

## Educational Computer Technology Pre-Kindergarten

By the end of Pre Kindergarten students will:

### *Basic Operations and Concepts (Foundational Skills)*

- use proper hand placement on mouse
- move the mouse and click on item on screen
- use mouse to drag items on the screen
- clear the screen within program being used
- quit programs

### *Productivity Tools (Graphics)*

- use the mouse to draw simple freehand shapes

### *Productivity Tools (Content Specific Software)*

- can use PhotoBooth to take pictures
- can use Shapes program to manipulate shapes
- use Internet activities

### *Social, Ethical and Human Issues (Impact of Technology)*

- clean up their workspace around them at the end of the lesson

# AISL Educational Computer Technology Kindergarten

By the end of Kindergarten students will:

## ***Basic Operations and Concepts (Foundational Skills)***

- open an application from the dock by clicking on the icon
- quit an application using the command key and Q OR by using the program menu
- log into the computer network
- use the correct vocabulary for equipment – mouse, screen
- retrieve a saved document with teacher assistance
- use the mouse to point, click and drag
- understand that different programs are used to different jobs
- understand that saving a document allows them to continue with or view it at a later time

## ***Productivity Tools (Graphics)***

- use simple painting tools
- use basic functions of TuxPaint, KidPix, and AppleWorks Draw
- use creativity in drawings, not following exactly what the teacher does
- start to add details to their drawings

## ***Productivity Tools (Content Specific Software)***

- can use effects in PhotoBooth to take pictures
- can use Shapes program to manipulate shapes and solve puzzles
- use Internet activities
- use basic functions of Neighborhood Map Machine to design a simple map
- perform basic clicking functions on age appropriate Internet website

## ***Communication Tools (Publish)***

- use basic functions of Inspiration to create a simple map with pictures and links
- begin to understand basic concept of animation

## ***Social, Ethical and Human Issues (Impact of Technology)***

- are able to sit and watch a short demonstration and then recreate the steps at their computer
- treat all computer equipment with respect

# Educational Computer Technology

## Grade One

*By the end of Grade One students will:*

### ***Basic Operations and Concepts (Foundational Skills)***

- use the correct vocabulary for equipment – projector, printer
- save a document with teacher direction
- use the correct vocabulary for operating system – desktop, trash, folder, home
- double-click the mouse when necessary
- understand that a computer desktop is similar to a physical desktop in the classroom
- understand that the computer trash is similar to a physical trashcan
- understand that a computer folder is similar to a physical folder

### ***Productivity Tools (Graphics)***

- create graphics with lines, rectangles and ovals
- manipulate graphics: change size of objects by dragging handles
- differences between dragging on a corner handle(keeps objects proportions) vs a side handle (distorts object)
- move objects by dragging
- delete objects
- fill objects with color and patterns

### ***Productivity Tools (Text)***

- use conventions for entering text: capital letters, punctuation, one space between words
- fix errors in typing by deletion and insertion

### ***Productivity Tools (Content Specific Software)***

- use basic functions of Quilt Squares and Block Towns to manipulate shapes and solve puzzles
- perform basic clicking functions on age appropriate Internet websites

### ***Communication Tools (Publish)***

- can use basics of Inspiration to create a simple map with text, ovals, links and pictures

### ***Social, Ethical and Human Issues (Impact of Technology)***

- show curiosity about menus and tools in programs

Red – Knowledge

Orange – Concepts

Blue – Skills

Green - Attitudes

## Educational Computer Technology Grade Two

By the end of Grade Two students will:

### ***Basic Operations and Concepts (Foundational Skills)***

- use a simple undo command to reverse an action taken
- understand that they are able to print to different printers
- choose a printer and print a document
- use correct vocabulary for operating system – document, dock, icon, menu, touchpad
- open files from the home folder
- understand that a document on the computer is similar to a document that they write/draw by hand
- understand that their computer home folder is similar to their classroom desk, cubby or backpack

### ***Basic Operations and Concepts (Keyboarding Skills)***

- use 2 hands on keyboard for text input – right hand for right side keys, left hand for left side keys

