

## **Teacher Technology Training Objectives**

### **Project Venture - Technology Innovations Challenge Grant**

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|--|---------|
| • Instructional Software               | page 2  |
| • Desktop Basics & Troubleshooting     | page 3  |
| • Word Processing & Desktop Publishing | page 6  |
| • Spreadsheets                         | page 9  |
| • Database                             | page 12 |
| • Internet                             | page 14 |
| • Multimedia                           | page 19 |

**Teachers take classes according to their training levels:**

<p><b>Level I - Survival Skills</b>            Teachers who fit into this level are beginners who are learning the necessary skills for their job.</p> <ul style="list-style-type: none"> <li>• Basic computer navigation</li> <li>• Word processing to include graphic use</li> <li>• District e-mail</li> <li>• Internet navigation</li> </ul>	<p><b>Level III - Beginning Integration</b>            Once teachers have developed their technology skills, they begin to integrate technology into their curriculum. Project Venture trainers are available as mentors.</p> <ul style="list-style-type: none"> <li>• Use of in-class mini-lab</li> <li>• Multimedia production</li> <li>• Peripheral use</li> <li>• Technology integration for project-based curriculum</li> <li>• Advanced trouble-shooting</li> </ul>
<p><b>Level II - Teacher Tool</b>            At Level II a teacher will learn to take advantage of the full use of technology as a classroom management tool.</p> <ul style="list-style-type: none"> <li>• Advanced word processing</li> <li>• Database manipulation with mail merge</li> <li>• Spreadsheets</li> <li>• Advanced Internet</li> <li>• Internet e-mail</li> <li>• Beginning troubleshooting</li> </ul>	<p><b>Level IV - Full Integration &amp; Mentoring</b>            Teachers fluently use technology throughout all their curriculum; they learn new applications with little effort, and are viewed by peers as role models.</p> <ul style="list-style-type: none"> <li>• Stay updated on new developments</li> <li>• Act as resource for other teachers</li> <li>• Initiate mentoring relationships to help others understand the potential of technology</li> </ul>

## INSTRUCTIONAL SOFTWARE OBJECTIVES

Level I	Level II	Level III	Level IV
IS.I.1 Participant will use drill and practice software	IS.II.1 Participant will use drill and practice software that includes adjustments for student levels and for teacher reporting.		
	IS.II.2 Participant will understand the three types of software available for classroom uses.	IS.III.1 Participants will evaluate software as it is related to curricular needs and teaching strategies	IS.IV.1 Participants will act as a resource and promote the use of software specific to curricular needs.
		IS.III.2 Participants will use a variety of software given specific curricular objectives.	
	IS.II.3 Participants will use a variety of software titles that are available at the site level.	IS.III.3 Participants will research software titles based on curricular needs.	IS.IV.2 Participants will use external sources (i.e. Internet software review sites, journals, colleagues, etc.) to seek out quality software given specific needs.
		IS.III.4 Participants will apply strategies for efficiently and effectively learning the operation of a new program.	
	IS.II.4 Participants will use a presentation device for large group instruction of software applications.	IS.III.5 Participants will use a variety of large group, small group, and individual implementation strategies having specific curricular objectives in mind.	IS.IV.3 Participants will design effective learning environments based upon student needs and curricular objectives.

## DESKTOP BASICS & TROUBLESHOOTING OBJECTIVES

Level I	Level II	Level III	Level IV
<p><b>DT.I.1</b> Participant will identify computer components and their functions.</p> <ul style="list-style-type: none"> <li>• Define computer components</li> <li>• Connect CPU, monitor, keyboard, mouse, peripherals, network, and power supply</li> </ul>			
<p><b>DT.I.2</b> Participant will contact the appropriate person to obtain a password(s).</p>	<p><b>DT.II.1</b> Participant will periodically change passwords to maintain security.</p>		
<p><b>DT.I.3</b> Participant will demonstrate proper computer start-up and shutdown.</p> <ul style="list-style-type: none"> <li>• Start up computer system</li> <li>• Shut down computer system</li> <li>• Perform cold boot</li> <li>• Perform warm boot</li> </ul>	<p><b>DT.II.2</b> Participant will install and upgrade applications from disk or CD-ROM.</p>	<p><b>DT.II.1</b> Participant will install and/or upgrade applications using downloads from e-mail or internet websites.</p>	
<p><b>DT.I.4</b> Participant will access programs/files with or without desktop security program.(At Ease, Foolproof, On Guard, etc.)</p>	<p><b>DT.II.3</b> Participants will bypass desktop security programs if allowed.</p>		
<p><b>DT.I.5</b> Participant will demonstrate proper usage of computer menu items and other desktop elements.</p> <ul style="list-style-type: none"> <li>• Locate and use menu bar</li> <li>• Select appropriate menu item for a desired task</li> <li>• Respond appropriately to dialog boxes.</li> </ul>			

