# Integrated Technology Curriculum

**BASED ON I.S.T.E. STANDARDS**

## Technology Department

### Benchmarks

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<th>Skill</th>
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<td>AI.</td>
<td>September/October</td>
<td>A. Basic Computer Operations &amp; Concepts:</td>
<td>Students will learn &amp; be able to…</td>
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<td>II.</td>
<td>To be taught by Computer Teacher and reinforced by Classroom Teacher and Media Specialist.</td>
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### A. Basic Computer Operations & Concepts:

**Students will learn & be able to…**

I. Identify basic computer hardware: tower, printer, webcam, disk drives, monitor & keyboard

II. Turn computer on and off properly: shut down, log in and log out

III. Use a mouse: roller, right & left clicks, trackpad, cursor, scrolling & drop-down menus

IV. Open & Close computer programs: quit applications

V. Use basic computer vocabulary: P.C., Mac, Icon, Dock, Desktop, Laptop

VI. Identify basic computer functions as it represents a tool for learning

VII. Insert & remove disks, CDs, DVDs & Flash drives

VIII. Use Save & Save As commands, including choosing location

IX. Print to selected printers (network)

X. Demonstrate proper handling of Disks, CDs, DVDs & Flash drives

XI. Toggle between two or more open applications: using F9 & function F_

XII. Identify basic digital equipment: cameras, video cameras scanners, etc.

XIII. Understand file attributes: file extensions (.doc, .pdf, .mov), size & location

XIV. Understand Operating System basics: Mac OS and Windows

XV. Understand directory folder structure

XVI. Understand advanced hardware components: Ports, Universal Serial Bus (USB)

XVII. Understand basic network concepts: intranet, internet

### A. Basic Computer Operations & Concepts:

**Students will learn & be able to…**

I. Have the students point to and name each piece of equipment (O), Complete a matching worksheet (W)

II. Observe during use (O)

III. Observe during use (O)

IV. Observe during use (O)

V. Vocabulary Quiz (O, W)

VI. Observe during use (O)

VII. Observe during use (O)

VIII. Observe during use (O)

IX. Observe during use (O)

X. Observe during use (O)

XI. Observe during use (O)

XII. Observe during use (O), Matching Worksheet (W), Webquest (OLA)

XIII. Observe during use (O), Vocabulary Quiz (W)

XIV. Venn Diagram Comparing Mac OS & PC (W)

XV. Create web in inspiration/kidspiration

XVI. Observe during use (O), Matching Worksheet (W), Webquest (OLA)

XVII. Design intra- and Internet in Inspiration or Kidspiration Software (PB), (OLA)

### B. Digital Citizenship & Internet Safety

**A. I-XIV-Standard 6

XV, XVII-Standard 1

V. Worksheet

XIII. & XV. Kidspiration Inspiration/ Tux

XII. Interactive Lesson: What is the Internet?**
B. Digital Citizenship & Internet Safety
Students will learn & be able to...

I. Demonstrate appropriate use of computers (refer to AUP policy for details)
II. Demonstrate appropriate computer etiquette (refer to AUP policy for details)
III. Respect the privacy of all users
IV. Understand copyright laws
V. Appropriately cite resources & materials
VI. Use appropriate judgment upon entering websites
VII. Understand software licensing
VIII. Understanding appropriate school speech extends to electronic publications & communication

C. Technology Productivity Tools
(Keyboarding)
Students will learn and be able to...

I. Become familiar with common keyboard keys
II. Use alpha keyboard keys
III. Use special keys: Enter, Spacebar, Caps Lock, Shift Keys & Tab
IV. Use special keys: arrows, delete, backspace, escape, num lock, numeric pad
V. Use left/right hand zones & basic home row finger placement
VI. Use efficient typing techniques with efficiency & accuracy without looking at the keyboard
D. (Publishing Software: iWorks Pages, Microsoft Office Word, Publisher & Works)
Students will learn & be able to...
I. Use a word processing or publishing software in real world context
II. Open, view, name save, save as, close and reopen files
III. Print document, use print preview, designate # of printouts and select printer
IV. Perform basic formatting tasks including font style, color, bold, italic, underline, alignment & tab
V. Use delete and Backspace appropriately
VI. Insert Graphics
VII. Rename, move and organize files in folders
VIII. Select and unselect text & graphics
IX. Use embedded tools: spell check, grammar check, & thesaurus
X. Cut, copy, paste text and graphics within a document
XI. Use page set-up options: paper size & orientation
XII. Compose and edit a document with appropriate formatting
XIII. Use formatting functions and numbering, indents, page breaks margins and columns
XIV. Use borders/drawing tools/graphics
XV. Use color to fill or outline
XVI. Use text boxes
XVII. Arrange objects on the layout
XVIII. Use graphics to enhance the layout
XIX. Use text special effects such as WORD ART
XX. Group objects together
XXI. Layer objects
XXII. Insert border
XXIII. Use column guides
XXIV. Create a background
XXV. Rotate Objects
XXVI. Design appropriate, content relevant & esthetically pleasing layouts