### ***Productivity Tools (Graphics)***

- use select all command to select all objects
- use more advanced drawing tools such as the polygon tool and line width
- use shift key to constrain rectangles to squares and ovals to circles
- use pen color to draw objects
- can flip objects.
- duplicate objects
- use zoom out to preview work, use zoom in for detail work.
- create a text box, enter text, format text (font, size, style, color), move text box, resize text box.
- understand that shapes made of discrete parts cannot be filled – only closed, shapes made of a continuous form can be filled
- create a simple bar graph from data entered on a spreadsheet

### ***Productivity Tools (Data)***

- understand that data entered into a spreadsheet can be shown in graphical/chart form
- enter and edit data to a spreadsheet
- create a simple bar graph from data entered on a spreadsheet
- use correct vocabulary for spreadsheet: cell, column, row, name cells appropriately i.e. A1, C6

### ***Productivity Tools (Text)***

Red – Knowledge

Orange – Concepts

Blue – Skills

Green - Attitudes

- fix errors in typing by deletion and insertion
- use word wrap and return key appropriately
- format text using font, size, style (bold and italics), and color

#### ***Communication Tools (Publish)***

- enter text onto slide of presentation program
- enter graphics onto slides of presentation program
- view and stop presentation
- use basics of ComicLife program
- can create mind maps with text, symbols, links, pictures and color

#### ***Productivity Tools (Content Specific Software)***

- through pre-chosen websites – click on links, use back buttons. (Internet)
- manipulate shapes, create and solve puzzles, use glue, zoom and erase tools (Shapes, Halves, Symmetry)

#### ***Social, Ethical and Human Issues (Impact of Technology)***

- practice responsible use of equipment and software
- demonstrate positive social and ethical behaviors when using technology
- understand that accounts are private and that they may not log into another student's account

## Educational Computer Technology Grade Three

By the end of Grade Three students will:

### ***Basic Operations and Concepts (Foundational Skills)***

- manipulate windows – maximize, minimize, close, move, resize
- delete files by placing them in the trash
- use correct vocabulary for the operating system – hard drive, cursor, command, hardware, software

### ***Basic Operations and Concepts (Keyboarding Skills)***

- learn proper keyboarding technique (correct fingers on keys)

### ***Productivity Tools (Graphics)***

- fill objects with color, texture, gradient
- select object parts and group together. Use ungroup to separate into individual parts
- choose appropriate commands to layer objects as needed: e.g. move/send backward, etc.
- rotate objects
- browse, search and insert clipart within a program
- use painting tools as appropriate to create a picture. Tools: selection, lasso, magic wand, paint brush, pencil, paint bucket, spray can, eraser
- know the difference between painting and drawing programs and can choose when it is appropriate to use the painting tools and when to use the drawing tools
- understand that a painting created in a painting program is similar to a physical painting
- understand that many graphics are made up of individual parts which can be grouped together or ungrouped to take apart

### ***Productivity Tools (Data)***

- modify a bar graph by changing data, modify format of bar graph by changing chart options

### ***Productivity Tools (Text)***

- use cut/copy/paste to edit text
- use alignment buttons to left, right and center justify text
- use spell check
- use zoom controls to view window for previewing and other as needed
- insert clipart from within a word processing program and manipulate art as needed

### ***Productivity Tools (Content Specific Software)***

- manipulate tetrominoes

Red – Knowledge

Orange – Concepts

Blue – Skills

Green - Attitudes

- create maps

***Research Tools (Find Information)***

- click to follow hyperlinks on the Internet
- use the back button to return through Internet pages
- use the home button to return to the homepage
- understand that not everything on the Internet is true

***Communication Tools (Publish)***

- use a presentation program to create an animation
- use a pre-made PowerPoint as an assessment tool
- use basics of ComicLife program to create and edit maps
- use basics of timeline program to create simple timelines
- create mind maps with symbols, links, text, pictures, color and size

***Social, Ethical and Human Issues (Impact of Technology)***

- start to troubleshoot their own questions and correct their own errors using skills taught in class
- start to appreciate the diverse powers of the computer

## Educational Computer Technology Grade Four

By the end of Grade Four students will:

### ***Basic Operations and Concepts (Foundational Skills)***

- set page orientation for desired printing
- use Select All command to select all text or objects in a document or folder
- navigate to a specific destination (such as network folder) to save a document and name the document appropriately
- navigate to a specific location to open a previously saved file
- use the simple Find command to find the location of a file by name
- use correct vocabulary for the operating system – filesaver, clipboard, finder