<ul style="list-style-type: none"> <li>• Apply appropriate mouse clicks to icons and buttons</li> <li>• Distinguish between icons, buttons and menus</li> <li>• Distinguish between applications, folders, documents, harddrive, servers and trash can/recycle bin</li> <li>• Use vocabulary and terminology</li> </ul>			
<p><b>DT.I.6</b> <b>Participant will manage windows with a mouse.</b></p> <ul style="list-style-type: none"> <li>• Use the mouse to click, double click and drag</li> <li>• Open, close, move and resize a window</li> <li>• Minimize/hide a window.</li> <li>• Restore a minimized/hidden window</li> <li>• Maximize a window</li> <li>• Restore a maximized window.</li> <li>• Tile and cascade displayed windows</li> <li>• Hide all windows to display only the desktop</li> </ul>	<p><b>DT.II.4</b> <b>Participant will increase computer functionality.</b></p> <ul style="list-style-type: none"> <li>• Use appropriate keyboard shortcuts to execute commands</li> <li>• Open and use more than one application at a time</li> <li>• Put most used items in Start/Apple menu</li> <li>• Use the find utility</li> <li>• Use the control panel</li> <li>• Lock file/folder</li> <li>• Identify and manipulate preferences, defaults, and other selectable features of operating systems or applications</li> <li>• Create an alias/shortcut when necessary/helpful.</li> <li>• Use the alias/shortcut to locate target/original item</li> </ul>	<p><b>DT.II.2</b> <b>Participant will customize their computer for advanced use.</b></p> <ul style="list-style-type: none"> <li>• Make more memory available to one or more applications</li> <li>• Configure network and internet settings</li> <li>• Print to a network printer</li> <li>• Add/setup printer software for local printer</li> </ul>	
<p><b>DT.I.7</b> <b>Participant will organize their files and folders so that they are easily accessible.</b></p> <ul style="list-style-type: none"> <li>• Locate a file/folder</li> <li>• Move a file/folder to a different</li> </ul>	<p><b>DT.II.5</b> <b>Participant will connect to a server in order to access applications and access saved documents.</b></p>	<p><b>DT.III.3</b> <b>Participant will share files between networked computers.</b></p> <ul style="list-style-type: none"> <li>• Set up file sharing</li> <li>• Log onto another computer</li> <li>• Access and/or save to another</li> </ul>	

<p>location</p> <ul style="list-style-type: none"> <li>• Copy a file/folder to a different location</li> <li>• Delete/trash a file/folder</li> <li>• Retrieve a deleted file/folder</li> <li>• Empty recycle bin/trash</li> <li>• Create a folder</li> </ul>		<p>computer</p>	
	<p><b>DT.II.6</b>  <b>Participant will demonstrate essential computer maintenance.</b></p> <ul style="list-style-type: none"> <li>• Make backup copies of files</li> <li>• Identify system files</li> <li>• Protect system files from deletion/modification</li> <li>• Exchange files among different operating systems</li> <li>• Install an application</li> <li>• Upgrade an application</li> </ul>	<p><b>DT.III.4</b>  <b>Participant will perform advanced computer maintenance.</b></p> <ul style="list-style-type: none"> <li>• Rebuild desktop(Mac only)</li> <li>• Run appropriate disk repair utility</li> <li>• Protect against computer viruses</li> </ul>	
	<p><b>DT.II.7</b>  <b>Identify and describe the major operating systems associated with computer platforms found in the district (ISTE 4.4.1)</b></p>	<p><b>DT.III.5</b>  <b>Participant will use strategies to resolve compatibility issues.</b></p> <ul style="list-style-type: none"> <li>• Save documents in cross-platform formats</li> <li>• Format and/or use PC disks</li> <li>• Use applications which are cross-platform (i.e., Word, html, etc.)</li> </ul>	
			<p><b>DT.IV.1</b>  <b>Participant will teach troubleshooting techniques to another user.</b></p>

