



RIS K-12 Technology Standards & Technology Benchmark Outcomes

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RIS K-12 Technology Standards & Technology Benchmark Outcomes

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Introduction

This handbook describes the standards and desired benchmark skills for students in Ruamrudee International School. The information in here is meant to assist teachers as they plan units, lessons, projects, assignments and activities. By examining the tables inside, teachers can know what technology skills their students should have already and what skills should be acquired during the year.

We realize that all teachers do not have all of the skills outlined inside, and we realize that teachers cannot be expected to teach their students all the skills outlined inside. The members of the Technology Committee can help you teach your students and assist you in developing your lessons, as well give you other kinds of technical support when needed.

This edition of the handbook is not meant to be the final version. It is a work in continual development. As you read through it, you will likely find some repetitions, redundancies, contradictions, simplistic statements or unrealistic goals. Please communicate your concerns or ideas to the Technology Committee so that we can keep this work truly reflective of the needs and abilities of our students.

Editions will be posted on the Internet for easy reference.

The Technology Committee has recently undergone change. The new system is composed of two teams: a curriculum support team and a technology support team. These two teams will, in a timely and realistic manner, help teachers with training, staff development, purchases, distribution, maintenance, and networking. To help meeting the school's increasingly complex technology needs we are hiring more support staff. Their job descriptions are included in the back of the book. Please note that these job descriptions have not been finalized. The new system should be in place by August 2001.

Bradley Arnold
K-12 IT Coordinator
Ruamrudee International School

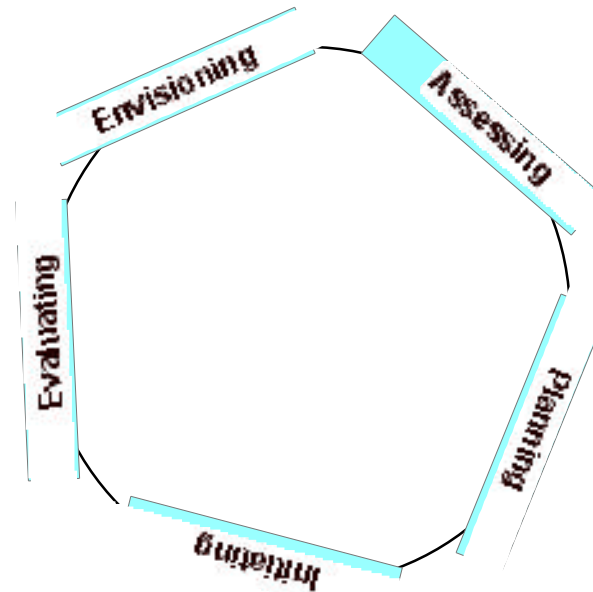
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Technology Integration Planning Cycle

As the technology committee goes about its work with the teachers, students and others in the school, we follow the cycle on the right.

All of our work follows this cycle, as we are constantly working to improve and develop the technology system we have at school.

- **Envisioning:** Creating a vision of technology integration
- **Assessing:** Understanding the resources, strengths, and weaknesses in your current program
- **Planning:** Developing a plan that includes placing milestones on a timeline and evaluating the resources required to achieve the goals
- **Implementing:** Putting that plan into action
- **Evaluating:** Evaluating the program's success



K-12 Technology Standards

Students will be able to...

Standard 1: Basic Operations	Standard 2: Social, Ethic and Human Issues	Standard 3: Technology Production Tools	Standard 4: Technology Communication Tools	Standard 5: Technology Research Tools	Standard 6: Technology Problem solving and Decision Making Tools
<p>Students are capable of using the required hardware and software in ways that support the five other standards.</p> <p>Students have a level of computer competency that allows them to solve technical problems and learn new computing skills as technology develops.</p>	<p>Students exhibit behaviors that demonstrate proper understanding of the role of computers.</p> <ul style="list-style-type: none"> • sharing: responsibilities, files, setting up and accessing folders on the network • cooperating: tasks, responsibilities • respecting the work of others: property, copyrights, references, bibliographies • assisting: helping other students and teachers with computer related matters, helping teachers and 	<p>Students are able to use computer hardware and software in ways that increase their productivity.</p> <p>Good productivity tools provide efficient and effective ways to collate, manage, publish and display information.</p> <p>Software applications include:</p> <ul style="list-style-type: none"> • word processing • database • spreadsheet • desktop publishing • communication • networking 	<p>Students use tools to create and effectively communicate both linear and non-linear presentations to a variety of audiences.</p> <p>Such type of communication includes:</p> <ul style="list-style-type: none"> • direct/personal communication: email, web boards/message centers, peer-editing, reporting • multimedia: WWW, slideshows, DV, graphic, animated, and combinations 	<p>Students gain access to information in dictionaries, encyclopedias, atlases, periodical indexes, journals, news, magazines, image libraries, multimedia resources, and other reference sources online, on CD ROM and within the school network.</p> <ul style="list-style-type: none"> • Searching: internet, library, network, computer • Software and tools should allow students to ask questions. 	<p>Software and tools should allow students to:</p> <ul style="list-style-type: none"> • brainstorm, develop ideas • group. categorize, compare & contrast • analyze • question • simulate • create sequences • Answer questions and propose solutions.

	<p>support personnel care for and maintain hardware, software rooms and other resources.</p> <p>• code of conduct: adhering to and promoting the adhering to of the school's code of conduct, advising teachers and others on issues of concern related to this.</p>	<p>This software is important for:</p> <ul style="list-style-type: none"> • presenting • The writing process • Reporting 	<ul style="list-style-type: none"> • live: oral reports, speeches, dramas, debates, and other presentation formats • presentations: classroom, school-wide, community-wide, international. • types of audiences: classmates, the teacher, administrators, family, the general population, civic leaders, universities, charities, and so on. 	<ul style="list-style-type: none"> • Software and tools should include links to other information sources and tools for expanding and retrieving searches, manipulating information. 	
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In Reference to Standard 2: Social, Ethic and Human Issues

The following ideas should be understood by all and should be reinforced by classroom teachers.

- Students understand that there are appropriate and inappropriate sites on the Internet and that they should not access inappropriate sites.
- Students demonstrate proper email etiquette.
- Students know not to give out personal information over the Internet.
- Students understand that not all people on the Internet are who they appear to be.
- Students understand never to access other peoples network folders.
- Students understand that copying copyrighted information is illegal unless properly cited.
- Students understand that files created by others are the sole possession of that person.

RIS Technology Code of Conduct

All computer users agree to:

1. be ethical and courteous and not send hateful, harassing, obscene, or discriminatory, or other inappropriate messages.
2. respect the files and data of other users and not change or copy files/data of others without their permission.
3. treat anything created by others (information, graphics, music, sounds, projects, etc.) as their private property and respect copyrights.
4. use the school network in a way that does not disrupt its use for others.
5. not develop or distribute programs that invade other computers, computer systems, or networks and not hack the system.
6. not destroy, change, or misuse the hardware or software in any way.
7. use the Internet for educational purposes.
8. respect and protect the privacy of all users. Do not use anyone else 's user name password, etc.

K-12 Standard Software Continuum

B = basic or beginning skills I = intermediate skills A = advanced skills

Software	K	1	2	3	4	5	6	7	8	9	10	11	12
AppleWorks	B	B	B	B	I	I	I	I	I	I	A	A	A
Explorer/Netscape	B	B	B	B	I	I	I	I	I	A	A	A	A
KidPix	B	I	A	--	--	--	--	--	--	--	--	--	--
MacOS Panels	B	B	I	I	A	A	A	A	A	--	--	--	--
MacOS Desktop	--	--	--	B	B	I	I	I	I	I	A	A	A
MapMaker's Toolkit	--	--	B	B	I	I	I	I	A	A	A	A	A
iMovie	--	--	B	B	B	B	I	I	A	A	A	A	A
Photodeluxe	--	--	B	B	B	I	A	A	A	--	--	--	--
Inspiration													
Storybook Weaver	--	--	B	B	I	A	A	A	A	--	--	--	--
Hyperstudio	--	--	--	B	B	I	I	I	I	I	A	A	A
Sherlock (& searching)	--	--	--	B	B	I	I	I	I	A	A	A	A
Word	--	--	--	--	--	B	B	B	B	I	I	A	A
Excel	--	--	--	--	--	B	B	B	B	B	I	I	A
Pagemill	--	--	--	--	--	B	B	B	I	I	I	A	A
Photoshop	--	--	--	--	--	B	B	B	I	I	I	I	A
Premier	--	--	--	--	--	B	B	B	B	B	B	I	A
PowerPoint	--	--	--	--	--	--	--	--	B	I	I	A	A
Acrobat	--	--	--	--	--	--	--	--	B	B	I	I	I
Pagemaker	--	--	--	--	--	--	--	--	B	B	B	I	A
Windows	--	--	--	--	--	--	--	--	--	B	I	I	A
Dreamweaver	--	--	--	--	--	--	--	--	--	--	B	I	I

KG Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Kindergarten	<ul style="list-style-type: none"> • locate, open and quit an application • can locate the save command in the file menu 	<ul style="list-style-type: none"> • identify and locate components of the computer and related equipment • use a mouse as a pointing device • use a mouse to click on icons • identify and locate letters, numbers and special keys on a keyboard • wake a computer from sleep or screen saver mode • insert and remove a CD 	<ul style="list-style-type: none"> • Exposed to simple databases in different media. 	<ul style="list-style-type: none"> • Exposed to digital video in CD ROMS and other media. • Participates in projects that are videotaped by the teacher and later transferred to computer.

