Excerpted from *The Technology Coordinator's Handbook*
By Max Frazier and Gerald D. Bailey

There's little consensus yet about how the position of technology coordinator should be defined and certified. Nevertheless, this relatively new education specialty does have powerful professional resources—in special interest and discussion groups like ISTE's SIGTC, and now, with ISTE's new guide, *The Technology Coordinator's Handbook*. Written by two broadly experienced educational technology leaders, this title provides one of the first comprehensive examinations of professional practice.

Included in the following excerpt are three selections from the book. The first highlights real-life technology coordinators with information about their job scope, professional background, and salary range. The second provides an overview and rubric for selecting software, and the third focuses on managing user accounts. These are just a sample of the book's numerous valuable resources. Order your full copy today!

The Technology Coordinator Issues Model

In most schools and districts, the technology coordinator serves in a leadership position within the organizational structure. However, tech coordinators are often hired and work under the union-negotiated agreement as a teacher leader rather than as a district administrator; in other words, though they have a title and hold a position of responsibility, they may not actually be an administrator. Many districts have preferred to keep the technology coordinator as part of the teaching staff, even though the coordinator may have supervisory responsibilities and work with adults rather than children. The actual job title varies considerably from district to district—from "coordinator" to "director" to "specialist." Regardless of the title, though, the responsibilities and issues that people in this position typically face are usually quite similar.

The technology coordinator is the person who blazes a trail for technology in the school or district and understands how all the hardware, software, policies, and procedures fit together in the big picture of the school's or district's technology implementation (Jewell, 1999). The tech coordinator should be prepared to help teachers, staff, administrators, and board of education members use technology more effectively and meet the standards and goals laid out in the district's technology plan. The coordinator must find and accumulate adequate funding and administrative support to make the school's or district's technology initiatives feasible, as well as budget successfully for the necessary resources for installation, maintenance, and training (Ritchie, 1996).

The Technology Coordinator Issues Model in Figure 2 is intended to provide a complete overview of the various areas of responsibility that comprise the technology coordinator position. The model articulates several specific issues within each general area that most technology coordinators will have to address to effectively support and integrate technology use in all aspects of the organization.

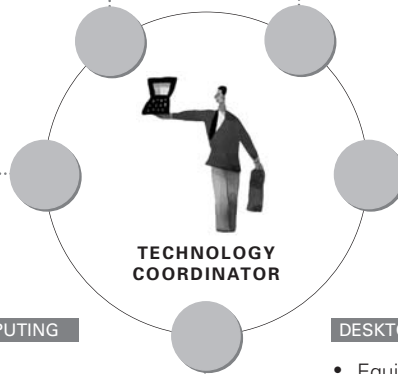*The Technology Coordinator's Handbook*

Technology Coordinator Issues Model—Areas and Issues

BUDGETING AND PLANNING

- Technology Planning
- Budgeting
- Evaluation
- Grants
- E-rate Applications

TEACHING AND LEARNING

- Educational Software
- Curriculum Integration
- Instructional Technology Research
- Staff Development
- Web-Based Resources and Instruction

TECHNOLOGY COORDINATOR

ADMINISTRATIVE COMPUTING

- Processing Grades and Student Records
- Human Resources
- Business Operations
- Document Imaging and Management

DESKTOP SUPPORT

- Equipment Purchasing and Allocation
- Ergonomics and Furniture
- Software Licensing
- Help-Desk Support
- Equipment Repairs
- Virus Protection
- Maintenance and Upgrades

NETWORK OPERATIONS

- Network Infrastructure
- User Management
- E-Mail System Management
- Backup Procedures
- Remote Management
- Intranet Management

FIGURE 2

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Real-Life Technology Coordinators

The following profiles depict the varying work environments and job descriptions typical of the technology coordinator position in small, medium, and large school districts around the country.

Meet Susan R., Technology Coordinator for a Rural District

Susan R. works as the technology coordinator for a rural Midwest school district. She's the only technology staff member for the district, which serves an agricultural town of about 10,000 people. The district has five school buildings, with a total enrollment of 1,200 students in Grades K–12.

Susan serves the district as network administrator, performs hardware maintenance and repair, handles the purchasing and installation of equipment and software, manages the technology inventory, develops short- and long-range technology goals, and manages all technology spending. She provides professional development in technology for all employees of the school system. Her responsibilities also include directing the technology committee responsible for developing and carrying out the technology plan and for implementing technology integration activities in district classrooms.

