

Program of Studies Curriculum Map
Bourbon County Schools

Level: Elementary

Updated: July 2007

(Adapted from Fayette County Public Schools)

Bold & () = Assessed

Italics = Supporting

e.g. = Example only

Technology Curriculum Framework - Grade 1

Big Idea: Information, Communication and Productivity

Students demonstrate a sound understanding of the nature and operations of technology systems. Students use technology to learn, to communicate, to increase productivity and become competent users of technology. Students manage and create effective oral, written and multimedia communication in a variety of forms and contexts.

Primary Academic Expectations

- 1.11** Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.
- 1.16** Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.
- 3.3** Students demonstrate the ability to be adaptable and flexible through appropriate tasks or projects.
- 6.1** Students connect knowledge and experiences from different subject areas.
- 6.3** Students expand their understanding of existing knowledge by making connections with new knowledge, skills and experiences.

Primary Enduring Knowledge – Understandings

- Students will understand that*
- T-P-ICP-U-1 technology is used in all content areas to support directed and independent learning.
 - T-P-ICP-U-2 appropriate terminology, computer operations and applications assist in gaining confidence in the use of technology.
 - T-P-ICP-U-3 technology requires proper care and maintenance to be used effectively.
 - T-P-ICP-U-4 technology is used to communicate in a variety of ways.

Skills and Concepts – Information

Program of Studies	Grade 1	Grade 1	Grade 1
Primary Students will:	Students will:	Vocabulary:	Activities/Resource Location:
<ul style="list-style-type: none"> • T-P-ICP-S-I1 investigate different technology devices and systems (e.g., computer processor unit, monitor, keyboard, disk drive, printer, mouse, digital cameras, interactive white boards) 	<ul style="list-style-type: none"> • identify basic components of a computer and peripheral devices and explain their function • open, close, and use developmentally appropriate applications • use the mouse to click, double click, drag 	<ul style="list-style-type: none"> • arrow • CD-drive • close • computer • CPU • desktop • digital camera 	

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Big Idea: Information, Communication and Productivity

		<ul style="list-style-type: none">• disk drive• double click• Enter/Return• hand• I-beam• interactive pad• interactive white board• laptop• maximize• minimize• monitor• mouse• open• pointers• printer• scroll• tablet• touchpad• window	
<ul style="list-style-type: none">• T-P-ICP-S-I2 use and care for technology (e.g., computers, cell phones, digital cameras, scanners, multimedia) at home, school and community	<ul style="list-style-type: none">• properly start, log on, log off, and shut down a computer or other device• explain why passwords are secret and how they appear on the screen when typed• use safety features associated with each device (e.g., digital camera neck or wrist strap)• explain how taking care of your equipment helps it to run better and	<ul style="list-style-type: none">• digital camera• hardware• lens cap• log off• log on• multimedia• password• power button• scanner• shut down	

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Big Idea: Information, Communication and Productivity

	<ul style="list-style-type: none"> last longer practice proper care of equipment (e.g., keep food, drinks, and magnets away from equipment, clean hands, not writing on equipment) use a variety of technology including computers, digital cameras, scanners, and multimedia devices 	<ul style="list-style-type: none"> software strap username 	
	<ul style="list-style-type: none"> use a variety of multimedia and technology resources for directed and independent activities to support learning (e.g., Earobics, SuccessMaker, Headsprout, interactive books, elementary multimedia encyclopedias, EncycloMedia videos) 	Vocabulary is product specific.	
<ul style="list-style-type: none"> T-P-ICP-S-I3 use appropriate technology terms (e.g., hardware, software, CD, hard drive) 	<ul style="list-style-type: none"> communicate accurately about technology using developmentally appropriate terminology demonstrate confidence by beginning to use the technology terms in the Grade 1 Vocabulary column 		
<ul style="list-style-type: none"> T-P-ICP-S-I4 demonstrate proper keyboarding techniques, optimal posture and correct hand placement (e.g., left hand for left side keys and right hand for right side keys, special keys such as space bar, enter/return, backspace, shift, delete) 	<ul style="list-style-type: none"> display proper body position when keyboarding use the left hand for left keys and the right hand for right keys begin to use both hands for keyboarding demonstrate the use of appropriate keys for the job needed (e.g., use shift to capitalize, space only once) 	<ul style="list-style-type: none"> arrow keys Backspace Caps Lock Delete Enter Escape (Esc) left 	