KG Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Kindergarten	<ul style="list-style-type: none"> • insert graphics from various sources as a large group • use a simple draw or paint program to illustrate an idea using applications such as AppleWorks, KidPix and Hyperstudio. • can use different color paintbrushes • can erase • create and extend patterns using stamps 	<ul style="list-style-type: none"> • understand aspects of multimedia applications: sounds, animations, buttons, screen transitions, graphics • access appropriate multimedia applications (Hyperstudio, Kid Pix, AppleWorks) • access drawing and painting tools with assistance 	<ul style="list-style-type: none"> • access shared files with assistance • can recognize class folder 	<ul style="list-style-type: none"> • Use a computer menu and select icons • identify program icons, open and quit an application • properly shut down a computer

KG Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Kindergarten	<ul style="list-style-type: none"> • print assigned work with teacher assistance and permission 	<ul style="list-style-type: none"> • access ideas and/or information from an electronic source • with the teacher, use simple strategies to retrieve relevant information (print a chosen picture or listen to a chosen sound) 	<ul style="list-style-type: none"> • Exposed to simple spreadsheets. 	<ul style="list-style-type: none"> • view a web page • develop an awareness of electronic mail • participate in whole-class projects to exchange electronic information (contribute in a class email message to a partner class)

KG Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Kindergarten	<ul style="list-style-type: none"> recognizes when there are problems with the computer and call a teacher for help 	<ul style="list-style-type: none"> Exposed to scanners, digital cameras and other related equipment. Can suggest possible uses for such equipment. 	<ul style="list-style-type: none"> Exposed to and helps develop class website. 	<ul style="list-style-type: none"> with the teacher use a word processor to type text (name, words) with teacher guidance, make occasional changes to a composition while writing (delete or replace letters)

Grade 1 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 1	<ul style="list-style-type: none"> • can save a file with a simple name 	<ul style="list-style-type: none"> • properly turn on and off the computer • utilize a mouse to point and click, choose a command from the menu bar, open a window, close a window, open a file, start or quit a program • use the cursor to insert text • use informal keyboarding skills (left hand on left side, right hand on right side, thumb on space bar, etc.) • locate the relative positions of keys on the keyboard • identify letter and number keys • identify and use punctuation keys • use the shift, caps lock, arrow, return, and delete keys, as well as the space bar • demonstrate proper posture 	<ul style="list-style-type: none"> • Exposed to simple databases in different media. 	<ul style="list-style-type: none"> • Exposed to digital video in CD ROMS and other media. • Participates in projects that are videotaped by the teacher and later transferred to computer.

Grade 1 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 1	<ul style="list-style-type: none"> • can choose and use simple tools such as the paintbrushes, polygon tool and line tool • make effective use of the screen/window space to communicate (create an image in the center of the screen, using white space above or below to write words) • move objects on screen to sort and count them 	<ul style="list-style-type: none"> • create text areas with assistance • use tools within an application to draw a picture (line, fill, shapes) • select a graphic within an application • access and create sounds with assistance • create transitions (visible buttons, screen transitions) with assistance 	<ul style="list-style-type: none"> • can enter password to log-in to the computer or network 	<ul style="list-style-type: none"> • Use the mouse and keyboard for basic commands • move objects on screen to sort and count them

Grade 1 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 1	<ul style="list-style-type: none"> • Print original work 	<ul style="list-style-type: none"> • students can access information from a variety of electronic sources • use icons or simple key words to locate information about a topic in a multimedia database (e.g. World Book) • with a teacher, identify appropriate sources for locating specific information 	<ul style="list-style-type: none"> • recognize parts of a spreadsheet, such as cells, row headings and column headings • create a spreadsheet as a large group inserting data in columns and rows 	<ul style="list-style-type: none"> • develop an awareness of different search engines • navigate from one screen to another using hyperlinks • view a web page designed by other students • contribute to a large group email using the components of send and reply • participate in whole class projects to exchange electronic information (class web page)

Grade 1 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 1	<ul style="list-style-type: none"> • identify a "hung" computer and be able to force-restart a computer 	<ul style="list-style-type: none"> • Exposed to scanners, digital cameras and other related equipment. • Can suggest possible uses for such equipment. 	<ul style="list-style-type: none"> • Exposed to and helps develop class website. 	<ul style="list-style-type: none"> • Can create one-page documents • use a create-a-book application to create a story • with guidance select known software to repeat a routine (use a word processor to type names, words, simple stories, etc.) • make occasional changes to a composition

Grade 2 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 2	<ul style="list-style-type: none"> • can move between applications • be able to create new folders with simple names 	<ul style="list-style-type: none"> • use a mouse to highlight text and graphics • demonstrate proper keyboarding techniques • be able to start, restart and shutdown the computer properly • identify home row keys 	<ul style="list-style-type: none"> • Exposed to simple databases in different media. 	<ul style="list-style-type: none"> • Exposed to digital video in CD ROMS and other media. • Participates in projects that are videotaped by the teacher and later transferred to computer.

Grade 2 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 2	<ul style="list-style-type: none"> • can use patterns and line fill features • with guidance, select from known software to perform a familiar task (use a paint/draw program to create an illustration) • balance some elements in a communication (make title larger than body text, center title) • compose a caption to explain an image • manipulate shapes on a screen to create new patterns 	<ul style="list-style-type: none"> • create text areas with assistance • use tools within an application to draw a picture (line, fill, shapes) • select a graphic within an application • access and create sounds with assistance • create transitions (visible buttons, screen transitions) with assistance 	<ul style="list-style-type: none"> • be able to use the chooser to access shared files and printers 	<ul style="list-style-type: none"> • demonstrate the ability to change applications using the finder and to quit currently running applications

Grade 2 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 2	<ul style="list-style-type: none"> Independently print assigned work 	<ul style="list-style-type: none"> use an entry level electronic encyclopedia use an appropriate website and its links with a teacher, select from simple screen icons to locate relevant information (using picture icons or initial letters to locate pictures and words in an electronic dictionary) with a teacher, use strategies to retrieve relevant information (print a chosen article) begin to identify, from specific resources, appropriate sources for locating information (an appropriate web page or CD)a 	<ul style="list-style-type: none"> recognize parts of a spreadsheet, such as cells, row headings and column headings create a spreadsheet as a large group inserting data in columns and rows use a spreadsheet template to classify and compare research information 	<ul style="list-style-type: none"> know how a search engine works review web pages already visited using the back/forward buttons from the navigation bar locate the title and author of a web page use email to send short messages

Grade 2 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 2	<ul style="list-style-type: none"> • identify a "hung" computer and be able to force-quit an application 	<ul style="list-style-type: none"> • Be aware of how to use appropriate computer peripherals • have basic understanding of the operation of a camera 	<ul style="list-style-type: none"> • Exposed to and helps develop class website. 	<ul style="list-style-type: none"> • can use the shift key • can use punctuation keys • can pick font and style • can create a storyboard for a computer-based project. • compose and illustrate a nonfiction text • with guidance make some changes to a draft while writing (add or delete letters, add or delete words/phrases, replace initial letters in proper nouns with capitals upon rereading) • use a word processor to generate and refine possible questions for an inquiry

Grade 3 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 3	<ul style="list-style-type: none"> • cut and copy information from different applications • navigate through different menus to retrieve other information (finder, open file, graphics) • manipulate more than one program at once • Can create folders • be able to drag and drop items • can create subfolders • drag and drop items to trash and folders <p>Can recognize different file formats by icons.</p>	<ul style="list-style-type: none"> • utilize a mouse's functions to resize windows and move windows • utilize a mouse to double click, • use a mouse to move graphics around on a page • drag the mouse to select words • recognize homerow keys 	<ul style="list-style-type: none"> • Exposed to simple databases in different media. 	<ul style="list-style-type: none"> • Exposed to digital video in CD ROMS and other media. • Participates in projects that are videotaped by the teacher and later transferred to computer.