## WORD PROCESSING OBJECTIVES

Level I	Level II	Level III	Level IV
<p><b>WP.I.1</b> Participant will navigate within an existing word processing document.</p> <ul style="list-style-type: none"> <li>• Open an existing document by double-clicking on it</li> <li>• Open a word processing application; open an existing document from within word processing application</li> <li>• Change the insertion point location by using a variety of methods</li> <li>• Use a variety of methods to move through a multiple-page document (i.e. scroll bar, arrows, page up, page down, etc.)</li> <li>• Perform simple operations by using menu bar and toolbar</li> <li>• Close a document and exit/quit the word processor application</li> </ul> <p><b>WP.I.2</b> Participant will edit, save and print an existing word processing document.</p> <ul style="list-style-type: none"> <li>• Use text wrap</li> <li>• Start a new paragraph using the return or enter key</li> </ul>	<p><b>WP.II.1</b> Participant will become proficient at independently navigating, editing and formatting with a word processing application.</p> <ul style="list-style-type: none"> <li>• Use the help system as reference tool</li> <li>• Use keyboard commands to navigate and edit the document</li> <li>• Customize and use toolbars</li> <li>• Use writing tools (i.e., thesaurus, grammar check, word count)</li> <li>• Display and hide nonprinting characters</li> </ul>		

<ul style="list-style-type: none"> <li>• Undo the last action</li> <li>• Insert and delete text, spaces and returns</li> <li>• Select text using a variety of methods</li> <li>• Copy and paste text to a new location in the document</li> <li>• Move text to a new location in the document using drag-and-drop</li> <li>• Use a spell checker</li> <li>• Name and save a document to a specific location or disk.</li> <li>• Print a document.</li> <li>• Utilize a template</li> </ul>			
<p><b>WP.I.3</b>  <b>Participant will create and format a new word processing document.</b></p> <ul style="list-style-type: none"> <li>• Create new document and input text</li> <li>• Change page orientation from portrait to landscape</li> <li>• Understand default settings</li> <li>• Change line spacing</li> <li>• Change font, style and/or size</li> <li>• Change justification</li> <li>• Change margins of a document</li> <li>• Use default tabs</li> </ul>	<p><b>WP.II.2</b>  <b>Participant will create, edit and format a new word processing document with graphics.</b></p> <ul style="list-style-type: none"> <li>• Find and replace text.</li> <li>• Set tabs (i.e., left, center, right, decimal).</li> <li>• Insert page breaks</li> <li>• Save a document as a template.</li> <li>• Insert headers and footers.</li> <li>• Insert date, time and page number.</li> <li>• Create labeled lists using application commands/buttons</li> <li>• Change paragraph indentation settings using the ruler</li> <li>• Insert a graphic from application's clip art collection.</li> <li>• Manipulate a graphic (i.e., rotate, flip, resize, reshape)</li> <li>• Wrap text around a graphic</li> </ul>	<p><b>WP.III.1</b>  <b>Participant will create, edit and format a new document using desktop publishing techniques.</b></p> <ul style="list-style-type: none"> <li>• Plan and design a visually appealing document (i.e., font, color, graphics, etc.)</li> <li>• Create and use columns and columns breaks</li> <li>• Copy and paste paragraph formatting/ruler</li> <li>• Insert graphics from a variety of sources</li> <li>• Use graphic tools to create special effects (i.e., shadows, transformation, etc.)</li> <li>• Arrange multiple graphics (i.e., layer, align, group/ungroup, lock/unlock)</li> </ul> <p><b>WP.III.2</b>  <b>Participant will share/merge</b></p>	

