

Beverly Public Schools
K - 8 Technology Standards and Performance Indicators
November 2004

Introduction

The Massachusetts Department of Education Recommended Pre K - 12 Instructional Technology Standards fall under three broad categories:

- Standard 1.** *Demonstrate proficiency in the use of computers and applications as well as an understanding of concepts underlying hardware, software, and connectivity.*
- Standard 2.** *Demonstrate responsible use of technology and an understanding of ethics and safety issues in using electronic media.*
- Standard 3.** *Demonstrate ability to use technology for research, problem-solving, and communication. Students locate, evaluate, collect, and process information from a variety of electronic sources. Students use telecommunications and other media to interact or collaborate with peers, experts, and other audiences.*

Specific technology **performance indicators** relating to each standard are grouped under three grade spans: Pre K- 4 ; 5 -8 and 9 -12. The following document is in two parts, Part One addresses performance indicators for the K-5 level and Part Two addresses performance indicators for the 6 -8 level. Each part is divided in to 2 sections:

Section 1 lists the **performance indicators** that will be addressed by Beverly Public Schools in grades k-5 and 6 -8.

Section 2 of this document provides a detailed list of **specific skills** related to each performance indicator that should be taught and reinforced at **each grade level**.

Note: *A chart at the end of Part 2, section 2 summarizes which subject area 6 -8 teachers will be responsible for introducing and/or reinforcing different performance indicators.*

As with any new initiative this document will be modified and refined with classroom implementation. Please contact your building principal or Judy Miller (jmiller@beverlyschools.org), Technology Director if you have suggestions or questions regarding this work.

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Section 1: K-8 Applications and Performance Indicators

Elementary (grade K - 5) Performance Indicators

Skill Area Description	Performance Indicators (From DOE Instructional Technology Standards)
<p>Orientation to Using Computers Students will demonstrate responsible use of technology and an understanding of ethics and safety issues in using electronic media.</p>	<p>1.1 Develop basic skills for using hardware and applications (e.g., open/close a file, navigate using scroll bars, arrow keys, special keys, and mouse).</p> <p>1.2 Use correct terminology for basic components of a computer system (e.g., monitor, keyboard, disk, printer, mouse), and develop understanding of the basic functions.</p> <p>1.11 Identify components of a computer system, understand the functions, and use appropriate terminology in speaking about them (e.g., operating system, hard drive, memory, window).</p> <p>1.13 Save a file to the desktop, the hard drive, and external storage spaces (e.g., floppy disk, CD ROM, virtual electronic space).</p> <p>2.4 Develop understanding of how the computer is a tool for learning.</p> <p>2.5 Explore issues of ergonomics and safety in using computers.</p> <p>2.6 Explain and demonstrate understanding of classroom rules regarding responsible use of computers (responsible behavior around equipment, respect for other people’s work, and appropriate collaborative behavior). Acceptable Use Policy</p> <p>2.7 Explain and demonstrate ethical and legal behavior in copying files, applications, and media.</p>
<p>Publishing Project Students will create, format and publish a word processing document that includes –headers, footers, margins, fonts, tabs, columns</p>	<p>1.3 Explore and develop keyboarding skills</p> <p>1.4 Explore basic formatting features of a word processing program</p> <p>1.14 Select a printer and print a document with appropriate page setup and orientation.</p> <p>1.17 Identify and use editing and formatting features of a word processing program (e.g. centering, line spacing, margins, cut and paste, fonts, spelling, page numbers).</p> <p>3.2 Explore the use of application programs (e.g., word processing, database, spreadsheet) for organizing information into charts, tables, and diagrams.</p>
<p>Electronic Research</p>	<p>1.25 Identify and use navigation features of browser (e.g., “go,” “back,” “forward”).</p> <p>1.27 Identify basic elements of a Website (e.g., URL, hyperlinks, site map, etc.).</p> <p>1.28 Copy an image from a Website into a file on desktop</p> <p>1.31 Use correct terminology in speaking about electronic communications (e.g., browser)</p>

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	<p>1.7 Collaborate with classmates to use teacher-selected Web sites.</p> <p>2.2 Develop understanding of the school's rules for safe and ethical internet use</p> <p>2.3 Explore practices for evaluating Web sites</p> <p>3.1 Explore and develop understanding of how to gather information from a variety of electronic sources, including teacher-selected Web sites, CD-ROM encyclopedias, and automated card catalog.</p>
<p>Electronic Communication Students will use email and VES to research, communication and collaboration</p>	<p>1.8 Collaborate with classmates and teacher to send electronic message (e.g. VES forums)</p> <p>3.5 Collaborate with classmates and teacher to send an electronic message with another class</p>
<p>Multimedia Presentation Students will use PowerPoint and HyperStudio to integrate web research and multimedia tools</p>	<p>1.9 Collaborate with classmates and teacher to create a slide presentation with existing template.</p> <p>1.10 Explore the use of drawing and painting applications for class projects (at teacher's discretion)</p> <p>1.15 Operate peripheral equipment (e.g., scanner, digital camera, camcorder).</p> <p>1.18 Insert images (e.g., graphics, clip art, tables) from other files into word-processed document/multimedia presentation.</p> <p>1.32 Create a slide presentation using appropriate applications.</p> <p>1.33 Identify and use drawing and painting applications as appropriate for class projects.</p> <p>1.34 Identify appropriate applications for a classroom project.</p> <p>3.4 collaborate with classmates and teacher in creating a multimedia presentation to communicate learning with others</p>
<p>Spreadsheets Students will learn the basics using electronic spreadsheets</p>	<p>1.6 Explore and understand the basic function and purpose of a spreadsheet.</p> <p>1.24 Produce simple charts from spreadsheet.</p> <p>3.2 Explore the use of applications programs (e.g., word processing, database, <u>spreadsheets</u>) for organizing information into <u>charts</u>, tables, and <u>diagrams</u>.</p>
<p>Using a Database Program Students will learn how to use the library cataloging software database</p>	<p>1.5 Explore and understand the basic function and purpose of a database</p> <p>1.21 Perform simple operations in a database (e.g., browse, sort, search, delete, add data).</p> <p>3.2 Explore the use of application programs (e.g., word processing, <u>database</u>, <u>spreadsheet</u>) for organizing information into <u>charts</u>, tables, and <u>diagrams</u>.</p>
<p>Outlining</p>	<p>3.10 Manipulate data using charting tools and graphic organizers (e.g., concept mapping, flow charting, and outlining software) to connect ideas and organize information [Note: PowerPoint and Word will be used for this area]</p>
<p>Citations</p>	<p>2.14 Write correct citations for text and images gathered from electronic sources. Understand that use of materials is limited by the fair use rule of copyright law</p>