Grade 3 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 3	<ul style="list-style-type: none"> • insert graphics from various sources (scanner, digital camera, collections, graphic software) with assistance • save in the appropriate graphics format (gif, jpg, pct) with teacher assistance • Can use transformation tools such as rotate, scale, and distort • can resize graphics to fit an appropriate space. • demonstrate awareness of the impact of placement and size of key elements in a communication (effectively place graphics, titles, body text, buttons) 	<ul style="list-style-type: none"> • with assistance edit text spelling, style, font, size, alignment, and color • with assistance cut and copy from other applications • select and manipulate a graphic within an application • access or create sounds within an application • create transitions (visible and transparent buttons, screen transitions) • create a basic animation with assistance • manipulate information within a document (moving cards in a stack, changing information and text. • produce a simple multimedia product (an computer slide show or interactive presentation) 	<ul style="list-style-type: none"> • can "log off" the network 	<ul style="list-style-type: none"> • master the use of major tools within an application • select and manipulate a graphic within an application

Grade 3 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 3	<ul style="list-style-type: none"> • navigate the appropriate windows to print a document • can utilize the "Page Setup" command • Can check for correct paper size 	<ul style="list-style-type: none"> • use bookmarks to access pre-selected websites • use a series of menus in a children's website to locate information about a topic • find relevant information on the school server • use simple strategies to retrieve relevant information (copy a selected sentence or picture and paste it into a word processor) • access more than one article about the same topic from multiple sources • identify, from resources, appropriate sources for locating information 	<ul style="list-style-type: none"> • create a simple spreadsheet • determine data items to use in a spreadsheet • insert data in column and rows • select the type of graph to display information • insert a graph into word processing documents • name, save, test and edit a spreadsheet • print a spreadsheet 	<ul style="list-style-type: none"> • access a browser to do a query using a search engine • choose a site which best matches a query • evaluate a selected site using the following criteria: authority, accuracy, purpose, currency, and helpfulness • use items from the menu bar such as Go and Bookmark • observe copyright laws and make references • compose an email message including an address line, subject line, message box, signature line • follow email etiquette

Grade 3 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 3	<ul style="list-style-type: none"> • Can restart a frozen computer 	<ul style="list-style-type: none"> • can scan a photograph • import a scanned image/digital photo into a document 	<ul style="list-style-type: none"> • Exposed to and helps develop class website. 	<ul style="list-style-type: none"> • change fonts, sizes, styles, alignments and borders • insert a graphic from a library • utilize edit commands such as undo, cut, copy and paste • utilize the tool bar and page setup, column and spell check commands • select the color of the text • use text wrap for graphics • create a storyboard for a computer-based project with a computer application • select from known software to perform a familiar task (select a word processor to write reports, poems, stories) • make changes to a composition for revising and editing while writing and after completion of a draft (revise a story by adding and inserting ideas and edit known spelling and punctuation errors by deleting and replacing and/or using a spelling check)

Grade 4 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 4	<ul style="list-style-type: none"> • can utilize the "save as..." commands • can duplicate files • can create subfolders • drag and drop items to trash and folders <p>Can recognize different file formats by icons.</p>	<ul style="list-style-type: none"> • able to touch-type • recognize all alphabet keys • double-click a word to select it or triple click a word to select more 	<ul style="list-style-type: none"> • Exposed to simple databases in different media. 	<ul style="list-style-type: none"> • can use a video camera to capture images. • can use basic cutting, titling and transition techniques to create short video clips.

Grade 4 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 4	<ul style="list-style-type: none"> • can add multiple texts and graphics together • can crop images • use information technology to produce a simple multimedia product to be shared with others • create a one-page newsletter for sharing information • select the appropriate type of software to produce a product (choose a word processor to create a poster and insert into it a graphic) • display consistency in the placement and size of key elements in a communication 	<ul style="list-style-type: none"> • with assistance edit text spelling, style, font, size, alignment, and color • with assistance cut and copy from other applications • select and manipulate a graphic within an application • access or create sounds within an application • create transitions (visible and transparent buttons, screen transitions) • create a basic animation with assistance • manipulate information within a document (moving cards in a stack, changing information and text. • use information technology to produce a simple multimedia product to be shared with others • create an interactive presentation to share learning from a project with peers, 	<ul style="list-style-type: none"> • can open a file from one folder and save it into another folder 	<ul style="list-style-type: none"> • Locate and use the basic help commands of an application • manipulate windows (close, open, move, rearrange, resize, scroll)

Grade 4 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 4	<ul style="list-style-type: none"> • Can utilize the "Print Preview" Command • Can change the paper orientation 	<ul style="list-style-type: none"> • gather information from text, graphics, audio, and video clips in an electronic encyclopedia • search a selected database to locate specific information • use keywords to search an electronic encyclopedia • select, copy and paste key points from an electronic encyclopedia • access at least three articles about the same topic from multiple sources • identify appropriate sources for locating specific information • choose an information CD-ROM to conduct research for a project 	<ul style="list-style-type: none"> • create a simple spreadsheet • determine data items to use in a spreadsheet • insert data in column and rows • select the type of graph to display information • insert a graph into word processing documents • name, save, test and edit a spreadsheet • print a spreadsheet • use tools to manipulate color, labels, and titles. • use a spreadsheet template to classify and compare research information 	<ul style="list-style-type: none"> • communicate with another person or group at a remote location • access a browser to do a query using a search engine • choose a site which best matches a query • evaluate a selected site using the following criteria: authority, accuracy, purpose, currency, and helpfulness • use items from the menu bar such as Go and Bookmark • observe copyright laws and make references • compose an email message including an address line, subject line, message box, signature line • follow email etiquette

Grade 4 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 4	<ul style="list-style-type: none"> • Can manually eject a CD ROM 	<ul style="list-style-type: none"> • Can recognize icons of external storage devices on the desktop. 	<ul style="list-style-type: none"> • Exposed to and helps develop class website. 	<ul style="list-style-type: none"> • Can use alignment commands • utilize the full writing process through the use of word processor to produce a complete composition • make some changes to a composition for revising and editing, both while writing and after completion of a draft (revise a story by reworking some sentences, adding description, edit for spelling and punctuation) • use a word processor to generate and refine possible questions for an inquiry

Grade 5 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 5	<ul style="list-style-type: none"> • drag and drop items to trash and folders • can make subfolders to hold multiple items for specific projects • can recognize different file formats by suffix 	<ul style="list-style-type: none"> • use all essential computer jargon and vocabulary (keyboard, mouse, monitor, drive, launcher, menu, chooser, network, save quit, etc.) • recognize all numeric keys • utilize the option key for special symbols 	<ul style="list-style-type: none"> • Exposed to simple databases in different media. 	<ul style="list-style-type: none"> • can design small video projects for classroom presentations using video editing software. • can plan to use simple special effects. • can insert sound into the desired location in a video

Grade 5 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 5	<ul style="list-style-type: none"> • can use all basic drawing and paint tools • import graphics, use computer writing tools, and apply accepted conventions of composition and document formats • maintain consistency of style in the key elements in a communication (button style and placement, title and body text styles, graphic borders) 	<ul style="list-style-type: none"> • with assistance edit text spelling, style, font, size, alignment, and color • with assistance cut and copy from other applications • select and manipulate a graphic within an application • access or create sounds within an application • create transitions (visible and transparent buttons, screen transitions) • create a basic animation with assistance • manipulate information within a document (moving cards in a stack, changing information. • add video clips to pages or cards • produce a simple multimedia product (use a spreadsheet to display a chart, table or graph, create an interactive presentation, such as a web page, to share learning within and beyond the school) 	<ul style="list-style-type: none"> • can log onto public folders and other relevant folders on the network 	<ul style="list-style-type: none"> • can recognize the difference in files saved in different formats or for different platforms • utilize keyboard shortcuts • do a force quit or a force restart

Grade 5 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 5	<ul style="list-style-type: none"> • Can assign a printing task to a specified printer on the network • Can recognize when a printer is out of paper by using the print monitor. • Can recognize when a printer misfeeds or is out of paper by using the warning light on the printer. • Can load paper tray with desired paper size or color. • Can diagnose common printing problems so as to avoid excess printing. 	<ul style="list-style-type: none"> • identify fiction, nonfiction, magazines, reference, non-print media, and electronic resources • access pre-selected Internet sites using URLs • gather information by navigating a multimedia stack, using outlines, menus, and hypertext links • use a search engine to locate information using pre-selected keywords and hypertext menus • use strategies to retrieve information from a number of different sources • access at least three articles about the same topic from multiple sources with one from the Internet • begin to select the electronic source that appears most appropriate for a specific task (choose between electronic database, Internet, CD-ROMs and print copy for specific information) 	<ul style="list-style-type: none"> • create a simple spreadsheet • determine data items to use in a spreadsheet • insert data in column and rows • select the type of graph to display information • insert a graph into word processing documents • name, save, test and edit a spreadsheet • print a spreadsheet use tools to manipulate color, labels, and titles. • use a spreadsheet to display a chart, table or graph • create a simple spreadsheet to simulate and explore a situation 	<ul style="list-style-type: none"> • access a browser to do a query using a search engine • choose a site which best matches a query • evaluate a selected site using the following criteria: authority, accuracy, purpose, currency, and helpfulness • use items from the menu bar such as Go and Bookmark design a web page with graphics and active links • observe copyright laws and make references • compose an email message including an address line, subject line, message box, signature line • use some basic conventions of etiquette in telecommunication exchanges (use upper/lower case appropriately, space text, sign the message)

Grade 5 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 5	<ul style="list-style-type: none"> • Can manually eject a CD ROM • Can recognize a paper jam in the printer. • upon diagnosing a problem, can recommend solutions to the teacher. 	<ul style="list-style-type: none"> • Can upload information from various peripherals. (i.e., video, audio, text files, etc) 	<ul style="list-style-type: none"> • Can create a webpage using PageMill including Text, Graphics, links • maintain consistency of style in the key elements in a communication (button style and placement, title and body text styles, graphic borders) 	<ul style="list-style-type: none"> • Can use headers and footers • take a completed composition and edit its format, text style and page layout for different kinds of writing tasks. • make some changes to a composition for revising and editing to better reflect thinking and improve clarity

