ABSTRACT

        The Latin School, a private K-12 school in Chicago, is
integrating technology into the school environment and teaching its ethical
use. Recognizing that children and families need assistance in adjusting to
current rapid technological change, the school developed the Parent Education
Initiative, which attempts to get parents involved in the school's
math/science/technology program to enhance their children's adaptation to
this changing school learning environment. Through the initiative, parents
are made aware of the school's resources, including Internet access, a home
page, equipment, and software; and are informed about use policies. Concerns
associated with the use of technology in school and home are also addressed.
The school hopes to keep teachers, students, and families informed and
actively engaged in the changes and challenges that will remain a normal part
of stakeholder's lives in the years to come. (A sample letter to Latin School
parents inviting them to programs for parents and excerpts from the school's
computer use guidelines are appended.) (LPP)

Making Connections:

Helping a School, Its Families, and the Community Adapt to Technological Change

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Abstract

The Latin School, a private K–12 school in Chicago, is integrating technology into the school environment and teaching its ethical use. Recognizing that children and families need assistance in adjusting to current rapid technological change, the school developed a plan for parent education and support. Staff continue to get parents involved in the school's Math, Science, and Technology 2000 program to enhance their children's adaptation to the changing school learning environment. Parents are kept aware of the school's resources, including Internet access and a home page, and are informed about use policies. Concerns associated with the use of technology in school and home are also addressed. The school hopes to keep teachers, students, and families informed and actively engaged in the changes and challenges that will remain a normal part of everyone's lives in the years to come through ongoing school–home communications and activities, through the school-based Parent Education Initiative, and through the ongoing adult education program "Live and Learn." ∎

Introduction

Who are we and what have we been doing?

For 3 years, the first author has actively developed ways to involve parents in the comprehensive math, science, and technology program he was recruited to implement at the Latin School, an independent K–12 school in Chicago. The second author is collaborating with him to support current parent involvement and interest in the project through the Latin School Parent Education Initiative. The necessary school climate for this endeavor, which is present at the Latin School, includes a commitment to lifelong learning; a carefully planned introduction for faculty, staff, students, and parents to the place of technology in education; a reaching out to the larger community to share the process and resources; and an ongoing effort to cultivate and sustain interest, involvement, and related competencies.

The Parent Education Initiative was begun in 1995 at Latin School to support parents as lifelong learners as they adapt to their changing children, families, and communities. We view technology as a prime opportunity for parent adaptation and growth.

Background: Call for a Change

Few would deny that children and families need assistance in adjusting to current rapid technological change. The National Association for the Education of Young Children (1996) suggests that teachers and parents need to examine the impact of technology on preschoolers and work together to promote appropriate uses of technology. We also know from research, as reported in the Carnegie Council (1995) document *Great Transitions,* that the essential requirements for healthy development for preadolescents and adolescents include "acquiring the technical and analytic capabilities to participate in a world-class economy" (p. 10). In addition, we know that parent involvement is vital to student academic success at this age (Comer, 1989; National PTA, 1997).

It is in that spirit that the Long Range Planning Committee of Latin School stated in their mission statement as early as February 1994 that academic

programming must "embrace technology to support the best possible academic program and the most flexible learning environment." The strategies for attaining this goal were to encourage technological awareness and skill development among students and faculty; to use technology to enhance curriculum, to challenge students, and to address their different learning styles; to create a multidisciplinary approach linking mathematics, science, and technology; and to create a culture of responsibility and ethical use of technology. Comer and Haynes (1991) add that "a parent program needs to be part of a comprehensive school change initiative and that the other key players in the school community, such as the central office, the principal, the teachers and other staff need to be oriented to the program" (cited in Haynes & Ben-Avie, 1996, p. 54). This was indeed the case for us at Latin School.

Our initial concern was how to get parents involved in our math/science/technology initiatives in order to enhance their child's adaptation to this changing school learning environment. Recommendations of the Carnegie report included preparing youth for the 21st century by creating "family resource centers that provide educational programs for parents, including computer literacy" (Carnegie Council, 1995, p. 55). Why do parents need to be involved? We know that change is often difficult. Comer (1989), in his own work in which parents were involved in a school change initiative, noted that "the children observed and identified with their parents as active learners and contributors to the school program, and they internalized the attitudes, values and ways of the school" (p. 26). Thus, by being involved in learning about technology, parents demonstrated to their children that learning is a lifelong process that is valued.