Technology Curriculum Framework - Grade 1

Big Idea: Information, Communication and Productivity

	<p>between words and after commas and periods)</p>	<ul style="list-style-type: none"> • Num Lock • number pad • right • Shift • spacebar • Tab 	
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Primary Skills and Concepts – Communication

<p>Program of Studies Primary Students will:</p>	<p>Grade 1 Students will:</p>	<p>Grade 1 Vocabulary:</p>	<p>Grade 1 Activities/Resource Location:</p>
<ul style="list-style-type: none"> • T-P-ICP-S-C1 use technology to communicate in a variety of modes (e.g., recordings, speech to text, print, media) 	<ul style="list-style-type: none"> • share and exchange information with support from teachers, family members, or student partners (e.g., talking books, digital storytelling, morning news program, text to speech software) • design, create, and participate in class projects which will be published or monitored on the web by the teacher • use templates to present written communication • observe and use various software productivity tools 		
<ul style="list-style-type: none"> • T-P-ICP-S-C2 participate in group projects and learning activities using technology communications 	<ul style="list-style-type: none"> • actively participate in group projects and learning activities using technology communications (e.g., Monster Exchange, Flat Stanley, Global SchoolNet Foundation, morning news program, forums, Backpack Buddies, class email, Square of Life) • compare email to a friendly letter 		

Technology Curriculum Framework - Grade 1

Big Idea: Information, Communication and Productivity

Primary Skills and Concepts – Productivity

Program of Studies Primary Students will:	Grade 1 Students will:	Grade 1 Vocabulary:	Grade 1 Activities/Resource Location:
<ul style="list-style-type: none"> T-P-ICP-S-P1 explain how information can be published and presented in different formats 	<ul style="list-style-type: none"> begin to understand the different productivity software available to them begin to understand and explain the difference between word processors, spreadsheets, databases, and presentation software determine as a class which software tool is appropriate for a project 		
<ul style="list-style-type: none"> T-P-ICP-S-P2 create a variety of products using technology devices and systems to support authentic learning 	<ul style="list-style-type: none"> explore finished products that have been electronically created (e.g., graphs, charts, signs, banners, cards, portfolio piece) participate in developing a plan for a class project that includes selecting software with appropriate capabilities begin to use proofreading and electronic editing skills (e.g., backspacing, moving cursor to insert words or letters, spellcheck) print and save products to identified locations identify and use developmentally appropriate menus, toolbars, and features within various software 	<ul style="list-style-type: none"> backspace bold center close copy cut desktop document drag dropdown edit file font format highlight insert italic left align 	

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Big Idea: Information, Communication and Productivity

		<ul style="list-style-type: none"> • menu • new • open • paste • print • right align • save • spellcheck • table • text • toolbar • tools • underline • undo • view • window • word wrap • zoom 	
	<ul style="list-style-type: none"> • begin to use electronic graphic organizers to assist in idea development and/or to demonstrate content knowledge 	<ul style="list-style-type: none"> • graphic organizer • KWL Chart • T-chart • Venn Diagram 	
	<ul style="list-style-type: none"> • begin to use word processors throughout the writing process 		
	<ul style="list-style-type: none"> • begin to use spreadsheets to organize data as a class • create simple electronic graphs to display data • begin to use class created spreadsheets to create electronic 	<ul style="list-style-type: none"> • cell • cell address • column • row • sort 	<ul style="list-style-type: none"> • calendar activity