Grade 6 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 6	<ul style="list-style-type: none"> • drag and drop items to trash and folders • make subfolders to hold multiple items for specific projects • create folders on the network. • save file into desire folder on network. 	<ul style="list-style-type: none"> • locate the letters on the keyboard without looking • use both hands to correctly input data and follow other keyboarding conventions • can input data at 35-45 wpm with 90% accuracy • utilize a mouse to resize and move windows 	<ul style="list-style-type: none"> • Use Internet Search Engines • Use Encyclopedias on CD ROMs • Use Internet Resources to search online databases. • create a database layout to share results of an investigation 	<ul style="list-style-type: none"> • can design small video projects for classroom presentations using video editing software. • can plan to use simple special effects. • can insert sound into the desired location in a video

Grade 6 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 6	<ul style="list-style-type: none"> • draw and manipulate graphics (cut, crop, paste, scale, rotate, flip, filter, sharpen) • insert graphics from various sources (scanner, digital camera, graphics applications, collections and the Internet) • insert graphics into various applications and combine them with text. • save in the appropriate graphics format (gif, jpg, pct) • prepares manuscripts suitable for submission • maintain consistency of style in the key elements and choose elements that will assist the audience (create text chunks of appropriate length and size, use representational icons for buttons) 	<ul style="list-style-type: none"> • with assistance edit text spelling, style, font, size, alignment, and color • with assistance cut and copy from other applications • select and manipulate a graphic within an application • access or create sounds within an application • create transitions (visible and transparent buttons, screen transitions) • create a basic animation with assistance • manipulate information within a document (moving cards in a stack, changing information and text. can add video clips to pages or cards • produce a simple multimedia product (create a database layout to share results of an investigation, use a spreadsheet to calculate and display comparisons) 	<ul style="list-style-type: none"> • can decide the best location to save files (desktop, personal folder, public folder, etc.) 	<ul style="list-style-type: none"> • demonstrate independent use of copy and paste techniques with multiple applications

		<ul style="list-style-type: none">• select the appropriate software to produce a product (choose an interactive program to share information through text, pictures, sound and video)• use simulations to learn about people, the world, and events• use simulations to learn basic problem-solving strategies		
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Grade 6 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 6	<ul style="list-style-type: none"> • Can assign a printing task to a specified printer on the network • Can recognize when a printer is out of paper by using the print monitor. • Can recognize when a printer misfeeds or is out of paper by using the warning light on the printer. • Can load paper tray with desired paper size or color. 	<ul style="list-style-type: none"> • use email to gather information from specific sources • refine Internet search techniques by taking a number of keywords from classroom brainstorming • Use strategies to retrieve relevant information from a number of sources and begin to assess the accuracy of that information • choose the electronic source that appears the most appropriate for a specific task. • analyze and synthesize information appropriate to the developmental level • properly cite researched information based on accepted standards • use an appropriate heuristic to determine the validity of on-line information 	<ul style="list-style-type: none"> • create a simple spreadsheet • determine data items to use in a spreadsheet • insert data in column and rows • select the type of graph to display information • insert a graph into word processing documents • name, save, test and edit a spreadsheet • print a spreadsheet use tools to manipulate color, labels, and titles. • use a spreadsheet to calculate and display comparisons 	<ul style="list-style-type: none"> • send email with attachments • demonstrate clarity in telecommunications exchanges (state the key idea or question, provide necessary information)

Grade 6 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 6	<ul style="list-style-type: none"> • access the help menu to search for answers to how-to questions • can diagnose and solve common technology problems (the computer freezes, the server connection is lost, the printer won't print) • check the keyboard, mouse and other cable connections • can diagnose minor disk problems (e.g. disk is locked or unreadable). 	<ul style="list-style-type: none"> • Uses projectors in presentations • Uses digital cameras in class projects • Uses disk drives to save and upload to network and computer. 	<ul style="list-style-type: none"> • Can create a webpage using PageMill including Text, Graphics, links • maintain consistency of style in the key elements and choose elements that will assist the audience (create text chunks of appropriate length and size, use representational icons for buttons) 	<ul style="list-style-type: none"> • Can resize fonts • Can change fonts • Can use style features • Can spell check • Can use thesaurus • Can cut and paste • Can copy and paste • use simple techniques to facilitate the writing process • use a mind mapping program to brainstorm and connect ideas • classify ideas by copying and pasting into a chart, creating headings for each group

Grade 7 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 7	<ul style="list-style-type: none"> • can locate the application file • can utilize the public server • Can limit file memory size. • can utilize external disk drives. • can download images, audio and video from the Internet. 	<ul style="list-style-type: none"> • apply keyboard shortcuts such as cut, copy, paste, save and select all • can use attached peripheral equipment with assistance 	<ul style="list-style-type: none"> • Use Internet Search Engines • Use Encyclopedias on CD ROMs • Use Internet Resources to search online databases. • collect and analyze information collaboratively using an on-line database 	<ul style="list-style-type: none"> • can design small video projects for classroom presentations using video editing software. • can utilize a variety of transitions and titling effects in a video. • can insert a soundtrack for a video and time action around the sound.

Grade 7 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 7	<ul style="list-style-type: none"> • use template files to create a class newsletter/report that incorporates student writing and graphics • create a clear, balanced and consistent layout for pages and screens (use representational icons within a navigation bar or menu, use a footer to place an address and page number) 	<ul style="list-style-type: none"> • Can design and create multimedia presentations. • produce a simple multimedia product (create a brochure to promote an idea, design a web page to publish artwork) • select the appropriate software to produce a product (combine previously made diagrams and captions in a slide show) 	<ul style="list-style-type: none"> • can "log on" to multiple servers as needed 	<ul style="list-style-type: none"> • be able to master the use of less commonly used tools in an application • be able to use attached peripherals

Grade 7 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 7	<ul style="list-style-type: none"> • Can assign a printing task to a specified printer on the network • Can recognize when a printer is out of paper by using the print monitor. • Can recognize when a printer misfeeds or is out of paper by using the warning light on the printer. • Can load paper tray with desired paper size or color. • clear minor paper jams. 	<ul style="list-style-type: none"> • pose questions to on-line experts • use different search engines to locate information on the same topic • retrieve information from a number of sources and assess the accuracy of that information • gather and compare information that cites different viewpoints on an issue • from a variety of electronic sources, select the information which appears to be recent and accurate • question information that is obviously biased • use appropriate Internet-based tools to test and determine the accuracy of information 	<ul style="list-style-type: none"> • create a complex spreadsheet using multiple mathematical operations (formulas, graphs and tables) • insert formulas• calculate equations • manipulate cell sizes to accommodate data • insert a spreadsheet into a word processing document • incorporate borders • determine print range • cut, copy, and paste data • sort data in ascending and descending order • insert a header and footer • select a font to display the information • create and manipulate tables in a word processing document 	<ul style="list-style-type: none"> • Use Email to communicate with a variety of people. • compose a subject line that summarizes the content of a message.

Grade 7 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 7	<ul style="list-style-type: none"> • access the help menu to search for answers to how-to questions • can diagnose and solve common technology problems (the computer freezes, the server connection is lost, the printer won't print) • check the keyboard, mouse and other cable connections 	<ul style="list-style-type: none"> • Uses projectors in presentations • Uses digital cameras in class projects • Uses disk drives to save and upload to network and computer. • can attach an external disk drive to an iMac. 	<ul style="list-style-type: none"> • Can create a webpage using PageMill including Text, Graphics, links • create a clear, balanced and consistent layout for pages and screens (use representational icons within a navigation bar or menu, use a footer to place an address and page number) 	<ul style="list-style-type: none"> • Can resize fonts • Can change fonts • Can use style features • Can spell check • Can use thesaurus • Can use graphics from library • Can download graphics from Internet sites • Can make graphics from software and use in document • Can cut and paste • Can copy and paste • use techniques to facilitate composition, revision and editing (compose both introduction and conclusion, filling out the body text later, mark sections that will require revision by changing the style) • create a sequence of steps in a process that can then be revised and reordered

Grade 8 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 8	<ul style="list-style-type: none"> • Can save in different locations 	<ul style="list-style-type: none"> • can set up peripheral equipment (cameras, scanners, projectors) with assistance 	<ul style="list-style-type: none"> • Use Internet Search Engines • Use Encyclopedias on CD ROMs • Use Internet Resources to search online databases. • choose a database to collate information and to create layouts 	<ul style="list-style-type: none"> • can design small video projects for classroom presentations using video editing software. • can utilize a variety of transitions and titling effects in a video. • can insert a soundtrack for a video and time action around the sound. • can insert video into multimedia presentations (Hyperstudio, Powerpoint, AppleWorks).