Thanks to her considerable experience in working with schools and teachers, Susan has been successful in implementing special technology initiatives in her district. She was instrumental in initiating a plan providing seventh-graders with handheld computers—a program that's been successful with both teachers and students. One of the secrets to her success has been the development of a cadre of district teachers and administrators who assist her with planning, decision making, staff training, and implementation activities. Susan is also active in technology leadership activities in her state. She has twice served as the president of the statewide computers-in-education organization.

Susan came to this position from outside education and has never worked as a teacher. She received her computer training through a vocational program and does not have a four-year college degree. She's been working in this position for nine years and works on an 11-month-contract basis. Her salary range for this position is $35,000–$45,000.

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Selecting Educational Software

The careful selection of educational software is very important to the success of a school's or district's technology integration efforts. The technology coordinator must first determine which software will serve as the standard installation on each computer in the organization. This set of software comprises the basic set of tools available to all users.

While districts may prefer one manufacturer over another, each computer should be outfitted with a minimum set of standard software: a word processing program for writing and editing text, a spreadsheet program for working with numbers, a database program for organizing and manipulating data, a desktop publishing program for creating publications of various types, a presentation program for creating and organizing multimedia presentations, an e-mail client for communicating, and a browser program for accessing information on the Internet.

This core software should become the basis for all machine setups and serve as the basic kit for the integration of technology into teaching and learning (McGillivray, 1999). Any users who access the technology resources within the organization can be sure they will find these standard tools installed and available for use. McGillivray points out that "because the tools are used across the curriculum, students learn to use them in multiple venues. Each teacher contributes to the student's mastery of the tools. Because the students use the tools frequently, their mastery becomes more rapid and their work more sophisticated" (p. 46).

Figure 4 illustrates the software kit implemented by the Heidelberg Model Schools. This kit contains a set of common software programs that are installed and used to support the integration of technology into all classrooms and subject areas. By selecting common tools for communications, word processing, presentations, computation, reference, security, and administration, the school was able to minimize costs, provide universal access, and address a wide range of classroom activities and projects. The selection of common tools for all classrooms also minimized the support requirements by making the number of programs more manageable (McGillivray).
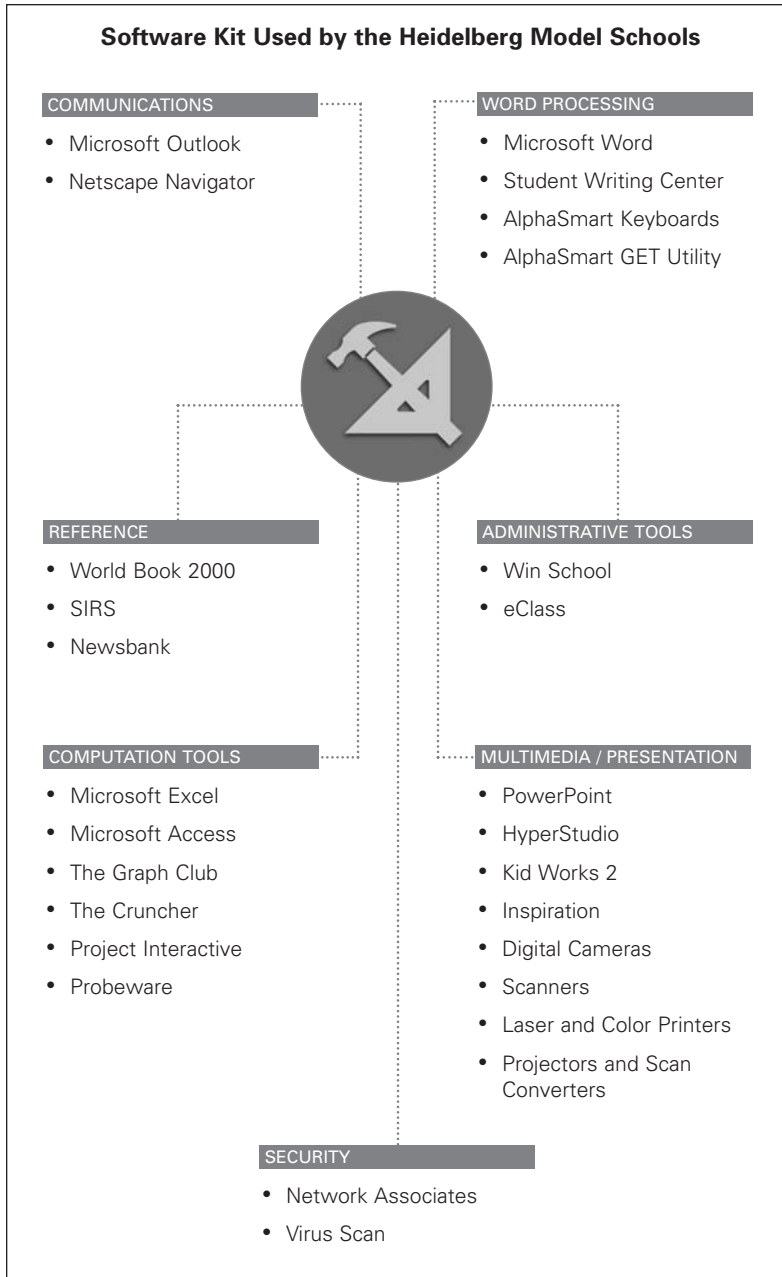
Software Kit Used by the Heidelberg Model Schools

