ISO and schedule all installations for all PC's. This ensures that security is established correctly and no ***access*** is left opened to the PC or network, which would allow unauthorized access to the Diocesan Network.

1.4 Reporting Security Violations

Security violations should be reported immediately to the department supervisor and ISO. Failure to report such violations, or adherence to the Security Policy could result in negative consequences on performance reviews, up to and including loss of employment.

E-MAIL POLICY

Policy No. EMP001

1.1 Introduction

Electronic mail or E-Mail is the term used for a computer network messaging system. The system is composed of a "post office(s)" made up of individual "mail boxes" which are assigned to subscribers or “users”. All mail boxes are secured with passwords. Users can send and receive messages to one another via their mail boxes. Messages may consist of text, data, or image files.

Examples of Post Offices and mail boxes:

- Post office

  Main post office at Information Systems, Chancery office, Parish, agency, or school post office

- Mail boxes

  Assigned to individual users at each post office

  Send and receive messages to/from other users of post offices

  Permit message retrieval only with the password of assigned user

1.2 Purpose

The purpose of the Diocesan E-mail System is to provide a centralized effective means to communicate with one another via a directory of mail boxes for all Chancery, parishes, agencies, and school personnel.

The purpose of this policy is to maximize the benefits and minimize potential problems inherent to E-Mail. Your observance of these policies will make E-Mail more valuable to you and those with whom you communicate. The Diocese and its various operating units, (hereafter referred to as "employer"), intends to honor these policies but reserves the right to change them as necessary, with reasonable prior notice under any given circumstances.

2.0 Benefits

E-Mail provides us with an effective vehicle to communicate quickly with ourselves and people around the world and provides resource savings by reducing the use of paper, postage, phone calls, and improving the exchange of data by using an electronic format that can be easily shared between computers.

3.0 Responsibilities

It is the responsibility of Information Systems Technical Support to keep the Main Post Office Network and communications operational. It is the responsibility of parishes, agencies, and school Post Office coordinators to keep their Post Offices operational. It is the responsibility of each mail box user to check their mailbox at various times throughout the day.

4.0 Employer Access and Disclosure

The employer will not monitor electronic mail messages as a routine matter, but reserves the right to access and disclose the contents of all electronic mail messages, when there is a legitimate business need to do so. Legitimate business needs include but are not limited to:

- Inspection of electronic mail messages in the course of an investigation triggered by indications of impropriety or as necessary to locate substantive information that is not more readily available by some other means.

- Disclosure of electronic mail to law enforcement officials including requests made by subpoena and search warrant.

Legitimate business need for access and disclosure must be determined in conjunction with and approved by the diocesan attorney.

5.0 E-Mail Usage

Electronic snooping for any purpose or transmission of discriminatory or harassing language by any Chancery, parish, agency, or school employee is a violation of policy and grounds for disciplinary action, up to and including termination, in accordance with standard Personnel policies and procedures.

Use of E-mail for inappropriate messages is prohibited. Inappropriate messages include, but are not limited to, those containing discriminatory or derogatory language or remarks that may be construed as sexual harassment. Use common sense and common courtesy.

Misaddressed mail should be routed immediately, without reading, to intended recipient OR deleted without reading.

Improperly used, E-Mail can result in a loss of privacy and potential legal liability for individuals and employers. **Users should be aware that electronic mail messages which have been deleted by both sender and recipient may reside on the system, and may be accessible for a period of time, until the files are written over.**

E-Mail, like the telephone is intended primarily for business purposes. Incidental and occasional personal use of electronic mail is permitted, but such messages, and access will be governed by this policy.

Users need to use public mailing lists appropriately by ensuring the right mailing lists are used for mailings and not send messages unnecessarily to every list within the directory.

Transmission of copyrighted material is to be done only with permission. All copyright laws must be followed.

Word 95 or higher is the standard file format for attached files to E-Mail but, many parishes continue to use lower versions of Word Perfect so for general mailings, a file should be converted downward to WP 5.1. ASCII is the standard file format for attached files to Internet E-Mail. A standard for Electronic forms is currently being developed. Users should periodically purge message log file based on Chancery, parish, agency, or school retention policy. If no policy is in place then create one to ensure manageable disk space requirements.

E-Mail should not substitute for all personal meetings. Personnel matters should be communicated via other means to supervisors or the Human Resource Director.