Grade 8 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 8	<ul style="list-style-type: none"> • create text and graphics • design layouts • can adjust the lighting of an image • select the appropriate software to produce a product (choose a spreadsheet program to graph statistical data, choose a database to collate information and to create layouts • use a range of techniques to facilitate composition, revision and editing (write key points in bullet form, cut and paste paragraphs to reorder them) • use white space to balance text, graphics and decorations, align and place objects using rulers 	<ul style="list-style-type: none"> • Can design and create multimedia presentations, import graphics, sound, video and other files from a variety of sources • produce a simple multimedia product (create a web page advocating a point of view to students in other parts of the world, design a database to share comparative information using raw data and summaries) • select the appropriate software to produce a product (choose a spreadsheet program to graph statistical data, choose a database to collate information and to create layouts 	<ul style="list-style-type: none"> • can share files from one computer to another 	<ul style="list-style-type: none"> • Use advanced help features of an application

Grade 8 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 8	<ul style="list-style-type: none"> • Can assign a printing task to a specified printer on the network • Can recognize when a printer is out of paper by using the print monitor. • Can recognize when a printer misfeeds or is out of paper by using the warning light on the printer. • Can load paper tray with desired paper size or color. • Understand how many pages will be printed and plan printing job accordingly.(i.e., printing only one page from a multiple page document) • can clear most printer jams. 	<ul style="list-style-type: none"> • search an on-line database to gather information • query newsgroups • combine selected key words to conduct a Boolean search • retrieve relevant information from various sources and evaluate the reliability of those sources • evaluate conflicting evidence • consider the reliability of sources • use criteria to compare information from a variety of electronic sources (investigate and evaluate multiple sources for an investigation and choose the most relevant, up-to-date and accurate information) 	<ul style="list-style-type: none"> • create a complex spreadsheet using multiple mathematical operations (formulas, graphs and tables) • insert formulas• calculate equations • manipulate cell sizes to accommodate data • insert a spreadsheet into a word processing document • incorporate borders • determine print range • cut, copy, and paste data • sort data in ascending and descending order • insert a header and footer • select a font to display the information • create and manipulate tables in a word processing document • choose a spreadsheet program to graph statistical data 	<ul style="list-style-type: none"> • Use Internet resources to communicate with a variety of groups. • in telecommunication summarize ideas, state opinions, copy original questions

Grade 8 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 8	<ul style="list-style-type: none"> • access the help menu to search for answers to how-to questions • can diagnose and solve common technology problems (the computer freezes, the server connection is lost, the printer won't print) • check the keyboard, mouse and other cable connections • Force restart any computer. • choose the appropriate application needed to open a file, depending on its file format. 	<ul style="list-style-type: none"> • Uses projectors in presentations • Uses digital cameras in class projects • Uses external disk drives to save and upload to network and computer. 	<ul style="list-style-type: none"> • Can create a webpage using PageMill including Text, Graphics, links 	<ul style="list-style-type: none"> • Can resize fonts • Can change fonts • Can use style features • Can spell check • Can use thesaurus • Can make columns • Can cut and paste • Can copy and paste • use a range of techniques to facilitate composition, revision and editing (write key points in bullet form, cut and paste paragraphs to reorder them)

Grade 9 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 9	<ul style="list-style-type: none"> • can "get info" or "properties" about a particular file • can merge files together • can attach files to email <p>can access all networked folders Know all backup locations for files.(i.e., hard drive, class folders, public folders and external devices.(CD ROM, zip discs, and floppy discs) can convert files to be read on both PC and Mac formats.</p>	<ul style="list-style-type: none"> • utilize the right-button functions on the mouse of a Windows-based computer 	<ul style="list-style-type: none"> • Use Internet Search Engines • Use Encyclopedias on CD ROMs • Use Internet Resources to search online databases. • Can create content based databases • design a database to share comparative information using raw data and summaries. • choose a database to collate information and to create layouts 	<ul style="list-style-type: none"> • can design small video projects for classroom presentations using video editing software. • can utilize a variety of effects, including lighting, transitions and titling in a video. • manipulate sounds in two tracks or more. • can insert video into multimedia presentations (Hyperstudio, Powerpoint, AppleWorks).

Grade 9 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 9	<ul style="list-style-type: none"> • can apply filters to an image • use white space to balance text, graphics and decorations, align and place objects using rulers 	<ul style="list-style-type: none"> • Can use advanced features of multimedia programs (i.e. advanced animations, video, sound, transitions, can convert to html, can upload to webpage.) • produce an advanced multimedia product (create a web page advocating a point of view to students in other parts of the world, design a database to share comparative information using raw data and summaries) • Can synthesize information from multiple sources to create new products, 	<ul style="list-style-type: none"> • Can log on as a new user on a Windows-based machine 	<ul style="list-style-type: none"> • can attach peripheral equipment to the computer and check basic settings • can force quit applications on a Windows-based computer and force restart a Windows-based computer

Grade 9 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 9	<ul style="list-style-type: none"> • Can assign a printing task to a specified printer on the network • Can recognize when a printer is out of paper by using the print monitor. • Can recognize when a printer misfeeds or is out of paper by using the warning light on the printer. • Can load paper tray with desired paper size or color. • Understand how many pages will be printed and plan printing job accordingly.(i.e., printing only one page from a multiple page document) 	<p>Can utilize a variety of search engines for specific content needs.</p> <ul style="list-style-type: none"> • search an on-line database to gather information • query newsgroups • combine selected key words to conduct a Boolean search • retrieve relevant information from various sources and evaluate the reliability of those sources • evaluate conflicting evidence • consider the reliability of sources • use criteria to compare information from a variety of electronic sources (investigate and evaluate multiple sources for an investigation and choose the most relevant, up-to-date and accurate information) • Can evaluate information for appropriateness to specific content. 	<ul style="list-style-type: none"> • create a complex spreadsheet using multiple mathematical operations (formulas, graphs and tables) • insert formulas• calculate equations • manipulate cell sizes to accommodate data • insert a spreadsheet into a word processing document • incorporate borders • determine print range • cut, copy, and paste data • sort data in ascending and descending order • insert a header and footer • select a font to display the information • create and manipulate tables in a word processing document • choose a spreadsheet program to graph statistical data 	<ul style="list-style-type: none"> • Use e-groups, listserves, bulletin boards, chat • Can create personal webpage. • in telecommunication summarize ideas, state opinions, copy original questions

Grade 9 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 9	<ul style="list-style-type: none"> • Can plug-in peripherals • Can manually eject disks • Can re-start frozen computers • Can use disk aid programs • Can start with extensions off (Mac) • Can start in safe-mode (PC) 	<ul style="list-style-type: none"> • Uses projectors in presentations • Uses digital cameras in class projects • Uses external disk drives to save and upload to network and computer. 	<ul style="list-style-type: none"> • Learning HTML Basics • Can edit source code of HTML authoring software. • create a web page advocating a point of view to students in other parts of the world. 	<ul style="list-style-type: none"> • Can create project specific word documents (i.e. brochures, newsletters, flyers, posters, banners). • Can insert spreadsheets into word documents. • Can save into different formats. • Can use multilingual dictionaries. • use a range of techniques to facilitate composition, revision and editing (write key points in bullet form, cut and paste paragraphs to reorder them)

Grade 10 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 10	<ul style="list-style-type: none"> • can differentiate between different versions of files with the same names • can export files to different file formats. • Can use internet servers to store data.(i.e. yahoo briefcase, iDisk) 	<ul style="list-style-type: none"> • can examine attached settings and attachment of peripheral equipment to determine problems and conflicts 	<ul style="list-style-type: none"> • Use Internet Search Engines • Use Encyclopedias on CD ROMs • Use Internet Resources to search online databases. • Can create content based databases • Can manipulate size and shape of fields in the database. • design a database to share comparative information using raw data and summaries 	<ul style="list-style-type: none"> • can design small video projects for classroom presentations using video editing software. • can utilize a variety of effects, including lighting, transitions and titling in a video. • manipulate sounds in two tracks or more. • can insert video into multimedia presentations (Hyperstudio, Powerpoint, AppleWorks).

Grade 10 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 10	<ul style="list-style-type: none"> • can use distort, perspective, rotate, shear and flip tools 	<ul style="list-style-type: none"> • Can use advanced features of multimedia programs (i.e. advanced animations, video, sound, transitions, can convert to html, can upload to webpage.) • produce a advanced multimedia product (create a web page advocating a point of view to students in other parts of the world, design a database to share comparative information using raw data and summaries) 	<ul style="list-style-type: none"> • can determine what networking problems are • can solve basic networking problems with assistance 	<ul style="list-style-type: none"> • can check that cables are properly attached to the computer

Grade 10 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 10	<ul style="list-style-type: none"> • Can assign a printing task to a specified printer on the network • Can recognize when a printer is out of paper by using the print monitor. • Can recognize when a printer misfeeds or is out of paper by using the warning light on the printer. • Can load paper tray with desired paper size or color. • Understand how many pages will be printed and plan printing job accordingly.(i.e., printing only one page from a multiple page document) 	<p>Can utilize a variety of search engines for specific content needs.</p> <ul style="list-style-type: none"> • search an on-line database to gather information • query newsgroups • combine selected key words to conduct a Boolean search • retrieve relevant information from various sources and evaluate the reliability of those sources • evaluate conflicting evidence • consider the reliability of sources • use criteria to compare information from a variety of electronic sources (investigate and evaluate multiple sources for an investigation and choose the most relevant, up-to-date and accurate information) 	<ul style="list-style-type: none"> • create a complex spreadsheet using multiple mathematical operations (formulas, graphs and tables) • insert formulas• calculate equations • manipulate cell sizes to accommodate data • insert a spreadsheet into a word processing document • incorporate borders • determine print range • cut, copy, and paste data • sort data in ascending and descending order • insert a header and footer • select a font to display the information • create and manipulate tables in a word processing document <p>Use formulas and functions to manipulate and analyze data.</p>	<ul style="list-style-type: none"> • Use e-groups, listserves, bulletin boards, chat • Can create personal webpage.