	<ul style="list-style-type: none"> <li>• Create an outline using appropriate tools</li> <li>• Insert and edit a table or chart</li> </ul>	<p><b>information from other applications with a word processing document.</b></p> <ul style="list-style-type: none"> <li>• Mail merge with database or data documents</li> <li>• Insert and link spreadsheet data</li> </ul> <p><b>Participant will use HTML features in a word processing application.</b></p> <ul style="list-style-type: none"> <li>• Create a page with active internet links.</li> <li>• Create a document and save as a HTML page.</li> </ul>	
		<p><b>WP.III.3</b>  <b>Participant will develop and implement a whole group project which utilizes word processing/desktop publishing applications.</b>   <b>(I.e., brochure, class newspaper, research, etc)</b></p>	<p><b>WP.IV.1</b>  <b>Participant will develop and implement a lesson or project where students utilize word processing/desktop publishing applications.</b>   <b>(I.e., brochure, class newspaper, research, etc)</b></p>

# SPREADSHEETS OBJECTIVES

Level I	Level II	Level III	Level IV
<p><b>SS.I.1</b> Participant will describe the various uses and educational applications of spreadsheets.</p> <p>I.e., develop various spreadsheets, analyze data, organize data</p>			
	<p><b>SS.II.1</b> Participant will be able to input a given set of data into a predesigned spreadsheet.</p> <ul style="list-style-type: none"> <li>• Enter data including text, numbers, and dates</li> <li>• Save and close</li> <li>• Use tool bars</li> <li>• Open an existing document</li> <li>• Print an existing document</li> <li>• Use appropriate vocabulary regarding spreadsheets (cells, number cells, text cells, columns, rows, etc.)</li> </ul>	<p><b>SS.III.1</b> Participant will design a spreadsheet that presents in an organized fashion for a specific purpose.</p> <ul style="list-style-type: none"> <li>• Column/row headings</li> <li>• Row height, column width</li> <li>• Entering data</li> <li>• Formatting data for sorting</li> </ul>	
	<p><b>SS.II.2</b> Participant will be able to edit and format a predesigned spreadsheet.</p> <ul style="list-style-type: none"> <li>• Edit information within a cell (cut, copy, paste, clear)</li> <li>• Edit information within a range of cells (cut, copy, paste, clear)</li> <li>• Move data using “drag and drop”</li> <li>• Delete data and undo action</li> <li>• Select single cells, columns, rows, and whole spreadsheet</li> </ul>	<p><b>SS.III.2</b> After creating a spreadsheet, participant will be able to edit and format the document according to their needs.</p> <ul style="list-style-type: none"> <li>• Print a document, cell ranges, etc.</li> <li>• Sort in ascending vs. descending order</li> <li>• Sort multiple rows and columns</li> <li>• Protect and unprotect cells</li> </ul>	

	<ul style="list-style-type: none"> <li>• Insert and delete rows and columns</li> <li>• Adjust column widths and row heights</li> <li>• Use numeric format</li> <li>• Format data within a cell or groups of cells (fonts, size, color, alignment)</li> <li>• Preview print jobs</li> <li>• Use page setup options (print size, margins)</li> <li>• Print spreadsheets</li> <li>• Utilize fill commands</li> </ul>	<ul style="list-style-type: none"> <li>• Shade ranges</li> </ul>	
	<p><b>SS.II.3</b> Participant will be able to use basic formulas to obtain quantitative results given a set of data in a predesigned spreadsheet.</p> <ul style="list-style-type: none"> <li>• Use a variety of cell references</li> <li>• Use averaging tools</li> <li>• Use auto sum</li> </ul>	<p><b>SS.III.3</b> Participant will be able to create formulas for numeric and text calculations.</p> <ul style="list-style-type: none"> <li>• Format for calculations</li> <li>• Use relative cell references</li> <li>• Use absolute cell references</li> <li>• Use relative and absolute references</li> <li>• Use appropriate functions</li> <li>• Use advanced formulas</li> <li>• Use cell references (Absolute, Relative, and Mixed)</li> </ul>	
	<p><b>SS.II.4</b> Participant will be able to create a graph or chart from a given set of data in a predesigned spreadsheet.</p> <ul style="list-style-type: none"> <li>• Use wizard/menu bar/button bar to create a graph or chart</li> <li>• Add footers and headers</li> <li>• Use borders (outline, right, left, top, and bottom)</li> </ul>	<p><b>SS.III.4</b> After creating a spreadsheet, participant will be able to analyze the data and determine appropriate charts and graphs to display the information.</p> <ul style="list-style-type: none"> <li>• Identify purpose for each type of chart or graph</li> <li>• Create appropriate chart and</li> </ul>	<p><b>SS.IV.1</b> After collecting relevant data, participant will be able to use spreadsheets to create charts and graphs which are then imported into other applications.</p> <ul style="list-style-type: none"> <li>• Move and copy data between spreadsheets/worksheets</li> <li>• Link data from one</li> </ul>