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Middle School (Grades 6 –8) Performance Indicators

Application Description	Performance Indicators (From DOE Instructional Technology Standards)
<p>Orientation to Using Computers Student will demonstrate responsible use of technology and an understanding of ethics and safety issues in using electronic media.</p>	<p>2.6 Explain and demonstrate understanding of classroom rules regarding responsible use of computers (responsible behavior around equipment, respect for other people’s work, and appropriate collaborative behavior).</p> <p>2.7 Explain and demonstrate ethical and legal behavior in copying files, applications, and media.</p> <p>2.11 Describe and demonstrate knowledge of the school’s Acceptable Use Policy, and know the consequences of violating that policy.</p> <p>2.15 Develop an awareness of the issue of ergonomics (e.g., Repetitive Stress Injuries) and how to use equipment safely</p> <p>1.11 Identify components of a computer system, understand their functions, and use appropriate terminology in speaking about them (e.g., operating system, hard drive, memory, window).</p> <p>1.12 Identify and use basic features of computer operating system (e.g., format/initialize disks; access information on size and format of a file; create folders on local hard drive).</p> <p>1.13 Save a file to the desktop, the hard drive, and external storage spaces (e.g., floppy disk, CD ROM, virtual electronic space).</p> <p><i>Review basics of VES and usage policy in the school...</i></p> <p>** NOTE: Standards 2.6;2.7;2.11;2.15 will be reinforced in all subject areas when technology is being used</p>
<p>Publishing Project Students will create, format and publish a word-processing doc that includes - headers, footers, margins, fonts, tabs, columns,</p>	<p>1.14 Select a printer and print a document with appropriate page setup and orientation.</p> <p>1.16 Develop efficient keyboarding technique.</p> <p>1.17 Identify and use editing and formatting features of a word processing program (e.g., centering, line spacing, margins, cut and paste, fonts, styles, spelling, page numbers).</p>

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Application Description	Performance Indicators (From DOE Instructional Technology Standards)
<p>Electronic Research Students will use a web browser to access and retrieve information.</p>	<p>1.25 Identify and use navigation features of browser (e.g., "go," "back," "forward").</p> <p>1.26 Using a browser, "bookmark" a Website for future reference.</p> <p>1.27 Identify basic elements of a Website (e.g., URL, hyperlinks, site map, etc.).</p> <p>1.28 Copy an image from a Website into a file on desktop; write a correct citation caption in keeping with copyright law.</p> <p>1.31 Use correct terminology in speaking about electronic communications (e.g., browser, search engine, online).</p> <p>2.12 Validate a Website for authenticity (e.g., find site sponsor, author, and date the site was last updated).</p> <p>2.13 Explain how media and technology can be misused to distort or exaggerate information.</p> <p>3.7 Use search engines effectively to find relevant, unbiased, and current information on a subject. (Standard 2 performance indicators apply - i.e. evaluate Websites and write correct citations for sources.</p>
<p>Electronic Communication Students will use email and VES to research, communication and collaboration .</p>	<p>1.29 Using e-mail, create and send a message. (Student use of e-mail is determined by district policy and may be a class-wide activity if students do not have individual accounts.)</p> <p>2.8 Explain potential problem of computer viruses and exercise caution in opening e-mail attachments from unknown sources. (Use of e-mail is at district discretion.)</p> <p>2.9 Explain safe practices for sharing personal information via e-mail and the Internet. (Use of e-mail is at district discretion.)</p> <p>2.10 Explain proper e-mail etiquette. (Use of e-mail is at district discretion.)</p> <p>3.11 Under teacher's guidance, and at discretion of district, use e-mail to communicate with others (e.g., students in other classrooms, experts in a subject, teachers).</p> <p>Note: VES Performance indicators to be added in future.</p>