In a recent report of the National PTA (1997), educators were encouraged to provide varied communication opportunities for parents and schools including e-mail. We were also advised to provide technology workshops for parents and to institutionalize such workshops. Other suggestions include special events, such as health fairs, technology nights, or other learning opportunities, to inform parents and families. Since 1995, Latin School has been doing what the National PTA recommends.

Laying the Foundations

To support parent involvement, we first needed to inform parents by raising their awareness as to what resources we had and what we were doing (see Appendix A).

Latin was among one of the first schools in the nation to develop a home page and use it as part of the educational process. Some of Latin's student's work has been cited in the book *Kids Doing the Web*. Latin School was the first prekindergarten–12 school in Chicago to have direct access to the Internet with a T1 line connection and a 16-line modem pool for people to access outside of the school. It remains one of a handful of independent schools with this resource. The network supports 400 computers, 220 Power PCs, 60 Pentiums, and 50 printers. Latin has a computer on every faculty/staff desk, a printer in every office, at least one Power Mac in every faculty office, access to the Internet from virtually every room, digital cameras that allow you to download a picture to the computer for editing, QuickCam cameras that allow you to videoconference, and classrooms with multimedia stations, scanners, color printers, and video data projectors. Latin's library catalogs and Illinet (Illinois library catalogs online) will be available through the home page. Latin also has made a conscious effort to provide students with many discipline-specific cross-platform software programs such as Claris Works 5.0 (English and Spanish versions), Netscape, HyperStudio, Image Processing, Photoshop, and Eudora.

The school has a dial-in program for families and staff to access the school network as well as the Internet. The school provides faculty an interest-free loan of up to $3,000 to purchase a home computer with 2 years to repay the loan. In response to the exponential growth of technology and the challenges associated with that growth, the school has established an Information Systems Department in addition to its Academic Computing Department, with the latter overseeing plans for using technology to enhance instruction, curriculum, and assessment and to encourage professional development of faculty. We are confident of the infrastructure that has been built; however, no plan is complete without the proper support of the faculty entrusted with implementation of the program. Our faculty has responded enthusiastically to the use of technology in the classroom. We also have a technology committee that includes representatives from all divisions and disciplines. Our Internet policy is now included in the student handbook.

Next, we had to demonstrate what we were doing via school assemblies, during which we explained policy and what was available. We also needed to address concerns associated with the use of technology in school and home. We then sought to help parents understand what was being done through hands-on parent activities.

To involve parents, we held Technology Awareness Evenings for parents that included multimedia presentations. One presentation was geared to parents of lower school students, the other to parents of middle/upper school students. In 1995, the programs lasted about 90 minutes and included the following presentations (for the upper-level school parents):

- Overview: Panel Presentation
    Internet—Threat or Opportunity?
    Security
    Filtering
    Dialing into the School
    The Latin Network

- Software Highlights
    HyperStudio
    HyperCard
    NIH Image
    Geometry Sketchpad
    CDs (e.g., Adam's Essentials)
    Adobe Photoshop
    PageMill

- Examples of Faculty and Student Uses of Technology
    Math, Science and Technology in the Middle School
    HTML—AP Biology, AP Calculus
    HyperStudio—Chemistry
    Internet—South Africa assignment
    Adobe—Visual Arts
    CD-ROM—Foreign Language, Science
    Home Pages—Faculty and Students
    Library

- Future

- Upcoming Live and Learn Classes for hands-on experience

- Questions and Answers

The Technology Awareness Evening for parents of lower-school students was similarly structured but addressed concerns and materials appropriate to that age level.

After parents learned of our initiative via assemblies and awareness evenings, we offered a course as part of our already well-established continuing education program at Latin School, "Live and Learn." We had 128 parents take this introductory course the first time. Because of its popularity, we had to add additional courses. These 2-hour sessions included "Introduction to Internet E-Mail," "Netscape Basics," "How to Create Your Own Home Page for the World Wide Web," "Introduction to Multimedia," and "Introduction to Hyperstudio." We took the opportunity at these sessions to explain Internet user policy and ethical issues involved (see Appendix B) and to define frequently used terms, such as *bandwidth, Ethernet, e-mail,* and *telnet.* We also mailed all school parents a list of recommended materials for gift purchases for the holidays along with other informative handouts.