COMMUNICATIONS

- Microsoft Outlook
- Netscape Navigator

WORD PROCESSING

- Microsoft Word
- Student Writing Center
- AlphaSmart Keyboards
- AlphaSmart GET Utility

REFERENCE

- World Book 2000
- SIRS
- Newsbank

ADMINISTRATIVE TOOLS

- Win School
- eClass

COMPUTATION TOOLS

- Microsoft Excel
- Microsoft Access
- The Graph Club
- The Cruncher
- Project Interactive
- Probeware

MULTIMEDIA / PRESENTATION

- PowerPoint
- HyperStudio
- Kid Works 2
- Inspiration
- Digital Cameras
- Scanners
- Laser and Color Printers
- Projectors and Scan Converters

SECURITY

- Network Associates
- Virus Scan

FIGURE 4

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The programs included in the Heidelberg Model Schools software kit included some of the most common programs installed on desktop computers in schools today. They're by no means the only choices a district can make in adopting a standard set of software tools for use by teachers, students, and staff. In addition to commercial programs such as these, a wide variety of freeware and shareware products are available from many developers and sources found on the Internet.

Often, these freeware and shareware products may lack the name recognition of more commonly known and used products, such as those shown in Figure 4, but they may offer similar functionality for a fraction of the cost. The StarOffice suite of programs offers the same functionality as the more commonly known products from Microsoft and is essentially free to educational institutions. More information on this suite of programs can be found at **www.sun.com/software/star/staroffice/**. These programs are also designed to share files and be interoperable with Microsoft programs.

Alternatives to Microsoft products also exist for e-mail services for both servers and desktop computers. Pegasus mail offers the Mercury Mail Transport System for servers, as well as the Pegasus Mail client for desktops, as a free download from the Pegasus site (**www.pmail.com**). The software is free, but users do have to pay for user manuals and support. These fees, however, are minimal, even for a large organization.

The technology coordinator will also play an integral role in the selection of additional software for use in the classroom. Information about specific programs and vendors must be gathered, software reviews located and distributed, and comparisons made of the programs' various capabilities and how they might support the school's or district's goals for technology use and integration.

It's important that the tech coordinator solicit input from staff and teachers before making final software selections. These users will have a better understanding of the curriculum and how the software can support it and will ultimately be the ones to use the software to support learning. Allowing end users a strong voice in purchasing decisions will lead to greater support and, ultimately, more frequent use of the software. The coordinator can effectively guide this process by acting as the liaison who contacts vendors, conducts research on new programs, tests the software

on district computers, contacts other schools or districts to see what products they're using, and reports to the school software committees that will make the final selections.

The technology coordinator also plays a vital role in obtaining the best price for such purchases by engaging in the *bid request* process, working with consortia to make bulk purchases and working with vendors to secure the best pricing available. Throughout the selection process, the technology coordinator should work to ensure that the software packages chosen match the educational goals and long-range technology plans for the school or district.