6.0 Access To and By External Users

External users are defined as anyone who uses an E-mail system not operated by the Diocese of Phoenix. As a user of the Diocesan E-mail system and the Internet the Diocese has accessibility with external users providing a means by which members of the church and the general public can communicate. **External users may acquire access to the Diocesan operated electronic mail system as follows:**

- To an individual mailbox if the address is provided by the mailbox user. When any access to an individual mailbox is granted, it should be with the **understanding that there will be no solicitation and no access to and disclosure of confidential or sensitive personal, private, or business information .**

- To an entire parish or diocesan post office directory of all mail boxes. Such broad access will not be granted. Any external users, including organizations with a Catholic identity who are not under the Diocesan **corporation, will not have access to the E-Mail system operated by the Diocese of Phoenix.**

Messages between external users and church representatives will be governed by this policy. **Access and disclosure of such messages will also be subject to outsider policies which may be more or less restrictive than our own.**

Revised 11/5/97

INTERNET WEB SITE AND WEB PAGE POLICY

Policy No. Webpol

1.0 Purpose

In the interest of maintaining consistency with parishes, schools, agencies, and departments web sites and web pages, in the Diocese of Phoenix, the following policy sets guidelines for establishing such web sites, web pages, and linking web sites to one another. This policy also sets standards for links to / from web sites of other organizations not operated by the Diocese of Phoenix.

2.0 Policy - General

The diocesan web page http://www.diocesephoenix.org is managed by both the diocesan Communication Office and Information Systems Office. The diocesan web page provides every parish, school, diocesan department, and agency with unlimited web pages at no cost. It would be to the benefit of parishes and schools to host their Web page with the Diocese versus hosting with an outside vendor. The Diocesan pages are free and provide the added benefits of security, backup of information, and support services from our Diocesan Web Editor.

All Web sites that are not hosted with the Diocese of Phoenix must be hosted by a Web and / or Internet company. No Web site can be hosted by an individual or company at a private residence.

The Web pages are protected via password protection. Users may expand and maintain their own web pages. Still photography, motion pictures, audio and video of individuals can be posted to a web page but you are required to have the individual sign the Photographic And Interview Release form. (Please see attached copy of form to be used). This is to protect the parishes, schools, diocesan departments, and agencies from potential lawsuits for their unauthorized use. This requirement includes obtaining a release form for all individuals within a group, still photograph, motion picture, audio or video.

No text, photographs, graphics, or music whose copyright is held by another party may be used on the web page of a Diocesan parish, school, agency, or department without the written permission of the appropriate copyright holders.

All web pages of a Diocesan parish, school, agency, or department should have the following copyright notice at the bottom of each page: " Copyright © 2000 by Roman Catholic Diocese of Phoenix. All rights reserved."

Some Internet/Web companies (also known as hosts, providers) have approached some of our parishes offering a free web site to which the parish would allow the web company to place advertising on parishes pages. They might even offer the parish a slice of the advertising revenue. These Internet / web companies ask you to promote their web site in your bulletins, etc. By being able to align themselves with Catholic churches, schools, etc., a web site can gain a measure of instant respectability and the confidence of the public, neither of which may be deserved. One web site provider created unauthorized parish web sites which contained advertising that included direct lines to on-line casinos allowing people to engage in on-line gambling by credit card. The potential for reaching pornography through a parish web site is of great concern. The impression that a Catholic parish supports or endorses on-line gambling activity or the viewing of pornographic material could create great scandal for the Church.

We would ask that you check with Kim Sue Lia Perkes or Greg Leisse at the Diocesan Center before you make any agreement, either orally or in writing, with these companies.

We ask that you notify the Diocesan Communication Office or Greg Leisse if you become aware of any unauthorized web site for parishes, schools, agencies, or departments operated by someone other than the Diocese of Phoenix.

You can contact Greg Leisse at 602.257.5630 or Kim Sue Lia Perkes at 602.257.5591.

For technical support please contact Christine Olea at the Information Systems Help Desk 602.257.5643, colea@diocesephoenix.org. For other general Web questions please contact Peter Kronschnabel at 602.744.6384, pkronschnabel@diocesephoenix.org.