We developed workshops for teachers and staff each year before school began and then throughout the school year. We also hosted and will continue to host Technology in the Classroom conferences at the school for other teachers/schools with Latin faculty demonstrating what they do with technology in many different disciplines. Workshops included "Networking," "Evaluation of the Essay," "Image Processing in Science Teaching," "Electronic References," "Discovering Geometry with Your Computer," and "Using the Internet in the History Classroom."

Finally, we continue to work to sustain and cultivate an interest in our efforts by assigning projects for families, creating an atmosphere acceptable to change, and enhancing Web site services—for example, home pages, family passwords, ability to communicate with teachers and access grades/ information, and activities and resources of the Parent Education Initiative.

Concluding Comments

Preparing for the Families, Technology, and Education conference provided us with an opportunity to reflect on all that has been accomplished at Latin School in the past 3 years. Implementing technology has been a process of adaptation for all involved. We do hope that we can network with others in the field to share our own experiences and learn from them to improve services to families. Our goal is to keep teachers, students, and their families informed and actively engaged in the changes and challenges that will remain a normal part of everyone's lives in the years to come.

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APPENDIX A

Sample Letter to Latin School Parents

January 16, 1996

Dear Friends,

As the area of information technology has grown in leaps and bounds, and as the School as expanded its computer resources, some of you may have found yourselves taking lessons in the new technology from your son or daughter. As part of our continuing efforts in the areas of technology and computer education, we are presenting two informative evenings for parents which are designed to help you fill in some of these gaps. They will provide you with a basic knowledge of the way your son or daughter is using technology each day at Latin, and introduce you to ways you can also make use of Latin's computer resources and network. Enclosed with this letter is a brief overview of the topics that will be covered during these evenings.

As a follow-up to these evenings, Live & Learn, Latin's adult education program, has organized a series of classes on technology, computers, and the Internet. The classes will take place in the last two weeks in February and will be taught by members of Latin's Computer and Science Departments. A complete list and description of these classes is included in the January/February issue of *Latin Today,* which you should receive shortly.

We hope many of you will take advantage of the parent evenings and the Live & Learn courses. It is our hope that through these efforts, you will gain a more complete understanding of the ways the School is fulfilling its Long Range Plan goal "to embrace technology to support the best possible academic program and the most flexible learning environment."

Sincerely,

Frank Hogan

APPENDIX B

Excerpts from Latin School's Computer Use Guidelines

Computers and Technology

All computer users have two basic rights—privacy and a fair share of resources. All students, faculty, and staff have the responsibility of using Latin computer systems in an efficient, ethical, and lawful manner. The ethical and legal guidelines put forth below derive directly from standards of common sense and common decency that apply to the use of any public resource within the school.

Rights and Responsibilities

- Computers and networks can provide access to resources on and off campus, as well as the ability to communicate with other users worldwide. Such open access is a privilege, and requires that individual users act responsibly. Users must respect the rights of other users, respect the integrity of the systems and related physical resources, and observe all relevant laws and school regulations.

- The user should select an obscure password and change it frequently to prevent unauthorized access to their private folder and/or restricted applications and data by other users. The user should also be aware of viruses and other destructive computer programs, and take steps to avoid becoming an unwitting victim or means of transmission.

- It is the responsibility of the individual to make backup files of the documents they create. There is no guarantee that items produced on an individual Mac and left in the local guest folder will be there the next day; all important files should be copied either to a diskette or to the individual's user folder. User folders on the student and faculty servers are backed up once weekly.

- System administrators may access user files as required to protect the integrity of computer systems. For example, system administrators may access or examine files or accounts that are suspected of unauthorized use or misuse, or that have been corrupted or damaged. Games, cartoon sounds, and icon collections found in student folders and guest folders will be deleted.

- Users are reminded that for their own protection, they should not discuss or give out specific personal information about themselves such as age, phone number, or address to strangers encountered in the course of online or e-mail exchanges.
- All existing laws (federal and state) and school regulations and policies apply, including not only those laws and regulations that are specific to computers and networks, but also those that may apply generally to personal conduct.
- Misuse of computing, networking, or information resources may result in the loss of computing privileges. Additionally, misuse can be prosecuted under applicable statutes. Users may be held accountable for their conduct under any applicable school policies or procedures. Complaints alleging misuse of Latin resources will be directed to those responsible for taking appropriate disciplinary action. Illegal reproduction of software protected by U.S. Copyright Law is subject to civil damages and criminal penalties including fines and imprisonment.