	<ul style="list-style-type: none"> <li>• Change display (Claris Works users)</li> <li>• Use style sheets (create, modify, format cells)</li> </ul>	<p>graph for intended purpose</p> <ul style="list-style-type: none"> <li>• Format and modify charts and graphs to elaborate the purpose</li> <li>• Modify charts and graphs (change types, reposition legends, resize/move)</li> </ul>	<p>spreadsheet/worksheet to another</p> <ul style="list-style-type: none"> <li>• Import/export spreadsheets into other applications</li> <li>• Link spreadsheets to other applications</li> <li>• Cut and paste spreadsheets into other applications</li> </ul>
		<p><b>SS.III.5</b>  <b>Participant will develop and implement a whole group lesson plan utilizing spreadsheets to collect, organize, and analyze information within a curricular topic.</b></p> <ul style="list-style-type: none"> <li>• Determine appropriate spreadsheet uses</li> <li>• Create a spreadsheet for data input</li> <li>• Create appropriate graph or chart to analyze data; assist students in analysis/synthesis</li> </ul>	<p><b>SS.IV.2</b>  <b>Participants will develop and implement a lesson or project where students design/create spreadsheets for developmentally appropriate analytical / statistical purposes.</b></p> <ul style="list-style-type: none"> <li>• Determine appropriate spreadsheet uses</li> <li>• Create a spreadsheet for data input</li> <li>• Create appropriate graph or chart to analyze data; assist students in analysis/synthesis</li> </ul>

## DATABASE OBJECTIVES

Level I	Level II	Level III	Level IV
<b>DB.I.1</b> <b>Participant will identify three database applications (e.g., search engines, library catalogs, etc.), what information they contain, and describe how they are used.</b>			
	<b>DB.II.1</b> <b>Participant will identify and define database components given an existing database.</b> <ul style="list-style-type: none"> <li>• Use database vocabulary (i.e., tables, fields, etc.)</li> <li>• Define database components</li> </ul>		
	<b>DB.II.2</b> <b>Participant will enter, edit, and print data, given an existing database</b> <ul style="list-style-type: none"> <li>• Enter data</li> <li>• Edit data</li> <li>• Print database</li> </ul>	<b>DB.III.1</b> <b>Participant will design a database for a specific purpose.</b> <ul style="list-style-type: none"> <li>• Determine and develop categories of information</li> <li>• Enter data</li> <li>• Change, delete fields</li> </ul>	
	<b>DB.II.3</b> <b>Participant will organize data within a given database by sorting information using one criteria</b> <ul style="list-style-type: none"> <li>• Sort alphabetically, numerically, chronologically, etc.</li> <li>• Sort in ascending and descending order</li> </ul>	<b>DB.III.2</b> <b>Participant will analyze and manipulate data in a database</b> <ul style="list-style-type: none"> <li>• View, hide, sort, find and match records</li> <li>• Share/merge database information with other applications</li> <li>• Import data from other applications</li> </ul>	

		<ul style="list-style-type: none"> <li>• Add, change, and delete fields</li> <li>• Design data tables (for Access users only)</li> <li>• Define field types</li> <li>• Copy, delete, and paste records</li> </ul>	
		<p><b>DB.III.3</b> Participant will create, edit and print a report for a specific purpose.</p> <ul style="list-style-type: none"> <li>• Create a n organized report/layout presenting selected data</li> <li>• Create multiple reports within a given database for a variety of purposes.</li> <li>• Edit a report/layout</li> <li>• Print a report/layout</li> </ul>	
		<p><b>DB.III.4</b> Participant will develop and implement a whole group lesson plan which utilizes a database to collect, organize, and analyze information.</p> <ul style="list-style-type: none"> <li>• Determine appropriate database uses</li> <li>• Create database for data input</li> <li>• Create report to analyze data</li> <li>• Assist students in analysis/synthesis</li> </ul>	<p><b>DB.IV.1</b> Participant will develop and implement a lesson or project where students create/manipulate databases for developmentally appropriate research purposes.</p> <ul style="list-style-type: none"> <li>• Determine appropriate database uses</li> <li>• Create database for data input</li> <li>• Create report to analyze data</li> </ul>