One way that technology coordinators can demonstrate their leadership and improve this process is to implement standard procedures for the selection of classroom software. Many valuable education dollars have been misspent on software programs that did not work as intended, were not compatible with or appropriate for the school's or district's hardware, or did not address an appropriate district educational need. An effective way to guard against this is to implement standard forms, criteria, and selection procedures for the purchase of educational software.

The first step should be to establish a software adoption committee. This committee—made up of representatives from different grade levels and subject areas—is charged with the evaluation of purchasing requests for educational software programs. This committee should meet as needed to review software recommendations and work with the technology coordinator to make final purchasing decisions.

helpful hint

Online Database

It's important to make sure that software evaluation information is available to staff members searching for educational software. One way to do this is the creation of an online database of software evaluation information that can be easily accessed, reviewed, and added to as products are reviewed. Database programs such as Filemaker Pro (www.filemaker.com) make it easy to share information over a network or the Web by publishing databases on a Web site. The program comes with 30 starter solutions that can be adapted to the user's particular needs. Creating and posting such a database will help staff members more easily find useful software and avoid wasting time with inferior products someone has already tried and reviewed.

Standard software review forms should be developed and used to gather information about products that staff members wish to purchase. These forms should require individuals requesting the purchase to gather basic product information, specify how the software would be used educationally as well as what content and technology standards it would address, list specific hardware requirements, summarize relevant software review articles, and submit all of this information to the software selection committee. The software selection committee would then evaluate the information and recommendations submitted to them by staff members, make selections based on those recommendations, and work with the technology coordinator to make final purchasing and budget decisions.

toolbox tip

Software Form

Software selection is an important yet time-consuming task that can benefit considerably from well-defined procedures. Making use of a software selection form such as the following can help standardize the process and make selection decisions more informed and effective. This form should identify useful information about the product and how it will be used in an educational setting. This information can be quite helpful when making software purchasing decisions.

software selection form

Name _____

School _____

Grade or Department _____

Software Title _____

Publisher _____

Content Area _____

Topic _____

Targeted Grade Level _____

TYPE OF LICENSE TO BE PURCHASED *(CHECK ONE)*

☐ Single Computer ☐ Site License

☐ Lab Pack ☐ Network License

TECHNICAL REQUIREMENTS

	Computer / Processor Required		Hard-Drive Space Required
	RAM Required		Additional Hardware Required
	Compatibility With Existing Software		Other Requirements

SOFTWARE CATEGORY

☐ Presentation ☐ Multimedia

☐ Simulation ☐ Data Processing

☐ Tutorial ☐ Educational Game

☐ Reference ☐ Graphics

software selection form

Page 2

☐ Authoring   ☐ Word Processing

☐ Drill and Practice ☐ Handheld Application

☐ Other (please specify)

SOFTWARE FEATURES

Claim	Strongly Agree	Agree	Disagree	N/A
The directions are clear and easy to follow.				
It's easy to start and exit the program.				
Users can easily resume where they left off in the program.				
The program functions well and is free of bugs.				
The program is enjoyable to use.				
The graphic elements are meaningful and appropriate.				
Sound can be turned on and off.				
The software contains useful management features.				
Basic tasks are easily learned and intuitive.				
Advanced features are easy to access and apply.				
Menu-driven tutorials are built into the program.				

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software selection form

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What specific curricular and technology standards will be addressed by this software?

_____

_____

What are your instructional goals for using this software?

_____

_____

Have you found reviews of this software? If so, summarize comments from the reviews:

_____

_____

Have you tested the software in the classroom? If so, summarize what you did with the software, and rate its usefulness to the learning process:

_____

_____

If you haven't used the software before, do you know colleagues who have? If so, indicate how they used the software and their general evaluation:

_____

_____

Other comments or information:

_____

_____

software selection form

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PURCHASING INFORMATION

Cost _____

Product ID Number _____

Recommended Vendor _____

Vendor Address _____

Vendor Phone Number _____

Software Selection
Committee Comments _____

_____

_____

Committee Purchase
Recommendation ☐ Yes ☐ No

Technology Coordinator Notes

Date of purchase _____

Software license number _____

Installation information,
notes,and location(s) _____

_____

_____

User-Account Management

The success of any network is measured best by the end user's level of satisfaction and productivity. A network's infrastructure may be of the highest quality, but if the user has difficulty using the resources available, the network will not be viewed as a good investment of limited technology dollars. A user who is unable to log onto the network cannot access stored files, use network programs, visit a Web site, send an e-mail message, or make use of a network printer. Problems with a user account could cause a teacher who is uncomfortable with technology to abandon the network altogether—and lose all the many benefits it can offer. Effective management of user accounts is, therefore, crucial to network operations.