Grade 10 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 10	<ul style="list-style-type: none"> • Can plug-in peripherals • Can manually eject disks • Can re-start frozen computers • Can use disk aid programs • Can start with extensions off (Mac) • Can start in safe-mode (PC) 	<ul style="list-style-type: none"> • Can connect peripherals to computer • Can install plug and play peripheral software on pc. 	<ul style="list-style-type: none"> • Can incorporate animations and advanced HTML features (i.e. tables, lists, counters, reply forms, java script). • create a web page advocating a point of view to students in other parts of the world 	<ul style="list-style-type: none"> • Can create project specific word documents (i.e. brochures, newsletters, flyers, posters, banners). • Can insert spreadsheets into word documents. • Can save into different formats. • Can use multilingual dictionaries.

Grade 11 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 11	<ul style="list-style-type: none"> • can save files in different formats based on the platform and intended application 	<ul style="list-style-type: none"> • can independently set up peripheral equipment to computers 	<ul style="list-style-type: none"> • Use Internet Search Engines • Use Encyclopedias on CD ROMs • Use Internet Resources to search online databases. • Can create content based databases • Can manipulate size and shape of fields in the database. 	<ul style="list-style-type: none"> • can design a music video or video montage. • can utilize a variety of effects, including lighting, transitions and titling in a video. • manipulate sounds in two tracks or more.

Grade 11 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 11	<ul style="list-style-type: none"> • Use all filter techniques 	<ul style="list-style-type: none"> • Can use advanced features of multimedia programs (i.e. advanced animations, video, sound, transitions, can convert to html, can upload to webpage.) • Can prepare a CD ROM multimedia project 	<ul style="list-style-type: none"> • can adjust control panels and other relevant network settings to solve problems 	<ul style="list-style-type: none"> • can check and manipulate control panel settings for basic operations (network, monitor resolution, sound, etc.)

Grade 11 Technology Skills

At the end of the school year, students will be able to...

	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 11	<ul style="list-style-type: none"> • Can assign a printing task to a specified printer on the network • Can recognize when a printer is out of paper by using the print monitor. • Can recognize when a printer misfeeds or is out of paper by using the warning light on the printer. • Can load paper tray with desired paper size or color. • Understand how many pages will be printed and plan printing job accordingly.(i.e., printing only one page from a multiple page document) 	<p>Can utilize a variety of search engines for specific content needs.</p> <ul style="list-style-type: none"> • search an on-line database to gather information • query newsgroups • combine selected key words to conduct a Boolean search • retrieve relevant information from various sources and evaluate the reliability of those sources • evaluate conflicting evidence • consider the reliability of sources • use criteria to compare information from a variety of electronic sources (investigate and evaluate multiple sources for an investigation and choose the most relevant, up-to-date and accurate information) 	<ul style="list-style-type: none"> • create a complex spreadsheet using multiple mathematical operations (formulas, graphs and tables) • insert formulas• calculate equations • manipulate cell sizes to accommodate data • insert a spreadsheet into a word processing document • incorporate borders • determine print range • cut, copy, and paste data • sort data in ascending and descending order • insert a header and footer • select a font to display the information • create and manipulate tables in a word processing document <p>Use formulas and functions to manipulate and analyze data.</p>	<ul style="list-style-type: none"> • Use e-groups, listserves, bulletin boards, chat • Can create personal webpage.

Grade 11 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 11	<ul style="list-style-type: none"> • Can plug-in peripherals • Can manually eject disks • Can re-start frozen computers • Can use disk aid programs • Can start with extensions off (Mac) • Can start in safe-mode (PC) 	<ul style="list-style-type: none"> • Can connect peripherals to computer <p>Can install plug and play peripheral software on pc.</p>	<ul style="list-style-type: none"> • Can incorporate animations and advanced HTML features (i.e. tables, lists, counters, reply forms, java script). 	<ul style="list-style-type: none"> • Can create project specific word documents (i.e. brochures, newsletters, flyers, posters, banners). • Can insert spreadsheets into word documents. • Can save into different formats. • Can utilize multilingual dictionaries.

Grade 12 Technology Skills

At the end of the school year, students will be able to...

	Application and File Management	Computer Hardware	Databases	Digital Video Production
Grade 12	<ul style="list-style-type: none"> • can manipulate files and applications to increase productivity in all normal situations 	<ul style="list-style-type: none"> • understand the basic functionality of all parts of a computer and related peripheral equipment to increase productivity and solve problems 	<ul style="list-style-type: none"> • Use Internet Search Engines • Use Encyclopedias on CD ROMs • Use Internet Resources to search online databases. • Can create content based databases 	<ul style="list-style-type: none"> • can design a 5-minute dramatic or documentary video. • can utilize a variety of effects, including lighting, transitions and titling in a video. • manipulate sounds in two tracks or more.

Grade 12 Technology Skills

At the end of the school year, students will be able to...

	Graphic Design and Desktop Publishing	Multimedia	Networking	Operating Systems
Grade 12	<ul style="list-style-type: none"> • Use all filter techniques • layering tools • Tool Palette Tools • Selecting Tools 	<ul style="list-style-type: none"> • can use advanced features of multimedia programs (i.e. advanced animations, video, sound, transitions, can convert to html, can upload to webpage.) • Can prepare a CD ROM multimedia project • using all the skills of multimedia, create a presentation that promotes an idea, person or place. 	<ul style="list-style-type: none"> • can utilize the network in all ways that increase productivity 	<ul style="list-style-type: none"> • can use (ort have the ability to learn how to use) all needed hardware and software

Grade 12 Technology Skills

At the end of the school year, students will be able to...

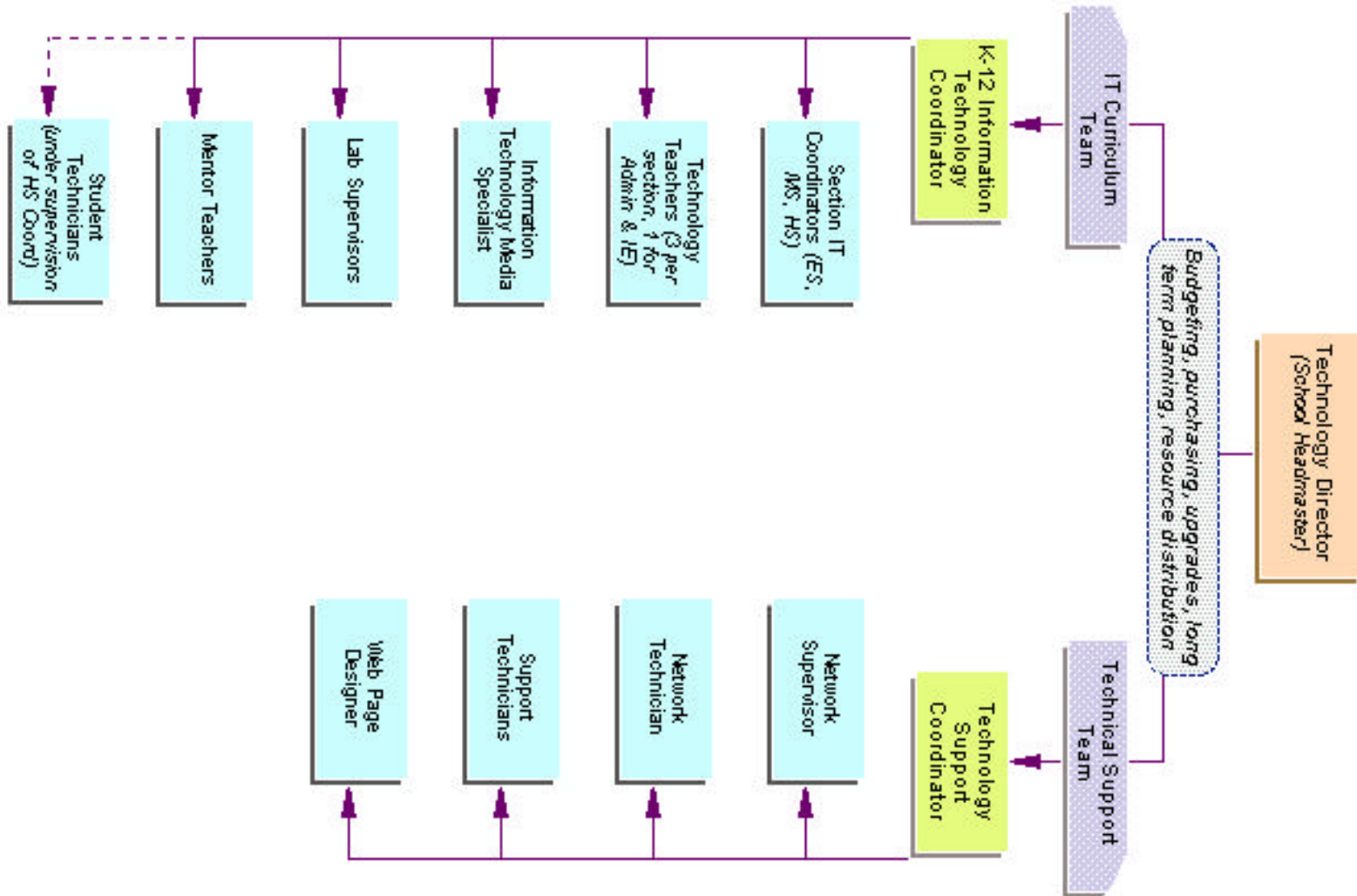
	Printing	Searching and Information Retrieval	Spreadsheets	Telecommunicating/ Internet Skills
Grade 12	<ul style="list-style-type: none"> • Can assign a printing task to a specified printer on the network • Can recognize when a printer is out of paper by using the print monitor. • Can recognize when a printer misfeeds or is out of paper by using the warning light on the printer. • Can load paper tray with desired paper size or color. • Understand how many pages will be printed and plan printing job accordingly.(i.e., printing only one page from a multiple page document) 	<p>Can utilize a variety of search engines for specific content needs.</p> <ul style="list-style-type: none"> • search an on-line database to gather information • query newsgroups • combine selected key words to conduct a Boolean search • retrieve relevant information from various sources and evaluate the reliability of those sources • evaluate conflicting evidence • consider the reliability of sources • use criteria to compare information from a variety of electronic sources (investigate and evaluate multiple sources for an investigation and choose the most relevant, up-to-date and accurate information) 	<ul style="list-style-type: none"> • create a complex spreadsheet using multiple mathematical operations (formulas, graphs and tables) • insert formulas• calculate equations • manipulate cell sizes to accommodate data • insert a spreadsheet into a word processing document • incorporate borders • determine print range • cut, copy, and paste data • sort data in ascending and descending order • insert a header and footer • select a font to display the information • create and manipulate tables in a word processing document <p>Use formulas and functions to manipulate and analyze data.</p>	<ul style="list-style-type: none"> • Use e-groups, listserves, bulletin boards, chat • Can create personal webpage.