Examples of Misuse

Examples of misuse include, but are not limited to, the activities in the following list.

- Using a computer account that you are not authorized to use. Obtaining a password for a computer account or folder without the consent of the true owner.
- Using someone else's login or e-mail account which has inadvertently been left open.
- Using school resources to gain unauthorized access to any computer systems.
- Knowingly performing an act which will interfere with the normal operation of computers, terminals, peripherals, or networks including erasing applications, making modifications to system files, or interfering with the functioning of the server computers.
- Knowingly running or installing on any school computer, or giving to another user, an application intended to damage or to place excessive load on a computer system or network. This includes but is not limited to programs known as computer viruses, bombs, Trojan horses, and worms.
- Playing games during school hours; playing or programming the display of distracting sounds and/or visuals on lab computers.
- Attempting (with or without malicious intent) to circumvent data protection schemes or uncover security loopholes. This includes attempts to decrypt intentionally secured files.
- Violating terms of applicable software licensing agreements or copyright laws. Protected software is not to be copied into, from, or by any Latin facility or computer except by license.
- Deliberately wasting computing resources (i.e. exceeding the student folder storage quota or wasting pages on the laser printers in the library, computer labs, or elsewhere).

- Using electronic mail to harass others or sending unauthorized mailings to large numbers of students.
- Posting objectionable or slanderous messages on a public bulletin board.
- Masking the identity of an account, machine, software application, or icon.
- Posting, downloading, e-mailing, or depositing onto any school computer materials that violate existing laws or the school's codes of conduct (e.g., graphic material of an obscene nature).
- Academic dishonesty (plagiarism, cheating, intentional damage to or deletion of someone else's work).
- Attempting to monitor or tamper with another user's electronic communications, or reading, copying, changing, or deleting another user's files or software without the explicit agreement of the owner.

Enforcement

- Minor infractions of these policies, especially if they appear accidental (e.g., poorly chosen passwords, overloading the system, excessive disk space consumption, hundred page laser printouts, and so on) will result in a warning by e-mail or in-person discussion.
- Infractions such as sharing of passwords, harassment, or repeated minor infractions as described in, but not limited to, the policies stated above may result in the loss of computer lab access privileges.
- More serious violations, such as unauthorized use, attempts to steal passwords or data, unauthorized copying or use of licensed software, or repeated violations as described in the above paragraphs will be referred to the Dean of Students and/or the Upper School Principal for appropriate action.

Policy adapted from:

—*Berkeley Computing,* Volume 3, Number 1 (January-February 1993)

—Indiana University, *Computer User's Privileges and Responsibilities,* Spring, 1990

—University of California–Davis Computer Use Policy

—University of New Mexico Ethics Code and Policy for Computer Use, July, 1991

Internet

Latin students can use the Internet to assist their learning, provide data for research projects, and allow for collaborative learning. Teachers and students have access to electronic communication with users all over the world, immediate access to information only a few minutes old, pictures, movies, sounds, and text that can either be viewed or downloaded, public domain software and shareware of all types, and discussion groups on all kinds of topics.

Internet Guidelines

The Internet is now available to the Latin School community. All members will have access to the Internet provided they agree to follow these guidelines:

- Student users must have parental permission to use Latin's Internet access.

- Accessing Internet sites that contain pornography or obscenity is forbidden.

- Addresses, photographs, or personal information about students identified by name may not be sent over the Internet without parental permission.

- Any material or user contact with which the student is uncomfortable must be reported to a faculty member.

- Every user must accept responsibility to monitor and control all materials sent or received under his or her account.

- No member shall use the Internet to transmit any material in violation of any federal or state regulation. This includes, but is not limited to, copyrighted material and threatening or obscene material.

- Use for commercial activity or for advertisement is prohibited.

- No member shall access the accounts and files of other users.

- No one shall attempt to damage the integrity of the system.

- All users must have prior approval of the network manager before joining a newsgroup or subscribing to a listserv.

Any violation of this policy or use of the School's Internet access in an inappropriate manner can lead to revo-cation of student privileges and to disciplinary action.

Internet Risks

We are all aware of the existence on the Internet of material inappropriate for Latin students and of users who might seek to take advantage of other users. We are aware of potential dangers and will try to protect our students through the use of software which blocks access to sites known to disseminate inappropriate material. On a global network, it is impossible to control all materials, however, and a determined user may find ways to bypass such controls.

■