While technology coordinators may not be directly responsible for user-account management, it's important that they understand related issues and establish standard procedures for typical user-account problems, such as how to access accounts for new users, whom to contact when questions and problems arise, what to do when a password is forgotten, and how to help users access network resources that are of most use to them. These procedures should be specified and communicated to all users of the network so that when questions and problems arise people know what to do.

New-account requests and problems with passwords are part of the day-to-day management of any network. At the beginning of a school year it may be useful to work with administration and school offices to develop a list of new staff members who will need user accounts. These lists should serve as the basis for new-account requests. Lists of employees who have left the organization should also be developed so that those accounts can be removed. Password problems can arise at any time and need to be dealt with in a timely manner. Often these problems can be solved quickly by simply resetting a password that has been forgotten. It will be helpful for the technology coordinator or network administrator to designate a contact who can assist with these routine questions and problems. This person might be given some extra training and the authority to create new accounts and reset passwords as necessary.

Since training brand new users of the network so that they can access what they want and need is such an important aspect of the technology coordinator's job, a mandatory introductory class is good way to ensure that all new users receive a standard introduction to network use. This class can be offered at a variety of times and locations at the beginning of the school year. The session can be quite basic in nature and can be taught by the technology coordinator or technology contacts at school sites.

This mandatory class can be a useful way to help people learn how to connect to the network with user ID and password. A formal introduction to the network will help new users understand how the network is organized, such as public vs. private storage of files. It will help them learn what programs are available through the network, how to access such resources as the online library catalog, how to find out whom they can turn to when questions or problems arise, and so forth. This introductory class is also an ideal forum for introducing the district's Acceptable Use Policy (AUP) to new users.

Acceptable use policies are documents that outline the district's intended uses of the network and Internet. They set forth proper online behavior. The district's AUP should be one of the first policies developed when establishing a network and Internet connection. The technology coordinator is usually the staff member charged with formulating, implementing, and communicating this policy to other district staff.

Including the AUP in student handbooks ensures that all students and families will have a copy of the document and, therefore, the opportunity to review it before school activities begin. By having a document that is distributed to every user, the technology coordinator can educate users on potential pitfalls and provide guidance for students and parents. Some schools choose to have the AUP signed by both students and parents and kept on file in the office or classroom. This may be difficult for a large organization to do. The real purpose of such a document is to define boundaries of behavior and, more critically, specify the consequences of violating those boundaries.

Following are sample Acceptable Use Policy documents.

internet acceptable use policy

<Your> School District

INTERNET ACCEPTABLE USE AGREEMENT

Please read this document carefully before signing.

Internet access is now available to students and teachers in the <YOUR> School District.

We are very pleased to bring this access to <YOUR> School District and believe the Internet offers vast, diverse, and unique resources to both students and teachers. Our goal in providing this service to teachers and students is to promote educational excellence in schools by facilitating resource sharing, innovation, and communication.

The Internet is an electronic highway connecting thousands of computers all over the world and millions of individual subscribers. Students and teachers have access to:

1   Electronic mail (e-mail) communication with people all over the world.

2   Information and news from NASA as well as the opportunity to correspond with the scientists at NASA and other research institutions.

3   Public domain software and graphics of all types for school use.

4   Discussion groups on a plethora of topics ranging from Chinese culture to the environment to music to politics.

5   Access to many university library catalogs, the Library of Congress, and ERIC, a large collection of relevant information for educators and students.