2.1 Policy - Political

There are strict restrictions on allowing political information and campaign activity to be posted or linked to a web page. During each Presidential election year since 1980, the Office of General Counsel at the National Conference of Catholic Bishops, has offered advice to Catholic organizations exempt from federal income tax under section 501 (c)(3) of the Internal Revenue Code ("Catholic organizations") relating to appropriate behavior during election campaigns.

Briefly, the principles of the Bishops' *Faithful Citizenship Statement*, which challenges voters to "examine the position of candidates on the full range of issues, as well as on their personal integrity, philosophy, and performance." *Faithful Citizenship* does not envision "the formation of a religious voting bloc", nor the Church instructing individuals "on how they should vote by endorsing or opposing candidates."

On the other hand, issue-oriented participation in the political process is entirely consistent with the section 501 (c)(3) regulatory framework applicable to Church institutions so long as "lobbying activities do not constitute a substantial part of a church's total activities". Section 501 (c)(3) restricts candidate-oriented activities, but does not prohibit discussion and debate on the values and principles that should guide our public life.

This policy, as it applies to political restrictions on web pages, also applies to other forms of communication throughout the Diocese of Phoenix.

Carefully conducted "neutral activities" such as distributions of voter information guides and candidate questionnaires are permitted. The Diocese will advise parishes, schools, agencies, and departments on the availability of such neutral guides and questionnaires. No voter guide or candidate questionnaire can be published on the web page of a Diocesan parish, school, agency, or departments without the prior written approval of the Diocese. Contact either Kim Sue Lia Perkes or Greg Leisse regarding such guides or questionnaires.

If you have any questions regarding political information in general call Greg Leisse at 602.257.5630 or Kim Sue Lia Perkes at 602.257.5591.

3.0 Policy - Web sites / Web Master Registration

All parishes, schools, diocesan departments, and agencies must provide their webmaster's name and E-Mail address (and position with or connection to the parish) to the Communications Office for contact purposes. (see form to use under section 4.0).

For SCHOOLS who have web sites hosted elsewhere (other than with the Diocese of Phoenix) the web master must provide to the Communications Office with the Uniform Resource Locator (URL) for the site, the webmaster's name and E-Mail address (and position with or connection to the school) and a signed letter of reference from the principal, pastor, or superintendent (where appropriate) designating this as the entity's official site. Once reviewed and approved, the web site can be linked from the diocesan web page. In return, the school web site will include a link to the Diocese of Phoenix web page.

For AGENCY web sites, the agency webmaster must provide to the Communications Office the Uniform Resource Locator (URL) for the site, the webmaster's name and E-Mail address (and position with or connection to the agency) and a signed letter of reference from the agency director or vicar designating this as the agency's official site. Once reviewed and approved, the agency web site can be linked from the diocesan web page. In return, the agency may be asked to include a link from its web site to the Diocese of Phoenix web site.

For ENTITIES not part of the Diocese of Phoenix, such as those listed in the "Other Institutions and Organizations" section of the Diocesan directory, a separate page for "Other Catholic Web sites not part of the Diocese of Phoenix" has been created on the diocesan web page. However, only those organizations that are listed in the Diocese of Phoenix pages of the Official Catholic Directory (Kenedy Directory) may be included on this web page. For ENTITIES web sites, the webmaster must provide to the Communications Office the Uniform Resource Locator (URL) for the site, the webmaster's name and E-Mail address (and position with or connection to the entity) and a signed letter of reference from the entity director or equivalent, with a notation that the entity is listed in the directory mentioned above. Once reviewed and approved, the web site will be linked as noted above from the diocesan web page. In return, the entity will be asked to include a link from its web site to the Diocese of Phoenix web site.

The Communications Office must review and approve all web page links on the Diocese of Phoenix web pages. The Communications Office will also provide guidance for acceptable content of web pages. Please call or E-Mail Peter Kronschnabel at 602.744.6384 pkronschnabel@diocesephoenix.org or Kim Sue Lia Perkes, Director of Communications, at 602.257.5591, kperkes@diocesephoenix.org.