Kidspiration
Inspiration
www.tuxpaint.org
www.atomiclearning.com
www.internet4classrooms.com
www.apple.com/ilife/tutorials
http://office.microsoft.com
http://www.easybib.com
http://support.apple.com/manuals/#iwork
http://office.microsoft.com
<table>
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<th>E: February/March</th>
<th>To be taught by Computer Teacher and reinforced by Classroom Teacher and Media Specialist.</th>
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<tr>
<td>E: Spreadsheet &amp; Database Applications (iWorks Numbers, Microsoft Office Excel &amp; Access)</td>
<td>Students will learn &amp; be able to...</td>
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<tr>
<td>E: O, OLA &amp; PB</td>
<td>View, discuss, analyze and create:</td>
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<tr>
<td>E: I-XXVIII Standards 1,2,3,4,5,6</td>
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| I. Identify Intended and appropriate use | O: | 
| II. Create simple spreadsheets, tables, and graphs with rows and columns | L: | 
| III. Explain the rationale for choosing charts, tables or graphs to best represent data | P: | 
| IV. Determine and create appropriate types of graphs to best represent data | M: | 
| V. Label & organize data | A: | 
| VI. Input values & labels on spreadsheets, tables, and graphs. | 
| VII. Change size of cell, font attributes, & align cell contents | 
| VIII. Open & save spreadsheets, tables, and graphs. file and exit an application | 
| IX. Input data in a cell & move data from cell to cell | 
| X. Select and edit data, cut, copy, paste within cells | 
| XI. Insert and delete columns and rows | 
| XII. Perform simple calculations within a spreadsheets, tables, and graphs. | 
| XIII. Sort data, manipulate print attributes, remove and add gridlines | 
| XIV. Import and Export graphs | 
| XV. Use spreadsheets, tables, and graphs. to explore various formulas/functions and relationships | 
| XVI. Access information from simple electronic database | 
| XVII. Create a personal database, save and print | 
| XVIII. Name fields | 
| XIX. Set field attributes | 
| XX. Enter and edit data | 
| XXI. Create a database using student-collected data and generate a document to display the information | 
| XXII. Customize a database | 
| XXIII. Sort data | 
| XXIV. Search for specific data by field | 
| XXV. Create and print reports | 
| XXVI. Add and delete records to existing files | 
| XXVII. Add and delete fields to a record | 
| XVIII. Communicate and access information using a database | 

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**F: Basic Internet Skills**

**Students will learn and be able to...**

1. Access the Internet in a browser
2. Use tool bar in browser
3. Refer to and utilize AUP guidelines
4. Enter and address to locate information
5. Identify and use search engines properly
6. Add Sites to the favorites or bookmark folders
7. Create, name and organize folders and sites in favorites and bookmarks

**G: Technology Problem-Solving, Research & Decision-Making Skills**

**Students will learn and be able to...**

1. Apply digital tools to gather, evaluate & use information
2. Plan strategies to guide inquiry
3. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
4. Locate information on a subject using online databases
5. Search the internet by utilizing search engines: keywords, concepts, & subject headings
6. Boolean Search (And, or & not)
7. Determine the reliability of information found on an internet site
8. Demonstrate information organization skills: cut, copy, paste, and downloading features to take notes from Internet sites on information in various subjects
9. Differentiate among fact, opinion, propaganda, point of view & bias of an Internet site
10. Utilize multiple search engines to locate information for research
11. Demonstrate information analysis skills by comparing two or more sources and identifying trends in data

**F: O, OLA & PB**

- Webquest
- Basic Internet Research
- Web-based Scavenger Hunt
- Navigate to a directed site

**G: O, W, OLA, PB**

Have the students demonstrate the limiting factors in a search; i.e. All boys stand up, but not those wearing red on sit down.

- Directed content search
- Comparing results from multiple search engines
- Advanced searches within a variety of search engines including meta-search engines
- Online or worksheet driven webquest
- Reading comprehension worksheet comparing facts and opinions

**F:**

- [www.allaboutexplorers.com](http://www.allaboutexplorers.com)
- [This is a fake site to help teach internet validity.](http://www.zlearn.ca/evaluating/div.netsearch.html)
- [www.tammypayton.net/courses/print/evalwebz.html](http://www.tammypayton.net/courses/print/evalwebz.html)
- [www.philb.com/fakesites.htm](http://www.philb.com/fakesites.htm)

**G:**

- [Big 6 – for older students](http://www.big6.com)
- [Super 3 – for younger students](http://www.super3.com)

**F:**

- I-VII Standards 1,2,3,4,5,6
II. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems

H: Digital Literacy:  
Presentation- PowerPoint/Keynote/Other  
Audio- GarageBand/Audacity/Other  
Visual- iPhoto/iMovie/MovieMaker/ComicLife/Other  
Web- iWeb/Frontpage/Other
Students will learn and be able to...
I. View and discuss a variety of examples of using multi-media to acquire and communicate information
II. Plan, storyboard, and create a multi-media project
III. Collaborate with team to create video, using class and online recourse
IV. Discuss media literacy and uses of media in real-life situations
V. Use different features of a digital video camera and/or digital camera
VI. Create a sequential slide show and/or presentation (linear)
VII. Create original art to include in digital project
VIII. Compare and contrast sequential (linear) and interactive (non-linear) multi-media projects
IX. Create a interactive slideshow and/or presentation
X. Record and edit audio and video files (sound, still photographs, movies & animation)

O, OLA & PB
• Podcasts
• eBooks
• PowerPoint Presentations
• News Broadcast
• P.S.A.
• Websites
• Content Driven Website
• Comic Strips
• Storyboards
• iSight camera
• iMovies
• Documentaries
• Commercials
• Walking Tours
• Video iPod Use
• Animation

H:
http://www.adobe.com/education/digkids/lessons/
http://my-ecoach.com/elibrary/
http://www.edutopia.org/
http://powermediaplus.com
www.thinkfinity.org
http://www.thirteen.org/edonline/lessons/storyboarding/
http://school.discoveryeducation.com/schrockguide/gadgets.html

H: 1-X Standards 1,2,3,4,5,6