# INTERNET OBJECTIVES

Level I	Level II	Level III	Level IV
<p><b>IN.I.1</b> Participant will have an understanding of Internet connectivity and structure.</p> <ul style="list-style-type: none"> <li>• Understand hardware, browsers &amp; networking to include LAN &amp; WAN, &amp; current ways of connecting to the Internet (school, home, business)</li> <li>• Discuss historical &amp; social implications</li> <li>• Discuss Acceptable Use Policies for student and staff</li> </ul> <p><b>IN.I.2</b> Participant will understand and describe the value of telecommunications to increase relevant and authentic learning opportunities. I.E., collaborative projects, real time data applications, access to experts</p>			
<p><b>IN.I.3</b> Participant will locate web pages, given a list of web sites related to various curriculum topics.</p> <ul style="list-style-type: none"> <li>• Start the navigation browser</li> <li>• Input URLs to view web pages</li> </ul>	<p><b>IN.II.1</b> Participant will locate and utilize web pages, given a list of web sites related to various curriculum topics.</p> <ul style="list-style-type: none"> <li>• Print data</li> </ul>	<p><b>IN.III.1</b> Participant will locate, utilize, and evaluate relevance and validity of web pages, given a list of web sites related to various curriculum topics.</p>	

<ul style="list-style-type: none"> <li>Identify domain types</li> <li>Use the navigation tool bar</li> <li>Navigate links</li> </ul>	<ul style="list-style-type: none"> <li>Download graphics, video, sounds</li> <li>Save a web page</li> <li>Copy and paste web based text to another application</li> <li>Follow Fair Use Guidelines and Copyright procedures</li> </ul>	<ul style="list-style-type: none"> <li>Determine validity of a web site to include: <ul style="list-style-type: none"> <li>Author posted vs. juried (peer reviewed) website, broad over generalizations vs. specifics</li> <li>Find collaborating evidence</li> <li>Credentials of author listed</li> <li>Resources and references listed by author</li> <li>Biased or commercial interest</li> <li>Publication date of the information</li> </ul> </li> </ul>	
<p><b>IN.I.4</b> Participant will use simple procedures which support district Acceptable Use Policies</p> <ul style="list-style-type: none"> <li>Demonstrate personal security with respect to credit card numbers, names, phone numbers, addresses, email addresses, etc..</li> <li>Use appropriate e-mail and “net etiquette”</li> </ul>	<p><b>IN.II.2</b> Participant will be able to develop classroom procedures as a way to provide safe internet use.</p> <ul style="list-style-type: none"> <li><b>Provide students with safe searching situations to include:</b> <ul style="list-style-type: none"> <li>Instructor generated bookmarks, arrange computers so that screens are visible to the instructor, use a teacher developed web page that links to predetermined sites, don't allow free internet surfing, instructor screened email, web whacking</li> </ul> </li> </ul>		
<p><b>IN.I.5</b> Participant will research a relevant topic using a simple search technique.</p> <ul style="list-style-type: none"> <li>Perform category searches (i.e.. Yahoo links to categories)</li> <li>Perform simple keyword searches</li> </ul>	<p><b>IN.II.3</b> Participant will research a relevant topic using advanced search techniques.</p> <ul style="list-style-type: none"> <li>Perform advanced keyword searches using Boolean and logical operators (i.e., +, -, &amp;,</li> </ul>		