Revised as of May 1, 2000

2.0 Policy - Web Site / Master Information Form

Date: _____

Parish / School / Agency Name : _____

Director / Principal / Pastor Authorization : _____

URL : _____

Company name where Web page is hosted: (if other than the Diocese of Phoenix)

Company Name : _____

Contact Name and Phone Number : _____

Fax Number : _____

E-Mail Address : _____

Web Master Information :

Name: _____

Phone Number 1: _____

Phone Number 2: _____

Fax Number : _____

E-Mail Address: _____

Return this form to :
Rene Dupree
Communications Office
Catholic Diocese of Phoenix
400 East Monroe Street
Phoenix, AZ 85004

PHOTOGRAPHIC AND INTERVIEW RELEASE
CATHOLIC DIOCESE OF PHOENIX

Today's date:_____

I hereby grant consent to use and release to the Catholic Diocese of Phoenix and (name parish/school) _____ the use of my name and likeness, whether in still, motion pictures, audio and video tape, my photograph and/or other reproduction of me including my voice and features with or without my name for any promotional purposes involving the diocese or parish/school, news or feature stories in The Catholic Sun or other media or other purpose whatsoever, except for the endorsement of any commercial products.

These items may be used without limitation or reservation of any fee.

Minors cannot consent to media interviews or waive their privacy right. These decisions must be made by parents/guardians, therefore, this release form **must** be signed by parents/guardians when the individual is a minor.

_____ _____
Signature Print Name

_____ _____ _____ _____
Address City State Zip

_____
Phone

_____ _____
Signature/Parent/Guardian (if minor] Print Name

_____ _____ _____ _____
Address City State Zip

_____
Phone

_____
Witnessed By:

_____ _____ _____ _____
Address City State Zip

_____
Date:

PERMISO DE PUBUCACION DE FOTOGRAFIA Y ENTREVI TA
DIOCESIS CATOLICA DE PHOENIX

Fecha de hoy:_____

Yo autorizo a la Diocesis Catolica de Phoenix y (nombre de la parroquia/escuela) _____ mi consentimiento de usar y publicar mi nombre o lo semejante, ya sea inactive, pelicula o cinta cinematogr8fica, cinta magnetica, mi fotografia y/o otra reproduccibn de mi persona incluyendo mi voz y rostro con o sin mi nombre con objetivo promocional relacionado con la Diocesis o parroquia/escuela, noticias o historias especiales en The Catholic Sun u otros objetivos publicitarios, excepto para promoci6n de cualquier producto comercial.

Este aviso puede ser usado sin contrato de limitaciones o reservaciones.

Los menores de edad no pueden conceder entrevistas publicitarias o renunciar a sus derechos de privacidad. Estas decisiones deben ser hechas por los padres/apoderados cuando el individuo es menor de edad.

_____ _____
Firma Nombre con letra de imprenta

_____ _____ _____ _____
Dirección Ciudad Estado Código Postal

_____
Teléfono

_____ _____
Firma/Padre/Apoderado (menor de edad] Nombre con letra de imprenta

_____ _____ _____ _____
Dirección Ciudad Estado Código Postal

_____
Teléfono

_____
Testigo

_____ _____ _____ _____
Dirección Ciudad Estado Código Postal

_____
Fecha

PERSONAL COMPUTER SOFTWARE COPYRIGHT LAW POLICY

Policy No. PCSFL001

1.0 Purpose

The Diocese recognizes that software written for all computers is intellectual property, and is protected by copyright rules established by the United States. Further, the Diocese recognizes that by protecting the investment of companies that develop computer software, we also protect those companies and allow them to gain a fair return on their development costs, and thus allow those companies to continue to produce enhancements and advancements to the software.

The purpose of this policy is to inform the employees and volunteers working for the Diocese of Phoenix of the Federal Copyright Law.

2.0 Policy

The Diocesan policy regarding the duplication and use of software requires all Diocesan employees and volunteers to comply with the Federal Copyright law that basically states that ***ANYONE WHO PURCHASES A COPY OF SOFTWARE HAS THE RIGHT TO LOAD THAT COPY OF SOFTWARE ONTO A SINGLE COMPUTER AND MAKE ANOTHER COPY FOR ARCHIVAL (BACKUP) PURPOSES ONLY. IT IS ILLEGAL TO USE THAT SOFTWARE ON MORE THAN ONE COMPUTER OR TO MAKE OR DISTRIBUTE COPIES OF THAT SOFTWARE FOR ANY OTHER PURPOSES UNLESS SPECIFIC PERMISSION HAS BEEN OBTAINED FROM THE COPYRIGHT OWNER.***

3.0 Software Usage

3.0.1 All software ***not*** written by the Diocese of Phoenix, but purchased from outside vendors is not owned by the diocese, therefore, a diocesan employee or volunteer does not have the right to reproduce it for the use on more than one computer unless ***specific*** permission has been obtained from the copyright owner. Follow the license agreement to comply.