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Application Description	Performance Indicators (From DOE Instructional Technology Standards)
<p>Multimedia Presentation Students will use PowerPoint and Hyperstudio to integrate web research and multimedia tools.</p>	<p>1.15 Operate peripheral equipment (e.g., scanner, digital camera, camcorder).</p> <p>1.18 Insert images (e.g., graphics, clip art, tables) from other files into word-processed document/multimedia presentation.</p> <p>1.32 Create a slide presentation using appropriate applications.</p> <p>1.33 Identify and use drawing and painting applications as appropriate for class projects.</p> <p>1.35 Identify appropriate applications for a classroom project.</p> <p>3.9 Communicate results of research and learning with others using the most appropriate tools (e.g., desktop published or word processed report, multimedia presentation).</p>
<p>Spreadsheets Students will learn the basics using electronic spreadsheets</p>	<p>1.22 Describe structure and function of spreadsheet (e.g., cells, rows, columns, formulas) and apply formatting features.</p> <p>1.23 Create an original spreadsheet, entering simple formulas.</p> <p>1.24 Produce simple charts from spreadsheet.</p> <p>3.8 Organize information that is collected using a variety of tools (e.g., spreadsheet, database, saved files).</p>
<p>Using a Database program Students will learn use the library cataloging software database</p>	<p>1.19 Describe structure and function of database and identify components (e.g., record, field).</p> <p>1.21 Perform simple operations in a database (e.g., browse, sort, search, delete, add data).</p> <p>3.6 In keeping with the research process outlined in Standard 24 of the English Language Arts Curriculum Framework, identify electronic sources of information (e.g., Internet, CD ROM, online periodical databases, and online catalogs). (grade 7 intro)</p>
<p>Outlining</p>	<p>3.10 Manipulate data using charting tools and graphic organizers (e.g., concept mapping, flow charting, and outlining software) to connect ideas and organize information [Note: PowerPoint, Word or Inspiration will be used for this area. Inspiration skills are taught at the elementary level and should be reviewed in Grade 6 and applied grades 7 and 8.</p>
<p>Citations</p>	<p>2.14 Write correct citations for text and images gathered from electronic sources. Understand that use of materials is limited by the fair use rule of copyright law</p>

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Section 2: Skills to Teach/Reinforce at each Grade level

K- 8 Orientation to Using Computers

Grade	*	Skill
K	I	Components of computer
K	I	Navigating using scroll bar, edit and arrow keys,
K	I	Using a mouse
K	I	Review Acceptable Use Policy
K	I	Computer safety
1	R	Components of computer
1	R	Navigating using scroll bar, edit and arrow keys,
1	R	Using a mouse
1	R	Review Acceptable Use Policy
1	R	Computer safety
1	I	How to open and close a file
2	R	Navigating using scroll bar, edit and arrow keys,
2	R	Using a mouse
2	R	Review Acceptable Use Policy
2	R	Computer safety
2	R	How to open and close a file
2	I	How to save a file to disk, teacher server
3	R	Navigating using scroll bar, edit and arrow keys,
3	R	Using a mouse
3	R	Review Acceptable Use Policy
3	R	Computer safety
3	R	How to open and close a file
3	R	How to save a file to disk, teacher server
4	R	Review Acceptable Use Policy
4	R	Computer safety
4	R	How to save a file to disk, teacher server
4	I	What are an operating system, hard drive, and memory?
5	R	Review Acceptable Use Policy
5	R	Computer safety
5	R	What are an operating system, hard drive, and memory?
5	I	Explain and demonstrate ethical and legal behavior in copying files, applications and media.

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6	R	Review Acceptable Use Policy
6	R	Computer safety - care of equipment, safe practices and repetitive stress injuries
6	I	Identify components of a computer system: operating system, hard drive, and memory?
6	I	Explain and demonstrate ethical and legal behavior in copying files, applications and media.
6	I	Identify components of a computer system and understand their functions: Format/initialize disks, access information on size and format of a file, create folders
6	I	Save a file on a disk, CD, desktop, hard drive, network, upload a file to VES
7	R	Review Acceptable Use Policy
7	R	Computer safety - equipment and repetitive stress injuries
7	R	Identify components of a computer system: operating system, hard drive, and memory?
7	R	Explain and demonstrate ethical and legal behavior in copying files, applications and media.
7	R	Identify components of a computer system and understand their functions: Format/initialize disks, access information on size and format of a file, create folders
7	R	Save a file on a disk, CD, desktop, hard drive, network, upload a file to VES
8	R	Review Acceptable Use Policy
8	R	Computer safety - equipment and repetitive stress injuries
8	R	Identify components of a computer system: operating system, hard drive, and memory?
8	R	Explain and demonstrate ethical and legal behavior in copying files, applications and media.
8	R	Identify components of a computer system and understand their functions: Format/initialize disks, access information on size and format of a file, create folders
8	R	Save a file on a disk, CD, desktop, hard drive, network, upload a file to VES
8	I	Deleting files - one file, adjacent files, non-adjacent files
8	I	Defragment a computer

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K - 8 Word - (Publishing Project)

Grade	*	Skill
3	I	Open and Close
3	I	Save
3	I	Insertion point
3	I	Type text using proper keyboarding technique
3	I	Delete text using delete or backspace key
3	I	Change font and size
3	I	Text alignment
3	I	Use the B , I , & U feature
3	I	Line spacing
3	I	Margins
3	I	Spelling
3	I	Adding a graphic from Word clipart
4	R	Open and Close
4	R	Save
4	R	Insertion point
4	R	Type text using proper keyboarding technique
4	R	Delete text using delete or backspace key
4	R	Change font and size
4	R	Text alignment
4	R	Use the B , I , & U feature
4	R	Line spacing
4	R	Margins
4	R	Spelling
4	R	Adding a graphic from Word clipart
4	I	Adding a graphic from Internet
4	I	Page numbers
4	I	Copy and paste
5	R	Open and Close
5	R	Save
5	R	Insertion point
5	R	Type text using proper keyboarding technique
5	R	Delete text using delete or backspace key
5	R	Change font and size
5	R	Text alignment
5	R	Use the B , I , & U feature
5	R	Line spacing
5	R	Margins
5	R	Spelling
5	R	Adding a graphic from Word clipart