<ul style="list-style-type: none"> <li>Perform searches via system software where provided (i.e. Sherlock)</li> </ul>	<p>or, not, “ ” )</p> <ul style="list-style-type: none"> <li>Use meta-search engines</li> </ul>		
		<p><b>IN.III.2</b> Participant will utilize freeware/shareware programs available via the Internet.</p> <ul style="list-style-type: none"> <li>Follow copyright laws</li> <li>Understand the increased potential for conflicts when using non-commercial products</li> <li>Identify, locate freeware/shareware programs</li> <li>Scan for virus and install freeware/shareware programs</li> </ul>	<p><b>IN.IV.1</b> Participant will utilize plug-ins to enhance web browser capabilities.</p> <ul style="list-style-type: none"> <li>Identify, download and install required plug-in in appropriate location (i.e. Shockwave, RealAudio, etc.)</li> <li>Identify download and install players (i.e. Midi player, Movie player, MP3, etc.)</li> </ul>
<p><b>IN.I.6</b> Participant accesses and utilizes e-mail for professional/educational communications.</p> <ul style="list-style-type: none"> <li>Address and compose a message</li> <li>Send and receive e-mail messages</li> <li>Forward and reply to messages</li> <li>Save messages</li> <li>Delete unwanted messages</li> <li>Print messages</li> </ul>	<p><b>IN.II.4</b> Participant accesses and utilizes advanced features of an e-mail system for professional/educational communications.</p> <ul style="list-style-type: none"> <li>Create address books,</li> <li>Create distribution lists</li> <li>Attach and retrieve files</li> <li>Subscribe/ Unsubscribe to listservs</li> <li>Organize mail</li> </ul>	<p><b>IN.III.3</b> Participant will develop and implement a whole group lesson plan which utilizes telecommunication resources for research and collaboration with peers, experts, and other audiences to create an educational publication.</p> <p>Teacher will:</p> <ul style="list-style-type: none"> <li>Participate in video conferencing</li> <li>Cite resources in MLA or APA format</li> <li>Utilize E-mail / web mail</li> <li>Access web-based and/or collaborative projects</li> <li>Follow Fair Use Guidelines and Copyright procedures</li> <li>Create a product which integrates telecommunications into word</li> </ul>	<p><b>IN.IV.2</b> Participant will develop and implement a lesson or project in which students utilize telecommunication resources for research and collaboration with peers, experts, and other audiences to create an educational publication.</p> <p>Students will:</p> <ul style="list-style-type: none"> <li>Participate in video conferencing</li> <li>Cite resources in MLA or APA format</li> <li>Utilize E-mail / web mail</li> <li>Access web-based and/or collaborative projects</li> <li>Follow Fair Use Guidelines and Copyright procedures</li> <li>Create a product which integrates telecommunications into word</li> </ul>

		processing, multi-media presentation, desktop publishing, and/or web page design	processing, multi-media presentation, desktop publishing, and/or web page design
<b>IN.I.7</b> Participant will access pre-existing bookmarks in a web browser.	<b>IN.II.5</b> Participant will use a web browser to create and organize bookmarks/favorites of educational sites.  <ul style="list-style-type: none"> <li>• Mark locations and access bookmarks/favorites</li> <li>• Organize bookmarks/favorites by using separators</li> <li>• Delete bookmarks</li> </ul>	<b>IN.III.4</b> Participant will utilize bookmarks for initial research and ongoing use during curriculum/lesson planning.  <ul style="list-style-type: none"> <li>• Save bookmarks to disk, server, web, or email.</li> <li>• Import and access bookmarks on another computer</li> <li>• Save bookmarks as an HTML file, to be shared and accessed by other users</li> <li>• Organize bookmarks in folders</li> </ul>	<b>IN.IV.3</b> Participant will develop and implement a lesson or a project where students utilize bookmarks for initial research and ongoing use during curriculum/lesson planning.  <ul style="list-style-type: none"> <li>• Save bookmarks to disk, server, web, or email.</li> <li>• Import and access bookmarks on another computer</li> <li>• Save bookmarks as an HTML file, to be shared and accessed by other users</li> <li>• Organize bookmarks in folders</li> </ul>
		<b>IN.III.5</b> Participant will develop and implement a whole group lesson plan in which they create an educational website (3 page minimum).  Participant will: <ul style="list-style-type: none"> <li>• Create a storyboard for the web site, which includes elements of good screen design</li> <li>• Use web publishing software to create a website, which includes: text, graphics, internal and external links, anchors, table and charts, bulleted or ordered lists, citations using MLA or APA format</li> </ul>	<b>IN.IV.4</b> Participant will develop and implement a lesson or project where students create an educational website (3 page minimum).  Student will: <ul style="list-style-type: none"> <li>• Create a storyboard for the web site, which includes elements of good screen design</li> <li>• Use web publishing software to create a website, which includes: text, graphics, internal and external links, anchors, table and charts, bulleted or ordered lists, citations using MLA or APA format</li> </ul>

