

COMPUTER/TECHNOLOGY CURRICULUM

JAL ELEMENTARY SCHOOL

REVISED SPRING, 1998

A. General Technological Awareness

1. The student understands what a computer is.
2. The student can identify the parts of a computer.
3. The student can start, restart, and shut down a computer.
4. The student can identify the dos and don'ts of using a computer.
5. The student can explain the basics of how a computer operates.
6. The student can identify the parts of and explain the use of a floppy disk.
7. The student can identify the parts of and explain the use of a hard drive.
8. The student can understand the size of a hard drive in relation to floppy disks.
9. The student can identify and explain the parts of and properly use a mouse.
10. The student can identify and properly use icons for files, programs, folders, and disks.
11. The student can identify and properly use menus and menu bars.
12. The student understands how to print, save, close, and/or exit a document.
13. The student can properly open, close, move, resize, or change the view of a window.
14. The student can choose, create, change the name of, and delete files and/or folders.
15. The student can write-protect a disk.
16. The student can copy files to another disk.
17. The student can back up files.
18. The student can use basic keyboard shortcuts.
19. The student can start, use, and close a desk accessory.
20. The student demonstrates appropriate behavior at the computer.
21. The student treats equipment and disks with respect.
22. The student respects the privacy of other students' files.
23. The student understands and respects copyright laws.

B. Keyboarding

1. The student understands relative position of the keys on a keyboard.
2. The student can identify and use various keys other than letter keys.
3. The student can use informal keyboarding skills to type words, phrases, and sentences.
4. The student can use formal keyboarding skills to learn the letter keys and special keys.
5. The student can use formal keyboarding skills to learn the numeric keypad.

C. Paint, Draw, and Graphics

1. The student can operate a paint program.
2. The student can properly select and use tools from a paint program.
3. The student can open and operate a draw program.
4. The student can properly select and use tools from a draw program.
5. The student can copy a graphic to the clipboard.
6. The student can paste or insert the graphic into another document.
7. The student can manipulate a graphic and use it to illustrate an idea in another document.
8. The student can create a graphic and export it to another document.
9. The student can use a scanner or digital camera to capture his or her own digital images.
10. The student can import a digital image into a word processing document.

D. Word Processing

1. The student can access and open a word processing program.
2. The student can enter text and delete text using a variety of methods.
3. The student can select and properly use various special keys in word processing.

4. The student can open, save, and retrieve a word processing file.
5. The student can highlight text.
6. The student can format the text of a document by changing text size, font, and style.
7. The student understands the concept of text/word wrap.
8. The student can cut, copy, and paste text.
9. The student can use the spell checker.
10. The student can manipulate the layout of a document.
11. The student can create indents and overhanging indents.
12. The student can use page breaks
13. The student can move or copy text between two or more word processing documents.
14. The student can import, position, and manipulate relevant graphics into a document.
15. The student can use the "save as" feature to create copies or news versions of documents.
16. The student can use the find/replace command.
17. The student can insert, position, and remove tabs.
18. The student can use the thesaurus.
19. The student can insert and customize footers and headers.
20. The student can enter and modify page numbers.
21. The student can create or import spreadsheets into word processing documents.

E. Information Systems/CD-ROM

1. The student can demonstrate an understanding of the amount of information contained on a CD-ROM.
2. The student can understand the difference between an audio CD and A CD-ROM.
3. The student can understand how to handle and load a CD-ROM into a CD-ROM drive with or without a caddy.
4. The student can open, navigate through, browse through, and quit a program on a CD-ROM.
5. The student can eject and carefully put away a CD-ROM.
6. The student understands how an electronic encyclopedia functions.
7. The student can do a title search using a CD-ROM.
8. The student can do a single-field word search.
9. The student can create an electronic bookmark.
10. The student can identify key words, names, phrases, and major headings or groupings for a search.
11. The student can design a title search strategy, narrowing the search parameters as needed.
12. The student can do a Boolean word search.
13. The student can skim articles for major ideas.
14. The student can capture information from one or several CD-ROM articles and transfer notes to a notepad or a word processor.
15. The student can create an outline for a report using information from a CD-ROM.

F. Network Awareness

1. The student can log and off a network.
2. The student can access and open programs on a network.
3. The student can print documents to a network printer.
4. The student can access CD-ROMs on a network.
5. The student can access, save to, and retrieve files from a personal network space.
6. The student can explain what a network is.
7. The student can explain how a network operates.
8. The student can choose a different printer.
9. The student can access, save to, and retrieve files from a shared network.
10. The student can explain the operation of a network server.
11. The student can explain the concept and operation of a multizone network.

G. Internet/Telecommunications

1. The student can operate the various functions of e-mail messaging.
2. The student can create and use a signature file.
3. The student can participate in an Acceptable Use Policy design.

4. The student can open a Web browser.
5. The student can enter a Uniform Resource Locator (URL).
6. The student can use the directory buttons in the Web browser.
7. The student can use hypertext links.
8. The student can use the tool bar in a Web browser.
9. The student can use a variety of ways to get to a Web site.
10. The student can save sites using a bookmark, hotlist, or favorite.
11. The student can use the save as command.
12. The student can use search engines.
13. The student can manage sites.
14. The student can evaluate Web pages using evaluation criteria.
15. The student understands the various aspects of HTML and can use them properly.
16. The student can use four tags to create a basic page (<HTML>, <TITLE>, <BODY>, <P>), and can use tags for a variety of tasks.
17. The student can view a basic document in a Web browser.
18. The student understands and can use "links" and "images" when working with Web pages.
19. The student can use required software.
20. The student can complete required tasks for an online project.
21. The student can implement a project using online resources.
22. The student can participate in an online environment (MUDs, MOOs, etc.)
23. The student can create a class or school home page.
24. The student can use all of this information to develop a Personal Portfolio.