Grade 12 Technology Skills

At the end of the school year, students will be able to...

	Troubleshooting	Using Peripheral Equipment	Web Page Design	Word Processing and Writing
Grade 12	<ul style="list-style-type: none"> • Can plug-in peripherals • Can manually eject disks • Can re-start frozen computers • Can use disk aid programs • Can start with extensions off (Mac) • Can start in safe-mode (PC) 	<ul style="list-style-type: none"> • Can connect peripherals to computer • Can install plug and play peripheral software on pc. 	<ul style="list-style-type: none"> • Can incorporate animations and advanced HTML features (i.e. tables, lists, counters, reply forms, java script). 	<ul style="list-style-type: none"> • Can create project specific word documents (i.e. brochures, newsletters, flyers, posters, banners). • Can insert spreadsheets into word documents. • Can save into different formats.

RIS Technology Committee



Technology Committee Jobs

***Note: As of May 2001, these following job descriptions are drafts. The final versions will be published in August 2001. If you have questions or concerns about the descriptions below, please consult with the K-12 IT Coordinator.

The Technology Integration Committee

The Technology Integration Committee is composed of the Technology Director, the K-12 Information Technology Coordinator, and the Technology Support Coordinator. The K-12 IT Coordinator heads the IT Curriculum Team, while the Technology Support Coordinator heads the Technology Support team.

These people are responsible for investigating emerging technologies, planning new purchases, maintaining the school's network and support systems, developing professional development and workshop programs, and creating a long-term vision for the school's technology development. In short, the committee is responsible for ensuring that technology supports the needs and abilities of the entire school community.

The Technology Committee gives final approval to all IT-related purchase, and it proposes yearly budgets. All purchase proposals are discussed for a sufficient period of time so that issues such as overall need, compatibility, support, infrastructure, and cost can be addressed sufficiently beforehand. All major decisions of the Technology Committee are made by consensus.

Technology Director

The Technology Director heads the Technology Committee, and is responsible for coordinating, through frequent discussions, the work of the K-12 IT Coordinator and the Technology Support Coordinator. Together, these three people finalize proposals for yearly budgets, long term vision statements, and the overall distribution and redistribution of resources. The Technology Director is a sitting member of the Administrative Council.

The current Technology Director is the RIS Headmaster.

K-12 Information Technology Coordinator

The K-12 IT Coordinator oversees the establishment, implementation and revision of:

1. schoolwide technology standards and benchmarks for teachers and students;
2. schoolwide, section, department and special group technology vision statements;
3. faculty and administration software and hardware training and other relevant training, in coordination, with the professional development and curriculum office.

The K-12 IT Coordinator works with the Technology Support Coordinator to provide and communicate:

1. a yearly budget technology budget proposal and related purchase plans;
2. a clearly organized technology support and maintenance system.
3. emerging technologies to the students, faculty, administration and staff.

The K-12 IT Coordinator works with other members of the IT Curriculum team to:

1. discuss issues and matters of importance;
2. work with department heads at all levels to establish curricular standards and set priorities for technology integration in the K-12 Curriculum;
3. assist interested teachers in their classrooms to insure the thoughtful use of technology;
4. establish, oversee, and enforce policies regarding access to labs and technology resource rooms;
5. assess the technology needs of the faculty and administration and conduct, with the assistance of the RIS Staff Development Coordinator, technology workshops;
6. provide relevant IT related information to faculty and staff;
7. maintain a dialogue with the technology coordinators in area schools and with hardware and software vendors;
8. plan with the Information Media Specialist to ensure teachers and students have knowledge of research skills necessary to make effective use of the Internet and other electronic information sources;
9. select and oversee the group of Technology Teachers (TTs).

The K-12 IT Coordinator is an advising member of the Administrative Council,

Technology Support Coordinator

The Technology Support Coordinator oversees the maintenance and development of:

1. schoolwide hardware and software inventory;
2. the school network infrastructure;
3. policies and records for the maintenance and upgrading of the school website, software and hardware.

The Technology Support Coordinator works with the K-12 IT Coordinator to provide and communicate:

1. a yearly budget technology budget proposal and related purchase plans;
2. a clearly organized technology support and maintenance system;
3. emerging technologies to the students, faculty, administration and staff.

The Technology Support Coordinator works with other members of the Technology Support team to:

1. assess the technology needs of the school staff and conduct technology workshops;
2. set up daily work schedules, keeping the school's technology system at its highest possible level;

3. assist faculty, staff and administrators with troubleshooting and problem solving on computer software and hardware;
4. assist as needed the K-12 IT Coordinator, Section IT Coordinators, and other members of the IT Curriculum team;
5. maintain strong working relations with software and hardware vendors.

The Technology Support Coordinator oversees the proper ordering, receiving, upgrading, registering and cataloguing of all technology related purchases. This work is done in collaboration with the K-12 IT Coordinator.

The Technology Support Coordinator is the only person with the authority to shut down the network, or parts of the network. Normally this action is done only after consultation with the K-12 IT Coordinator, the Network Supervisor and the Network Technician.

Network Supervisor

The Network Supervisor:

1. reports progress on all work to the Technology Support Coordinator
2. manages the day to day maintenance and running of the school's network.
3. advises the Technology Support Coordinator on all relevant information regarding the network.
4. coordinates the work of the support technicians when they are needed to assist in networking duties.
5. collaborates with the Network Technician on matters related to the functioning, maintenance and development of the school network.
6. provide relevant training to the members of the Technology Support Team and the IT Curriculum Team.
7. work with the section IT coordinators, technology teachers, principals, other concerned teachers and relevant staff regarding special training, curricular-based projects, security and other issues.
8. assists other members of the technology support team with their work as needed;
9. collaborates with the other members of the technology support team to make proposals concerning upgrades and developments regarding the network;
10. stays current with emerging technologies and request further training to upgrade their skills when needed.

Network Technician

The Network Technician:

1. reports progress on all work to the Technology Support Coordinator;
2. maintains the proper functioning of the school network infrastructure;
3. collaborates with the Network Supervisor on matters related to the functioning, maintenance and development of the school network;
4. works with teachers and staff to develop specialized programs too enhance the potential and security of the network;
5. coordinates the work of the support technicians when they are needed to assist in networking duties;
6. provides relevant training to faculty and staff;
7. assists other members of the technology support team with their work as needed;
8. collaborates with the other members of the technology support team to make proposals concerning upgrades and developments regarding the network;
9. stay current with emerging technologies and request further training to upgrade their skills when needed.

Except in extreme situations, the neither the Network Supervisor, nor the Network Technician has the authority to shut down the network without prior permission of the Technology Support Coordinator.

Support Technicians

The Support Technicians:

1. reports progress on all work to the Technology Support Coordinator;
2. maintain hardware, software, and peripheral equipment. This includes:
 - checking labs, student resource centers, teacher workrooms, classrooms, and libraries regularly during the school year to ensure that computers and systems are operating properly
 - regular checking and cleaning of all hardware such as scanners, printers, digital cameras, and upgrading systems as required
3. carry out other duties as requested by the Technology Support Supervisor.
4. stay current with emerging technologies and request further training to upgrade their skills when needed.