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5	R	Adding a graphic from Internet
5	R	Page numbers
5	R	Copy & paste
5	I	Creating a table
5	I	Navigating a table
5	I	Headers & Footers
5	I	How to add standard & formatting toolbars
*		Skill
6	R	Open and Close
6	R	Save
6	R	Insertion point
6	R	Type text using proper keyboarding technique
6	R	Delete text using delete or backspace key
6	R	Change font and size
6	R	Text alignment
6	R	Use the B , I , & U feature
6	R	Line spacing
6	R	Margins
6	R	Spelling
6	R	Adding a graphic from Word clipart
6	R	Adding a graphic from Internet
6	R	Page numbers
6	R	Copy & paste
6	R	Creating a table
6	R	Navigating a table
6	R	Headers & Footers
6	R	How to add standard & formatting toolbars
7	R	Type text using proper keyboarding technique
7	R	Delete text using delete or backspace key
7	R	Change font and size
7	R	Text alignment
7	R	Use the B , I , & U feature
7	R	Line spacing
7	R	Margins
7	R	Spelling
7	R	Adding a graphic from Word clipart
7	R	Adding a graphic from Internet
7	R	Page numbers
7	R	Copy & paste
7	R	Creating a table
7	R	Navigating a table
7	R	Headers & Footers
7	R	How to add standard, formatting, tables & drawing toolbars

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7	I	How to insert text box
7	I	How to change fill color, line color, line style & text color of text box
7	I	How to add Autoshapes
7	I	How to add text to an Autoshape
7	I	How to insert Word Art
7	I	How to group and ungroup objects
7	I	Change the order of graphic and text
7	I	How to Merge Cells in Table
7	I	How to Split Cells in Table
7	I	How to Shade Cells
7	I	How to Format Table Bordersex. Line Style, Line Weight, Line Color
7	I	How to Distribute Rows and Columns Evenly
8	R	Type text using proper keyboarding technique
8	R	Change font and size
8	R	Text alignment
8	R	Use the B , <i>I</i> , & <u>U</u> feature
8	R	Line spacing
8	R	Margins
8	R	Spelling
8	R	Adding a graphic from Word clipart
8	R	Adding a graphic from Internet
8	R	Page numbers
8	R	Copy & paste
8	R	Creating a table
8	R	Navigating a table
8	R	Headers & Footers
8	R	How to add standard, formatting, tables & drawing toolbars
8	R	How to insert text box
8	R	How to change fill color, line color, line style & text color of text box
8	R	How to add Autoshapes
8	R	How to add text to an Autoshape
8	R	How to insert Word Art
8	R	How to group and ungroup objects
8	R	Change the order of graphic and text

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K-8 Electronic Research

Grade	*	Skill
K	I	Open and close teacher selected websites
K	I	How to use Back and Forward buttons to navigate
K	I	How to use scroll bar
K	I	School rules for accessing Internet
1	R	Open and close teacher selected websites
1	R	How to use Back and Forward buttons to navigate
1	R	How to use scroll bar
1	R	School rules for accessing Internet
1	I	How to use a Hyperlink
1	I	How to access bookmarked sites approved by the teacher
2	R	Open and close teacher selected websites
2	R	How to use Back and Forward buttons to navigate
2	R	How to use scroll bar
2	R	School rules for accessing Internet
2	R	How to use a Hyperlink
2	R	How to access bookmarked sites approved by the teacher
2	I	How to use site maps
2	I	What is a URL?
2	I	How to bookmark a website
3	R	Open and close teacher selected websites
3	R	How to use Back and Forward buttons to navigate
3	R	How to use scroll bar
3	R	School rules for accessing Internet
3	R	How to use a Hyperlink
3	R	How to access bookmarked sites approved by the teacher
3	R	How to use site maps
3	R	What is a URL?
3	R	How to bookmark a website
3	I	How to copy a graphic and save to a folder
3	I	Practices for evaluating websites
3	I	How to gather information from teacher selected websites, on-line encyclopedias, and automated card catalog
3	I	How to write citations for sources
4	R	Open and close teacher selected websites
4	R	How to use Back and Forward buttons to navigate
4	R	How to use scroll bar