		<ul style="list-style-type: none"><li>• Follow Acceptable Use Policies, including copyright law</li></ul>	<ul style="list-style-type: none"><li>• Follow Acceptable Use Policies, including copyright law</li></ul>
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## MULTIMEDIA OBJECTIVES

Level I	Level II	Level III	Level IV
<b>MM.I.1</b> Participant will describe the value and purpose of using multimedia in the teaching/learning process	<b>MM.II.1</b> Participant will understand the planning procedures in multimedia production, given an existing presentation and its planning documents. <ul style="list-style-type: none"> <li>• Determine presentation objectives</li> <li>• Analyze audience and setting</li> <li>• Analyze flowchart</li> <li>• Analyze storyboard</li> <li>• Analyze screen design</li> </ul>	<b>MM.III.1</b> Participant will create a plan for a multimedia presentation on an educational topic (5 screens minimum). <ul style="list-style-type: none"> <li>• Determine objectives and audience</li> <li>• Determine presentation medium &amp; environment.</li> <li>• Determine which multimedia software to use for the specific purpose</li> <li>• Select linear or non-linear format</li> <li>• Determine if use of multimedia elements are appropriate and meaningful</li> <li>• Determine optimal design elements (font style, color, and size, background color or pattern and balanced layout, taking in account presentation format to be used, i.e. large screen projection, TV, computer monitor, etc.).</li> <li>• Create flowchart</li> <li>• Create storyboard</li> </ul>	
	<b>MM.II.2</b>	<b>MM.III.2</b>	<b>MM.IV.1</b>

	<p><b>Participant will modify and enhance an existing multimedia presentation.</b></p> <ul style="list-style-type: none"> <li>• Adhere to copyright laws</li> <li>• Add text</li> <li>• Add graphics</li> <li>• Add buttons/hyperlinks</li> <li>• Use tools to edit presentation</li> </ul>	<p><b>Participant will produce a multimedia presentation on an educational topic (5 screens minimum).</b></p> <ul style="list-style-type: none"> <li>• Create/delete slides/cards</li> <li>• Rearranging slide/card order</li> <li>• Copy/duplicate slides/cards</li> <li>• Create transitions between slides/cards</li> <li>• Create hyperlinks between slides/cards or other applications</li> <li>• Add sound &amp; video clips to add meaning if appropriate</li> <li>• Create &amp; print handouts from presentation/stack</li> <li>• Import graphics from a variety of sources</li> <li>• Import audio clips from a variety of sources</li> <li>• Create bibliography, crediting sources of information &amp; graphics</li> <li>• Save presentation in self-contained format (file with player or "pack &amp; go")</li> </ul> <p><b>MM.III.3</b>  <b>Participant will evaluate effectiveness of a multimedia slideshow/stack when given a rubric.</b></p>	<p><b>Participant will produce a multimedia presentation on an educational topic using advanced development techniques.</b></p> <ul style="list-style-type: none"> <li>• Use Master slide/background to customize entire presentation</li> <li>• Create animations on slides/cards</li> <li>• Create pop-up windows</li> <li>• Embed objects into slide (i.e. tables, charts, spreadsheets, etc.)</li> <li>• Save presentations/stacks to other media and platforms</li> <li>• Connect and use presentation system to present</li> <li>• Export presentation to other media (i.e. videotape, internet, CD-ROM etc.)</li> </ul> <p><b>MM.IV.2</b>  <b>Participant will evaluate effectiveness of a multimedia presentation.</b></p> <ul style="list-style-type: none"> <li>• Create an rubric to evaluate the product and presenter</li> <li>• Present to peers</li> <li>• Evaluate peer presentations</li> </ul>
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		<p><b>MM.III.5</b>  <b>Participant will develop and implement a multimedia presentation during the teaching and learning process.</b></p>	<p><b>MM.IV.4</b>  <b>Participant will develop and implement a lesson plan or project where students create a multimedia presentation on an educational topic.</b></p>