Web Page Designer

The Web Page Designer:

1. reports progress on all work to the Technology Support Coordinator;
2. work with the members of the RIS Website committee to keep web pages on the school's website up current and relevant
3. assists teachers, administrators and staff in the creation of websites by
 - assisting to bring curricular plans into being
 - providing graphic design assistance for such plans
 - advising on the potential of the web to teachers and provide solutions to projects that support curricular outcomes
4. provides relevant workshops that support approved web based projects.
 - posting on the server approved webpages and updating approved websites to ensure their smooth running
5. complete relevant computer graphic and multimedia work for different parts of the school as needed, and assist other related projects as needed
6. assists and advises the other members of the Technology Support team, as needed.
7. stay current with emerging technologies and request further training to upgrade their skills when needed.

This person does not post or update pages unless approved by the person directly concerned.

Section Technology Coordinators

General Duties:

- Oversee computer use in labs and classes
- Ensure that the labs are maintained in an orderly manner so that teachers and students have unrestricted access throughout the day
- Serve as the liaison between the technology support department and faculty
- Meet with support technicians to discuss the concerns of teachers and sections
- Join in the planning and implementation of the RIS Technology Plan
- Develop and maintain section websites, giving particular attention to specific classroom needs
- Learn and acquire proficiency in the use of all needed hardware and software and provide instruction to teachers and students on their use
- Work with the Internet/Intranet Coordinator and teachers to ensure class folders are properly maintained and easily accessible on the school server.
- Support and supervise the RIS acceptable use policy
- Ensure the computer carts are used responsibly and appropriately
- Assist the Technology Support Supervisor to keep up-to-date inventories.

Teaching Responsibilities:

- Plan with teachers and department heads how best to integrate technology into classes, suggesting appropriate hardware and software solutions
- Work with teachers in the classroom to insure the thoughtful use of technology to augment the regular curriculum
- Supervise classes and assist teachers in the computer labs, providing direct student instruction when necessary
- Assist students to use computers flexibly, creatively, and purposefully
- Search for and evaluate websites that would be useful for teachers
- Help teachers assess student technology use
- Teach appropriate classes as required by the demands of the school curriculum

Administrative Work

- Faculty In-services: plan and help implement, along with other members of the technology committee, special in-service days for technology workshops , technology majors and study groups
- Library: work with the librarians on issues regarding information technology (Internet, classroom projects, information sources, etc.)
- Technology Committee: share information with the technology coordinators and TTs in each section of the school, keeping them up to date on issues and matters of importance

Technology Teachers

Technology Teachers are teachers who have experience using technology in the classroom and can share their experiences with other teachers.

Guidelines for Selection:

- Familiarity with hardware and software
- Availability to work with other staff members on one's own time
- Interest in communicating technical expertise to others
- Familiarity with networking
- Experience with using technology in the classroom

Staff Development Duties:

- Conduct or oversee some technology workshops, majors, or discussion groups during both semesters.

Other Duties:

- Be an effective communication link between staff and the Technology Committee
- Foster staff self-sufficiency with technology (conduct workshops, distribute information sheets and checklists)
- Perform basic troubleshooting prior to contacting Support Staff
- Keep Technology Committee informed of staff changes
- Serve on section technology committee, assist with planning
- Assist with network troubleshooting and website updates

Information Technology Media Specialist

Software/Hardware

- Investigate the capabilities of new software and hardware that help increase the access of information in the library and school.
- Make proposals to purchase and implement needed technology, carefully examining its cost-benefit ratio.
- Act as a liaison with the libraries, software vendors and publishing companies.
- Provide reports for the Technology Committee regarding schoolwide curricular software inventories and needed software.

Technology Workshops and Software Promotion

- Provide/supervise workshops to teachers and students about the functionality of different technology used by the library.
- Provide encouragement to teachers and students to utilize the available technology.
- Provide regular assessment of technology and software use.

Lab Supervision

- Assist in the management and support of all the school's labs, resource centers and other computers.
- Maintain order and discipline in the lab, and promote a positive learning atmosphere in these locations.

Position in the School:

- Consult with the school's librarians regarding technology and software issues.
- Meet regularly with the school's IT Coordinators and assist in technology planning.
- Assist the Technology Support Coordinator and IT Coordinators on matters related to the maintenance and upkeep of computers in the labs and elsewhere (i.e. handling virus concerns and software conflicts).

Computer Lab Supervisor

Computer Lab Supervisors:

1. ensure all computers in the lab work
2. maintain order and discipline in the lab
3. promote a positive learning atmosphere in the lab
4. maintain lab/computer cart sign up sheet and distribution
5. help maintain the technology inventory for the section
6. conduct occasional computer related workshops
7. teach computer classes when arranged between lab supervisor and teacher
8. assist classes during their extra computer time or with additional projects
9. collaborate with teachers to plan lessons that integrate technology into content areas
10. help teachers assess the performance of students as related to RIS Technology Standards and benchmarks
11. assist students to use computers flexibly, creatively, and purposefully

Student Technicians

Student Technicians are students who volunteer to assist the teachers and students of RIS with computer related technology, and meet the following requirements:

- are in tenth, eleventh or twelfth grade;
- have a cumulative GPA of 3.2 or above with a teacher's recommendation;
- have experience with Windows and Apple based operating systems;
- have considerable troubleshooting skills with computers and software.

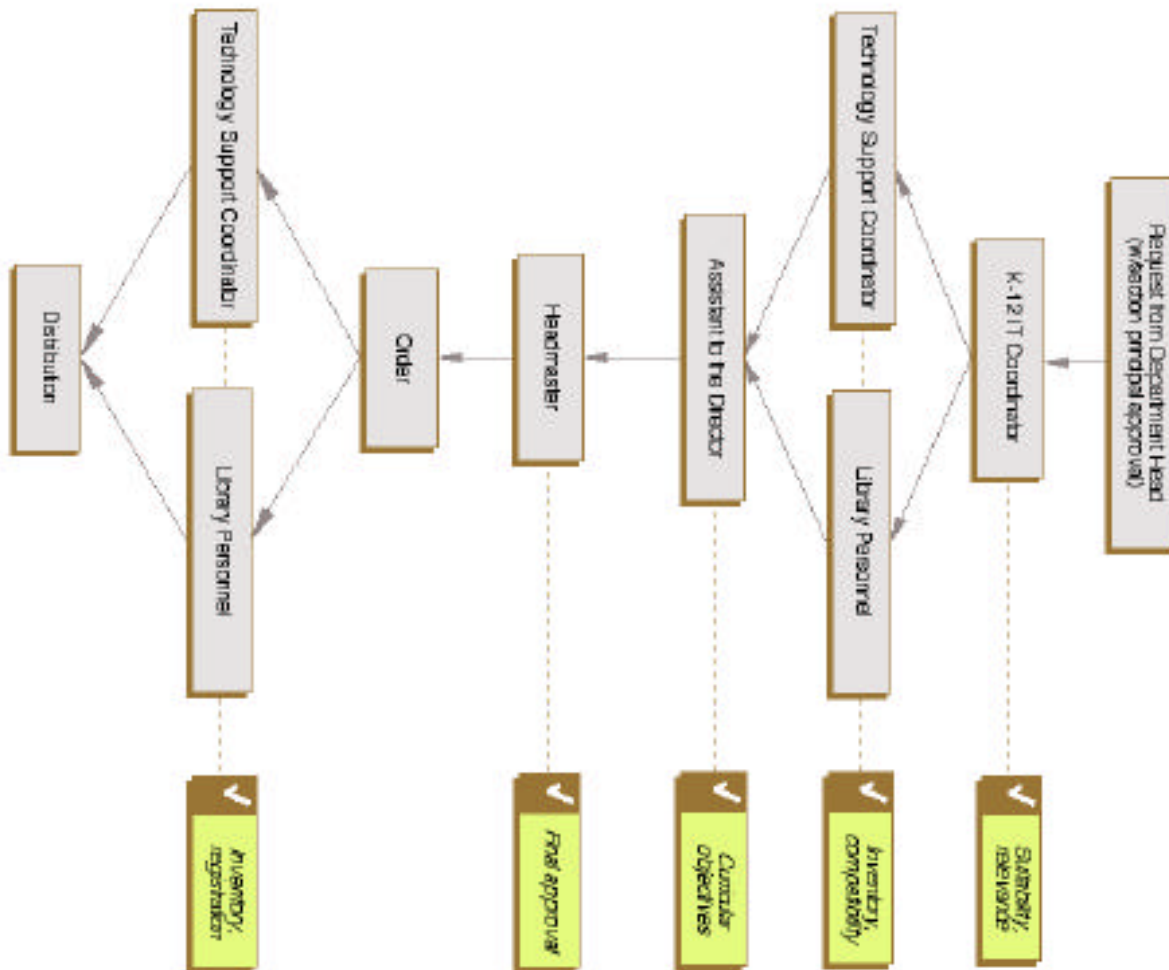
Student Technicians agree to:

- fulfill additionally assigned duties;
- abide by and enforce established lab rules and IT policies established at RIS;
- troubleshoot so labs run efficiently for all computer users;
- ensure that all stations are ready for subsequent users;
- learn to operate new technology introduced to the computer labs and demonstrate how it works;
- offer ideas that might improve the efficiency of the computer labs.

Student technicians are responsible to any teacher or student who requires assistance and their grades will be negotiated between the High School Technology Coordinator and teachers who have worked with them.

Ordering software or equipment for your department.

Please note that all requests for order must go through the department heads and principals.



Purchasing Software, Videos, Texts and related items for classroom preparation and professional development