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4	R	School rules for accessing Internet
4	R	How to use a Hyperlink
4	R	How to access bookmarked sites approved by the teacher
4	R	How to use site maps
4	R	What is a URL?
4	R	How to bookmark a website
4	R	How to copy a graphic and save to a folder
4	R	Practices for evaluating websites
4	R	How to gather information from teacher selected websites, on-line encyclopedias, and automated card catalog
4	R	How to write citations for sources
5	R	Open and close teacher selected websites
5	R	How to use Back and Forward buttons to navigate
5	R	How to use scroll bar
5	R	School rules for accessing Internet
5	R	How to use a Hyperlink
5	R	How to access bookmarked sites approved by the teacher
5	R	How to use site maps
5	R	What is a URL?
5	R	How to bookmark a website
5	R	How to copy a graphic and save to a folder
5	R	Practices for evaluating websites
5	R	How to gather information from teacher selected websites, on-line encyclopedias, and automated card catalog
5	R	How to write citations for sources
6	R	How to bookmark a website
6	R	How to gather information from teacher selected websites, on-line encyclopedias, and automated card catalog
6	I	Be able to identify and use various elements of a website including the URL, hyperlinks, search capabilities, and site map.
6	I	How to save and insert images from a website to a file. and write proper citation for sources
6	I	How to copy text from a website to a file and write proper citations for sources.
6	I	Explain and use safe practices for sharing personal information via the Internet.
6	I	Explain proper Email etiquette
6	I	Explain potential problem of computer viruses and exercise caution when opening attachments from unknown sources.
7	R	Be able to identify and use various elements of a website including the URL, hyperlinks, search capabilities, and site map.
7	R	How to save and insert images from a website to a file, write proper citation for sources

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7	R	How to copy text from a website to a file and write proper citations for sources.
7	R	Explain and use safe practices for sharing personal information via the Internet.
7	R	Explain proper Email etiquette
7	R	Explain potential problem of computer viruses and exercise caution when opening attachments from unknown sources.
7	I	Understand the concept of a browser.
7	I	Be able to use simple keyword searches to find information in a teachers selected web site or database such as Athena..
7	I	Be able to enter URLs for websites in a browser as directed by a teacher.
7	I	Be able to navigate using features of a browser, e.g. back and forward buttons, scroll bar, stop button etc.
7	I	Understand how to access a list of previously accessed websites via the history list and address bar.
8	R	Understand the concept of a browser.
8	R	Be able to enter URLs for websites in a browser as directed by a teacher.
8	R	Be able to navigate using features of a browser, e.g. back and forward buttons, scroll bar, stop button etc.
8	R	Understand how to access a list of previously accessed websites via the history list and address bar.
8	R	Be able to use simple keyword searches to find information in a teacher selected website or database, e.g. Athena
8	I	Understand concept of a search engine, meta search engine and directory.
8	I	Be able to identify, access and use various search engines, meta-search engines and directories
8	I	Be able to validate a website for authenticity
8	I	Be able to identify the sponsor of a site and make a judgment as to the credibility of that sponsor.
8	I	Be able to identify the date a site was last updated
8	I	Be able to use a search engine effectively to find relevant, unbiased and current information
8	I	Be able to use simple keyword searches to find information using various browsers.
8	I	Understand the difference between a search engine and an electronic database.
8	I	Be able to access and use simple searches in an online database such as the National Archives and others subscribed to by the district.

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K-5 (only)HyperStudio - (Multimedia Presentation)

Grade	*	Skill
1	I	Open and close application
1	I	Tear away tool and colors menu
1	I	Add background color -Fill Tool
1	I	Change paintbrush shape
1	I	Change paintbrush color
1	I	Use eraser
1	I	Use rectangle, circle, rounded rectangle buttons
1	I	Save stack
1	I	Open new stack
1	I	Open existing stack
1	I	Use spray can
1	I	Use pencil
1	I	Use line tool
1	I	Add text
2	R	Open and close application
2	R	Tear away tool and colors menu
2	R	Add background color -Fill Tool
2	R	Change paintbrush shape
2	R	Change paintbrush color
2	R	Use eraser
2	R	Use rectangle, circle, rounded rectangle buttons
2	R	Save stack
2	R	Open new stack
2	R	Open existing stack
2	R	Use spray can
2	R	Use pencil
2	R	Use line tool
2	R	Add text
2	I	Add new card
2	I	Move option on menu bar
2	I	Use storyboard
3	R	Open and close application
3	R	Tear away tool and colors menu
3	R	Add background color -Fill Tool
3	R	Change paintbrush shape
3	R	Change paintbrush color

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3	R	Use eraser
3	R	Use rectangle, circle, rounded rectangle buttons
3	R	Save stack
3	R	Open new stack
3	R	Open existing stack
3	R	Use spray can
3	R	Use pencil
3	R	Use line tool
3	R	Add text
3	R	Add new card
3	R	Move option on menu bar
3	R	Use storyboard
3	I	Add text object
3	I	Add graphic object - HyperStudio clip art
3	I	Add graphic object - from Internet
3	I	Add buttons
3	I	How to edit text object
3	I	How to edit graphic object
3	I	How to edit a button
4	R	Open and close application
4	R	Tear away tool and colors menu
4	R	Add background color -Fill Tool
4	R	Change paintbrush shape
4	R	Change paintbrush color
4	R	Use eraser
4	R	Use rectangle, circle, rounded rectangle buttons
4	R	Save stack
4	R	Open new stack
4	R	Open existing stack
4	R	Use spray can
4	R	Use pencil
4	R	Use line tool
4	R	Add text
4	R	Add new card
4	R	Move option on menu bar
4	R	Use storyboard
4	R	Add text object
4	R	Add graphic object - HyperStudio clip art
4	R	Add graphic object - from Internet
4	R	Add buttons
4	R	How to edit text object
4	R	How to edit graphic object
4	R	How to edit a button

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R = Skills that are **Reviewed**.