3.0.2 All multi-use software, such as software written for networks, must be used in accordance with the license agreement.

3.0.3 The Diocese of Phoenix understands that, according to the United States copyright laws, ***illegal*** reproduction of software may result in civil damages of as much as $100,000 per work copied, and criminal penalties, including fines and imprisonment of up to five years.

3.0.4 All software written by or for the Diocese of Phoenix is owned by the diocese and cannot be copied without the expressed permission of the Diocese of Phoenix.

4.0 Responsibilities

4.0.1 Departmental Responsibilities

Directors, Departmental Supervisors, or ISO will **audit** employees' computers periodically for un-licensed software. The diocese recognizes that, from time to time, employees or volunteers may bring in their own software, (**i.e. software licensed to the employee or volunteer**), for the specific purpose of the employee's or volunteer's project. However, once the project has been completed the software must be removed from the computer.

If a diocesan department, parish, or agency disposes of old computers, they have the responsibility of removing all software that is resident on the hard disk, (including the DOS/Windows operating systems) before disposing of the computer. If the department, parish, or agency is unable to perform this task notify ISO to assist or perform such steps.

4.0.2 ISO Responsibilities

Information Systems Office (ISO) will, from time to time, negotiate multiple copy or educational discount license from software vendors. ISO will notify all employees of such arrangements. No employee or volunteer may assume such an arrangement exists. It is the employee or volunteers responsibility to inquire from ISO whether any such arrangement exists.

5.0 Policy Violations

Any employee who determines that there may be a misuse of software shall notify their department manager, or immediate supervisor. Diocese Of Phoenix employees who are found copying, or to have copied, software for other than backup purposes, without the permission of the owner of the copyright of the software may incur negative consequences on performance reviews, and other disciplinary actions, up to and including loss of employment. In addition employees may be subject to civil and criminal penalties under applicable law up to and including fine of up to $ 100,000 per infringement, and/or a prison sentence of up to five years.

VIRUS CONTAINMENT PROCEDURE

Policy No.VPR001

1.0 Purpose

The purpose of the Computer Virus Containment Procedure is to ensure maximum containment of any virus outbreak and to reduce further loss of information, productivity, or system corruption.

2.0 Responsibilities

2.1 ISO Responsibilities

Information Systems Office (ISO) is responsible for immediate Diocesan Center virus containment providing the identification and cleansing of any and all systems affected; stand alone PC's or network servers, diskettes, tapes, or historical backups. Information Systems staff are responsible for notifying the diocesan directors, parishes, schools, and agencies of any known virus outbreak and coordinating the necessary resources needed for containment.

2.2 Departmental Responsibilities

Each director or department supervisor is responsible for ensuring that employees under their direct supervision conform to the virus procedure set forth. In the event of a virus outbreak it is the department supervisor responsibility to ensure system availability to the Information Systems staff so immediate containment can occur.

2.3 Employee Responsibilities

It is the responsibility of all diocesan employees to work with the Information Systems Staff towards immediate containment.

3.0 Containment Procedure

1. Create Work Order to perform containment.

2. Ensure the latest virus protection program has been downloaded and updated to the network and copied to an ISO bootable work diskette, if needed.

3. Perform a diagnostic check of any PC suspected to have a virus by using the ISO bootable diskette. Perform evaluation of all servers on the backbone to ensure virus shield has protected them from the virus.

4. If Virus found:

   - Document the dept/user name/server and the virus name/number within the Work Order.
   - Cleanse the virus from the infected system(s).
   - Inform the ISO and department director of virus outbreak.
   - Check all systems within the department and identify and cleanse any other systems within the Diocesan Center that may have shared diskettes/tapes with this user.
   - Identify, document within the Work Order, and cleanse any other diskettes, tapes, or backups (both current and historical) that may have been infected.
   - If the system is a laptop ensure the latest version of the virus protection program is installed/updated on the system.
   - Ensure the log in for this user in fact loads the automatic virus update.
   - If a backup of an infected system is to be performed it must be done via tape, zip drive, or diskettes. Do not backup the infected system to a network drive.