### ***Basic Operations and Concepts (Keyboarding Skills)***

- use proper keyboarding technique (correct fingers on keys) when entering text information

### ***Productivity Tools (Graphics)***

- change layout of clipart/graphic – wrap text, in front of text, behind text
- find images from within a program (online) and download to local computer
- find clipart/graphics from Internet
- copy online image and paste into document, save image to local computer

### ***Productivity Tools (Data)***

- browse an existing database to understand fields and records
- insert a simple graph into a word processing document
- use basics of TinkerPlots program to set up simple graphs and analyze data

### ***Productivity Tools (Text)***

- set line spacing as needed
- use electronic dictionary and thesaurus
- place page border around text
- view necessary toolbars and palettes

### ***Productivity Tools (Audio)***

- create audio files from within programs. e.g. GarageBand, PowerPoint

### ***Productivity Tools (Video)***

- use basics of iMovie – titles, transitions and clipping footage
- in groups use camcorder to film video
- storyboard a video project

### ***Research Tools (Find Information)***

Red – Knowledge

Orange – Concepts

Blue – Skills

Green - Attitudes

- enter a URL in the address bar of a browser
- use refresh button when Internet is stalled
- can find images on the Internet

***Research Tools (Evaluate/Use Information)***

- use information appropriately, not plagiarizing
- understand that the Internet is continually changing and this may affect information

***Communication Tools (Publish)***

- choose type of slide, background of slide, insert new slide and move between slides
- create mind maps
- create picture/text reports with ComicLife, using pictures from the Internet
- use basics of GarageBand – create audio, add pictures from Internet and sync
- show creativity in a presentation

***Social, Ethical and Human Issues (Impact of Technology)***

- work collaboratively and cooperatively with peers and others when using technology
- start to understand that computers are used in many aspects of their life even if they don't see the computer being used

## Educational Computer Technology Grade Five

By the end of Grade Five students will:

### ***Basic Operations and Concepts (Foundational Skills)***

- understand the folder hierarchy of the computer
- organize their personal folder by creating new folders, naming them appropriately and placing documents into the folders
- use Apple-Tab to switch between open programs
- open an application from the applications folder on the hard drive
- use shift key and command key to select multiple objects
- cut, copy and paste objects and text
- place files onto a network server for group use
- retrieve files from a network server
- are able to choose the appropriate software program for presentation of information (Word, PPT, Excel, TinkerPlots, GarageBand, iMovie, Inspiration, AW Databases, AW Painting/Draw)
- understand that some software programs will do similar functions

### ***Basic Operations and Concepts (Keyboarding Skills)***

- use proper keyboarding skills, typing at least 15 wpm with accuracy of at least 75% when entering text

### ***Productivity Tools (Graphics)***

- scale objects by percent.
- use a timeline program to create a timeline

### ***Productivity Tools (Photos)***

- use a digital camera to take photos, use zoom feature

### ***Productivity Tools (Data)***

- use an existing database to understand concepts of finding data, sorting data, field definitions
- use a spreadsheet and edit data for accuracy, do simple formatting of data for ease of reading

### ***Productivity Tools (Text)***

- use track changes to show edits
- use grammar check
- insert pictures from internet or other sources

### ***Productivity Tools (Audio)***

- create audio files using a digital voice recorder
- create and edit audio files from within programs. e.g. GarageBand, PowerPoint

Red – Knowledge

Orange – Concepts

Blue – Skills

Green - Attitudes

***Productivity Tools (Video)***

- continue video editing – titles, transitions, clipping footage, music, audio, video effects

***Research Tools (Find Information)***

- understand parts of a URL
- understand what a search engine does and can list 3 search engines
- enter keywords into a search engine and refine keywords as necessary

***Research Tools (Evaluate/Use Information)***

- cite digital sources of information in a presentation or report

***Communication Tools (Publish)***

- continue use of GarageBand – create audio, add pictures, add music/sounds – sync all
- continue use of PowerPoint – know the rule of 6, presentation rules, layout fundamentals of color, font size
- continue use of Inspiration – individually setting up colors, shapes, font sizes to represent different levels/topics

***Social, Ethical and Human Issues (Impact of Technology)***

- discuss common uses of technology and advantages/disadvantages those uses cause
- discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use