4	I	Add animation - Hyperstudio animation
4	I	Add animation - Internet animation
4	I	Add Sound
4	I	How to edit animation
4	I	How to edit sound
5	R	Open and close application
5	R	Tear away tool and colors menu
5	R	Add background color -Fill Tool
5	R	Change paintbrush shape
5	R	Change paintbrush color
5	R	Use eraser
5	R	Use rectangle, circle, rounded rectangle buttons
5	R	Save stack
5	R	Open new stack
5	R	Open existing stack
5	R	Use spray can
5	R	Use pencil
5	R	Use line tool
5	R	Add text
5	R	Add new card
5	R	Move option on menu bar
5	R	Use storyboard
5	R	Add text object
5	R	Add graphic object - HyperStudio clip art
5	R	Add graphic object - from Internet
5	R	Add buttons
5	R	How to edit text object
5	R	How to edit graphic object
5	R	How to edit a button
5	R	Add animation - HyperStudio animation
5	R	Add animation - Internet animation
5	R	Add Sound
5	R	How to edit animation
5	R	How to edit sound
5	I	Add New Button Action: blabber mouth & roll credits

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K-8 PowerPoint - (Multimedia Presentation)

Grade	*	Skill
3	I	Open and close application
3	I	Insert title slide
3	I	Select slide layout
3	I	How to add text
3	I	How to insert new slide
3	I	Adding a graphic using PowerPoint clipart
3	I	Apply transitions to slides
3	I	How to save presentation
4	R	Open and close application
4	R	Insert title slide
4	R	Select slide layout
4	R	How to add text
4	R	How to insert new slide
4	R	Adding a graphic using PowerPoint clipart
4	R	Apply transitions to slides
4	R	How to save presentation
4	I	How to change font size
4	I	How to change font color
4	I	Adding a graphic using the Internet
4	I	How to add sound to transition
5	R	Open and close application
5	R	Insert title slide
5	R	Select slide layout
5	R	How to add text
5	R	How to insert new slide
5	R	Adding a graphic using PowerPoint clipart
5	R	Apply transitions to slides
5	R	How to save presentation
5	R	How to change font size
5	R	How to change font color
5	R	Adding a graphic using the Internet
5	R	How to add sound to transition
5	I	How to use the copy & paste feature within document
5	I	How to use the copy & paste from other applications excel, word
5	I	How to change background color
5	I	How to use the fill effect feature.

- * I = New skills that are **Introduced**.
 R = Skills that are **Reviewed**.

6	R	Open and close application
6	R	Create a blank presentation
6	R	Insert new slide
6	R	Select slide layouts using auto layout feature: title; Bullets; 2-column etc.
6	R	Adding text in pre-set text boxes
6	R	Adding a graphic using PowerPoint clipart
6	R	Use slide sorter view to select, delete, copy, and move slides
6	R	Apply transitions to slides, add sounds to transitions
6	R	Save a presentation
6	R	Adding a graphic using the Internet
6	R	How to use the copy & paste from other applications excel, word
6	I	Use slide sorter view to select, delete, copy, and move slides
6	I	Apply design templates to presentation
6	I	Use Slide Show View
6	I	Navigate in Slide Show view, e.g. previous, next slide
6	I	Create different levels of bullets and numbers etc.
6	I	Apply simple animations to slides, e.g. bullets "fly in" from left.
6	I	Printing slides, and handouts
7	R	Open and close application
7	R	Create a blank presentation
7	R	Insert new slide
7	R	Select slide layouts using auto layout feature: title; Bullets; 2-column etc.
7	R	Adding text in pre-set text boxes
7	R	Adding a graphic using PowerPoint clipart
7	R	Apply transitions to slides, add sounds to transitions
7	R	Save a presentation
7	R	Apply design templates to presentation
7	R	Use Slide Show View
7	R	Navigate in Slide Show view, e.g. previous, next slide
7	R	Create different levels of bullets and numbers etc.
7	R	Apply simple animations to slides, e.g. bullets "fly in" from left.
7	R	Printing slides, and handouts
7	R	Adding a graphic using the Internet
7	R	How to use the copy & paste from other applications excel, word
7	I	Use Normal view to create slides and add notes to slides
7	I	Print slides with notes
7	I	Use Outline view to create slide presentation
8	R	Select slide layouts using auto layout feature: title; Bullets; 2-column etc.
8	R	Adding text in pre-set text boxes
8	R	Adding a graphic using PowerPoint clipart
8	R	Use slide sorter view to select, delete, copy, and move slides
8	R	Apply transitions to slides, add sounds to transitions
8	R	Save a presentation

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8	R	Apply design templates to presentation
8	R	Use Slide Show View
8	R	Navigate in Slide Show view, e.g. previous, next slide
8	R	Create different levels of bullets and numbers etc.
8	R	Apply simple animations to slides, e.g. bullets "fly in" from left.
8	R	Printing slides, and handouts
8	R	Adding a graphic using the Internet
8	R	How to use the copy & paste from other applications excel, word
8	R	Use Normal view to create slides and add notes to slides
8	R	Print slides with notes
8	R	Use Outline view to create slide presentation
8	I	Create a "self-running" presentation
8	I	Use custom animation to animate specific object in a slide, e.g. graphics and text

K-8 Excel - (Spreadsheets)

Grade	*	Skill
4	I	What is Excel?
4	I	Cell, Column, Row
4	I	Adding Rows or Columns using Σ
4	I	Changing numbers in a spreadsheet
4	I	Subtracting Rows or Columns using formula bar
4	I	Difference between line, bar & pie charts
4	I	Create chart using the chart wizard
4	I	Sorting in ascending and descending order
5	R	What is Excel?
5	R	Cell, Column, Row
5	R	Adding Rows or Columns using Σ
5	R	Subtracting Rows or Columns using formula bar
5	R	Changing numbers in a spreadsheet
5	R	Difference between line, bar & pie charts
5	R	Create chart using the chart wizard
5	R	Sorting in ascending and descending order
5	I	Enter and edit text in a cell: Row heading and Column Heading
5	I	Enter and edit numbers in cells
5	I	Adjust column width and row height
5	I	Insert Rows and columns
5	I	Copy chart into Word or PowerPoint
5	I	Multiplying Rows or Columns using formula bar
5	I	Copy formulas

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R = Skills that are **Reviewed**.