H. Multimedia

1. The student can define the basic elements of a multimedia presentation.
2. The student can place into a simple static screen: text, copied graphic, created graphic, photos, scanned images, and images from a digital camera.
3. The student can create a series of screens complete with texts, graphics, and buttons for a variety of navigation options.
4. The student can create a button/menu to allow a user to view a series of screens or selected screens.
5. The student can create a series of screens that show a wide variety of options for the user.
6. The student understands and can properly use the principals of animation techniques.
7. The student can use, edit, and/or modify prerecorded sounds, videos, and/or special effects from a variety of sources to enhance presentations.

I. Video

1. The student can explain videotape magnetic data storage.
2. The student can explain how television reproduces images.
3. The student can explain the difference between videotape formats.
4. The student can identify and properly use the various parts and functions of a camcorder.
5. The student can set up a video workstation.
6. The student can videotape: static images, images using movement, people, and slides.
7. The student can properly use framing and shot distance on a camcorder.
8. The student can identify graphics, text, and people to use in a video.
9. The student can organize graphics, text, and people to use in a video.
10. The student can add/mix narration and music to a video.
11. The student can create and use a storyboard.
12. The student can edit a video presentation using a variety of methods.
13. The student can connect the computer to the VCR or camcorder.
14. The student can make credits on the computer.
15. The student can add graphics to the video from the computer.
16. The student understands and can use various angles when using a camcorder.
17. The student can create claymation videos.
18. The student can create animations.

J. Electronic Presentations

1. The student can understand the concept of: slides, electronic presentations, views, a template, color schemes, and background items.
2. The student can create, edit, and delete slides for electronic presentations.
3. The student can create and modify templates.
4. The student can effectively use slides in an electronic presentation.

K. Desktop Publishing

1. The student understands the concepts of, and can use effectively: contrast, proportion, balance, rhythm with the visual center, rhythm with the power of eyes, rhythm with apparent motion, rhythm with lines, white space, and unity of graphical elements.
2. The student can describe the differences between sans serif and serif type.
3. The student can use sans serif and serif type effectively.
4. The student can use uppercase letters effectively.
5. The student can describe and use effectively the three steps of scan, skim, and scour.
6. The student can explain the three goals for any published document.
7. The student can use headlines, graphics, and body text effectively.
8. The student understands the concept of, and can use effectively, a layout grid.

L. Databases

1. The student can determine what items to use in a physical database.
2. The student can retrieve records from physical and electronic databases.
3. The student can use a public database.
4. The student can add new files to a record.
5. The student can enter new information to one or more fields of an existing record.
6. The student can save updated records on disk.
7. The student can organize a file by sorting alphabetically, numerically, or chronologically on a chosen field.
8. The student can print sorted records and use the information.
9. The student can determine items to include, the type of information for each field, and determine the layout of a record when creating a database.
10. The student can name, save, edit, and test the database.
11. The student can create and answer higher order questions using information a database.
12. The student can use the database to suggest trends.
13. The student can explain mythinformation and misrepresentation issues related to data.
14. The student can outline issues related to privacy and protection from theft and fraud.
15. The student can identify potential errors in creating, fitting, and using data.

M. Spreadsheets

1. The student can recognize the parts of a spreadsheet.
2. The student can understand the purpose of a spreadsheet.
3. The student can open a spreadsheet program.
4. The student can recognize new menus within the spreadsheet environment.
5. The student can move to a specific cell on a spreadsheet.
6. The student can enter text or numbers into a spreadsheet.
7. The student can save and retrieve spreadsheet files.
8. The student can select a cell or block of cells.
9. The student can change the order of information within a column by sorting.
10. The student can insert or delete cells.
11. The student can format a cell or block of cells.
12. The student can display or remove the grid.
13. The student can display or remove the column and row headings.
14. The student can change column widths.
15. The student can add a header or footer.
16. The student can build a formula into a cell.
17. The student can copy and past values and formulas to selected cells.

18. The student can protect cells from changes.
19. The student can analyze the effects of changes made to the spreadsheet.
20. The student can use the data within spreadsheet to create charts and graphs.
21. The student can design a spreadsheet.
22. The student can determine what data items to use when designing a spreadsheet.
23. The student can test the data items in the spreadsheet.

N. Programming

1. The student can solve problems that require a sequence of logical instructions.
2. The student can solve problems that require repetition of a sequence of instructions.
3. The student understands angles.
4. The student can enter Logo commands in immediate execution mode.
5. The student can use left and right to turn the turtle.
6. The student can use pendown and forward to draw lines.
7. The student can use the dimensions of the logo screen.
8. The student can use logo to draw simple geometric shapes.
9. The student can use logo to draw regular polygons.
10. The student can use turtle wrapping.
11. The student can use repeat to draw regular rotated designs.
12. The student can use logo to draw spirals.
13. The student can use procedures to group instructions.
14. The student can use home and penup to return to the center of the screen without erasing.
15. The student can identify the repeated element in a rotated pattern.
16. The student understands the concept of a variable.
17. The student can give a value to a variable.
18. The student can use procedures with variables.
19. The student can increase the value of a length variable in a repeat loop.
20. The student can increase the value of an angle variable in a repeat loop.
21. The student can use simple arithmetic calculations.