With access to computers and people all over the world also comes the availability of material that may not be considered to be of educational value in the context of the school setting. <YOUR> School District has taken precautions to restrict access to controversial materials. However, on a global network it is impossible to control all materials, and an industrious user may discover controversial information. We (<YOUR> School District) firmly believe that the valuable information and interaction available on this worldwide network far outweigh the possibility that users may procure material that is not consistent with the educational goals of the district.

internet acceptable use policy

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Internet access is coordinated through a complex association of government agencies and regional and state networks. In addition, the smooth operation of the network relies upon the proper conduct of the end users, who must adhere to strict guidelines. These guidelines are provided herein so that you are aware of the responsibilities you are about to acquire. In general, this requires efficient, ethical, and legal utilization of the network resources. If a <YOUR> School District user violates any of these provisions, his or her account will be terminated and future access could possibly be denied.

The signature or signatures at the end of this document are legally binding and indicate that the party or parties who signed have read the terms and conditions carefully and understand their significance.

INTERNET—TERMS AND CONDITIONS OF USE

Acceptable Use. The purpose of the backbone networks making up the Internet is to support research and education in and among academic institutions by providing access to unique resources and the opportunity for collaborative work. The use of your account must be in support of education and research and consistent with the educational objectives of the <YOUR> School District. Use of another organization's network or computing resources must comply with the rules appropriate for that network. Transmission of any material in violation of any national or state regulation is prohibited. This includes, but is not limited to: copyrighted material, threatening or obscene material, or material protected by trade secret.

Privileges. The use of the Internet is a privilege, not a right, and inappropriate use will result in a cancellation of this privilege. (Each student or teacher who receives an account will be part of a discussion with a <YOUR> School District staff member pertaining to the proper use of the network.) The system administrators will deem what is inappropriate use and their decision is final. Also, the system administrators may close an account at any time as required. The administration, faculty, and staff of <YOUR> School District may request the system administrator to deny, revoke, or suspend specific user accounts.

internet acceptable use policy

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Network Etiquette. You are expected to abide by the generally accepted rules of network etiquette. These include, but are not limited to, the following:

- Be polite. Do not get abusive in your messages to others.

- Use appropriate language. Do not swear or use vulgarities or any other inappropriate language.

- Illegal activities are strictly forbidden.

- Do not reveal your personal address or phone number, or those of students or colleagues.

- Note that electronic mail (e-mail) is not guaranteed to be private. People who operate the system do have access to all mail. Messages relating to or in support of illegal activities may be reported to the authorities.

- Do not use the network in such a way that you would disrupt the use of the network by other users.

- All communications and information accessible via the network should be assumed to be private property.

Warranties. <YOUR> School District makes no warranties of any kind, whether expressed or implied, for the service it is providing. <YOUR> School District will not be responsible for any damages you suffer. This includes loss of data resulting from delays, nondeliveries, misdeliveries, or service interruptions caused by its own negligence or your errors or omissions. Use of any information obtained via the Internet is at your own risk. <YOUR> School District specifically denies any responsibility for the accuracy or quality of information obtained through its services.

Security. Security on any computer system is a high priority, especially when the system involves many users. If you feel you can identify a security problem on the Internet, you must notify a system administrator or the <YOUR> School District Internet Coordinator. Do not demonstrate the problem to other users. Do not use another individual's account without written permission from that individual. Attempts to log on to the Internet as a system administrator will result in cancellation of user privileges. Any user identified as a security risk or as having a history of problems with other computer systems may be denied access to the Internet.

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internet acceptable use policy

Vandalism. Vandalism will result in cancellation of privileges. Vandalism is defined as any malicious attempt to harm or destroy data of another user, the Internet, or any of the above-listed agencies or other networks that are connected to any of the Internet backbones. This includes, but is not limited to, the uploading or creation of computer viruses.

_____

SCHOOL DISTRICT INTERNET USE AGREEMENT

I understand and will abide by the above Internet Acceptable Use Agreement. I further understand that any violation of the regulations above is unethical and may constitute a criminal offense. Should I commit any violation, my access privileges may be revoked and school disciplinary action, or appropriate legal action, may be taken.

User's Full Name: _____

User's Signature: _____

Date: _____

PARENT OR GUARDIAN

As the parent or guardian of this student, I have read the Internet Acceptable Use Agreement. I understand that this access is designed for educational purposes. <YOUR> School District has taken precautions to eliminate controversial material. However, I also recognize it is impossible for <YOUR> School District to restrict access to all controversial materials, and I will not hold the district 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 the information contained on this form is correct.

Parent's or Guardian's Name: _____

Parent's or Guardian's Signature: _____

Date: _____

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