6	R	What is Excel?
6	R	Identify the components of an Excel Window, e.g. Menu, Columns, rows, cells, shortcut icons, Formula Bar
6	R	Enter and edit text in a cell: Row heading and Column Heading
6	R	Enter and edit numbers in cells
6	R	Adjust column width and row height
6	R	Insert Rows and columns
6	R	Create simple charts using the chart wizard: bar; line; pie
6	R	Copy chart into Word or PowerPoint
6	R	Create simple charts using the chart wizard: bar; line; pie
6	R	Copy chart into Word or PowerPoint
6	I	Entering simple SUM formulas (3 methods: Pointing, =SUM and the AutoSum Σ and Copy/Fill short cut
6	I	Entering simple subtraction, multiplication, and division using pointing method
6	I	Copying formulas - relative cell references
6	I	Formatting worksheet cell numbers, e.g decimal places
6	I	Format chart area, plot area and data series
6	I	Add chart title and titles for X and Y axis
6	I	Add chart legend
6	I	Create Chart in a new sheet
7	R	What is Excel?
7	R	Identify the components of an Excel Window, e.g. Menu, Columns, rows, cells, shortcut icons, Formula Bar
7	R	Enter and edit text in a cell: Row heading and Column Heading
7	R	Enter and edit numbers in cells
7	R	Adjust column width and row height
7	R	Insert Rows and columns
7	R	Create simple charts using the chart wizard: bar; line; pie
7	R	Copy chart into Word or PowerPoint
7	R	Create simple charts using the chart wizard: bar; line; pie
7	R	Copy chart into Word or PowerPoint
7	R	Entering simple SUM formulas (3 methods: Pointing, =SUM and the AutoSum Σ and Copy/Fill short cut
7	R	Entering simple subtraction, multiplication, and division using pointing method
7	R	Copying formulas - relative cell references
7	R	Formatting worksheet cell numbers, e.g decimal places
7	R	Format chart area, plot area and data series
7	R	Add chart title and titles for X and Y axis
7	R	Add chart legend
7	R	Create Chart in a new sheet
7	I	Entering "Built in" functions using the Average function
7	I	Format worksheet alignment, e.g. making titles slant upward

* I = New skills that are **Introduced**.
R = Skills that are **Reviewed**.

7	I	Format worksheet cell fonts
7	I	Format Worksheet titles (merge cells and center)
7	I	Printing spreadsheet: fit to one page, landscape, selection, grid lines, row/column headings
7	I	Printing Charts
7	I	Freeze window panes
7	I	Adding additional worksheets
8	R	Insert Rows and columns
8	R	Create simple charts using the chart wizard: bar; line; pie
8	R	Copy chart into Word or PowerPoint
8	R	Create simple charts using the chart wizard: bar; line; pie
8	R	Copy chart into Word or PowerPoint
8	R	Entering simple SUM formulas (3 methods: Pointing, =SUM and the AutoSum Σ and Copy/Fill short cut
8	R	Entering simple subtraction, multiplication, and division using pointing method
8	R	Copying formulas - relative cell references
8	R	Formatting worksheet cell numbers, e.g decimal places
8	R	Format chart area, plot area and data series
8	R	Add chart title and titles for X and Y axis
8	R	Add chart legend
8	R	Create Chart in a new sheet
8	R	Entering "Built in" functions using the Average function
8	R	Format worksheet alignment, e.g. making titles slant upward
8	R	Format worksheet cell fonts
8	R	Format Worksheet titles (merge cells and center)
8	R	Printing spreadsheet: fit to one page, landscape, selection, grid lines, row/column headings
8	R	Printing Charts
8	R	Freeze window panes
8	R	Adding additional worksheets

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K-8 Database: Athena and Excel

Grade	*	<i>Skill</i>
3	I	What is Athena?
3	I	Open and Close
3	I	How to Search
3	I	Search by Author, Title, Subject, or Category
4	R	What is Athena?
4	R	Open and Close
4	R	How to Search
4	R	Search by Author, Title, Subject, or Category
4	I	On-line catalog at Beverly Public Library
4	I	Access www.noblenet.org/beverly
4	I	Search noblenet by Author, Title, Subject or Keyword
5	R	What is Athena?
5	R	Open and Close
5	R	How to Search
5	R	Search by Author, Title, Subject, or Category
5	R	On-line catalog at Beverly Public Library
5	R	Access www.noblenet.org/beverly
5	R	Search noblenet by Author, Title, Subject or Keyword
6	R	What is Athena?
6	R	Open and Close
6	R	How to Search
6	R	Search by Author, Title, Subject, or Category
6	R	On-line catalog at Beverly Public Library
6	R	Access www.noblenet.org/beverly
6	R	Search noblenet by Author, Title, Subject or Keyword
7	I	Understand spreadsheet vs database.
7	I	Understand database field and records (rows and columns)
7	I	Sort a database ascending and descending
7	I	Sort using secondary and tertiary sort fields
8	R	Understand spreadsheet vs database.
8	R	Understand database field and records (rows and columns)
8	R	Sort a database ascending and descending
8	R	Sort using secondary and tertiary sort fields
8	I	Use data filter command to perform a simple queries data fiels
8	I	Use data filter command to perform a custom query using "and/or"
8	I	Use data filter command to perform simple query using "equal to/less than/greater than" commands
8	I	Print a "report" that results from a query

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K-8 Inspiration - (Outlining)

Grade	*	Skill
2	I	Open and Close
2	I	Open & Close Symbol Palette - Menu bar or F8
2	I	How to drag & move symbol
2	I	How to add a new symbol
3	R	Open and Close
3	R	Open & Close Symbol Palette - Menu bar or F8
3	R	How to drag & move symbol
3	R	How to add a new symbol
3	I	How to add text to symbol
3	I	How to add a linked symbol
3	I	How to use RapidFire
3	I	How to use Create buttons
3	I	How to change font style, size & color
3	I	How to change effect of topic shapes (fill pattern, fill color, line color, line thickness)
3	I	How to change viewing modes
4	R	Open and Close
4	R	Open & Close Symbol Palette - Menu bar or F8
4	R	How to drag & move symbol
4	R	How to add a new symbol
4	R	How to add text to symbol
4	R	How to add a linked symbol
4	R	How to use RapidFire
4	R	How to use Create buttons
4	R	How to change font style, size & color
4	R	How to change effect of shape (fill pattern, fill color, line color, line thickness)
4	I	How to view outline mode
4	I	How to add background color
4	I	How to add graphics from Internet
4	I	How to use the Arrange button
4	I	How to add Notes
4	I	How to use Position Button
5	R	Open and Close
5	R	Open & Close Symbol Palette - Menu bar or F8
5	R	How to drag & move symbol

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5	R	How to add a new symbol
5	R	How to add text to symbol
5	R	How to add a linked symbol
5	R	How to use RapidFire
5	R	How to use Create buttons
5	R	How to change font style, size & color
5	R	How to change effect of shape (fill pattern, fill color, line color, line thickness)
5	R	How to view outline mode
5	R	How to add background color
5	R	How to add graphics from Internet
5	R	How to use the Arrange button
5	R	How to add Notes
5	R	How to use the Position button
5	I	How to use Drawing Toolbar
5	I	How to use Templates
6	*	Open and Close
6	R	Open & Close Symbol Palette - Menu bar or F8
6	R	How to drag & move symbol
6	R	How to add a new symbol
6	R	How to add text to symbol
6	R	How to add a linked symbol
6	R	How to use RapidFire
6	R	How to use Create buttons
6	R	How to change font style, size & color
6	R	How to change effect of shape (fill pattern, fill color, line color, line thickness)
6	R	How to view outline mode
6	R	How to add background color
6	R	How to add graphics from Internet
6	R	How to use the Arrange button
6	R	How to add Notes
6	R	How to use the Position button
6	R	How to use Drawing Toolbar
6	R	How to use Templates
7	R	Open and Close
7	R	Open & Close Symbol Palette - Menu bar or F8
7	R	How to drag & move symbol
7	R	How to add a new symbol
7	R	How to add text to symbol
7	R	How to add a linked symbol
7	R	How to use RapidFire
7	R	How to use Create buttons
7	R	How to change font style, size & color

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R = Skills that are **Reviewed**.

7	R	How to change effect of shape (fill pattern, fill color, line color, line thickness)
7	R	How to view outline mode
7	R	How to add background color
7	R	How to add graphics from Internet
7	R	How to use the Arrange button
7	R	How to add Notes
7	R	How to use the Position button
7	R	How to use Drawing Toolbar

K-5 (only) Keyboarding

Grade	*	Skill
3	I	Review all keys on keyboard and their functions
3	I	Proper posture - Back straight, body centered, feet on floor, elbows by side, wrists off computer, fingers curved.
3	I	Identify home row
3	I	Learn keys and what finger is assigned to each key
3	I	Practice typing using typing software in computer lab
4	R	Review keys on keyboard and their functions
4	R	Review proper posture
4	R	Review home row
4	R	Practice typing using the typing software in computer lab
5	R	Review keys on keyboard and their functions
5	R	Review proper posture
5	R	Review home row
5	R	Practice typing using the typing software in computer lab

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 R = Skills that are **Reviewed**.

6 -8 Summary of Teaching Responsibilities

KEY I	Shaded areas with an "I" indicate that this subject area has <u>primary</u> responsibility for introducing skills to students within context of a teaching unit.
R	An "R" in a block indicates that this subject area has <u>primary</u> responsibility for reinforcing Performance indicators with the context of a teaching unit.
R	Shading and an R indicates that this area has primary responsibility for teaching one ,major aspect of these performance indicators

Performance Indicator Categories	Tech Ed	LMC	SS	Science	English/LA	Math	Writing
Responsible Use	R	I	R	R	R	R	R
Electronic Research	R	R	I				
Communication	I	R					
Publishing	R				I		R
Graphic Organizers/Outlining					R		I
Multimedia	I		R				
Spreadsheet				R		I	
Database		R		I		R	

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