Technology Curriculum Framework - Grade 1

Big Idea: Information, Communication and Productivity

	graphs to explore patterns and make predictions		
	<ul style="list-style-type: none">• identify and begin to use multimedia tools to combine text and graphics as a class/group assignment• edit an existing linear/sequential multimedia story to include student narration as a class/group activity• identify and discuss issues regarding, appropriateness and accuracy of information and images to consider in selection and use of materials for a multimedia class/group projects	<ul style="list-style-type: none">• headphone• images• linear• microphone• multimedia• narrate• sequential order• audio clips• storyboard• video clips	<ul style="list-style-type: none">• Photo Story• PowerPoint• Windows MovieMaker

Technology Curriculum Framework - Grade 1

Big Idea: Safety and Ethical/Social Issues

Students understand safe and ethical/social issues related to technology. Students practice and engage in safe, responsible and ethical use of technology. Students develop positive attitudes toward technology use that supports lifelong learning, collaboration, personal pursuits and productivity.

Primary Academic Expectations

- 2.17 Students interact effectively and work cooperatively with the many ethnic and cultural groups of our nation and world.
- 3.6 Students demonstrate the ability to make decisions based on ethical values.
- 4.3 Students individually demonstrate consistent, responsive and caring behavior.
- 4.4 Students demonstrate the ability to accept the rights and responsibilities for self and others.
- 4.5 Students demonstrate an understanding of, appreciation for, and sensitivity to a multi-cultural and world view.

Primary Enduring Knowledge – Understandings

Students will understand that

- T-P-SESI-U-1 responsible and ethical use of technology is necessary to ensure safety.
- T-P-SESI-U-2 technology enhances collaboration to contribute to a learning community.
- T-P-SESI-U-3 acceptable technology etiquette is essential to respectful social interactions and good citizenship.
- T-P-SESI-U-4 technology is used in jobs and careers to support the needs of the community.
- T-P-SESI-U-5 assistive technology supports learning to ensure equitable access to a productive life.

Skills and Concepts – Safety

Program of Studies Primary Students will:	Grade 1 Students will:	Grade 1 Vocabulary:	Grade 1 Activities/Resource Location:
<ul style="list-style-type: none"> • T-P-SESI-S-S1 explain the importance of safe Internet use (e.g., iSafe skills) 	<ul style="list-style-type: none"> • compare the physical community (where we live) to the cyber community/Internet • explain that rules help keep citizens safe in their communities • identify examples of appropriate websites as a class • compare rules in the physical community and in cyber community that concern communication with strangers • discuss how a stranger can pretend to be a friend in cyberspace • identify the characteristics of 	<ul style="list-style-type: none"> • community • cyber community • cyber citizen • cyberspace • Internet • personal information • stranger • websites 	

Technology Curriculum Framework - Grade 1

Big Idea: Safety and Ethical/Social Issues

	<p>personal information</p> <ul style="list-style-type: none"> • discuss the danger of giving out personal information in Cyberspace 		
<ul style="list-style-type: none"> • T-P-SESI-S-S2 use safe behavior when using technology 	<ul style="list-style-type: none"> • describe what to do when an unintended website is entered • explain what to do in an uncomfortable online situation • discuss and follow the five Safety Tips published by the FBI for protecting oneself online 	<ul style="list-style-type: none"> • uncomfortable 	<p>FBI Safety Tips (from iSafe)</p> <ul style="list-style-type: none"> • Never give out personal information such as your name, home address, school name, telephone number or your picture on the Internet without your parent’s permission. • Never write to someone on the Internet who has made you feel uncomfortable or scared. • Do not meet someone or have them visit you without the permission of your parents. • Tell your parents right away if you read anything on the Internet that makes you feel uncomfortable. • Remember that people online may not be who they say they are. <p>Sample activity: Illustrate, label, and explain at least one tip.</p>

Skills and Concepts – Ethical Issues

<p>Program of Studies Primary Students will:</p>	<p>Grade 1 Students will:</p>	<p>Grade 1 Vocabulary:</p>	<p>Grade 1 Activities/Resource Location:</p>
<ul style="list-style-type: none"> • T-P-SESI-S-E1 use responsible 	<ul style="list-style-type: none"> • begin to discuss that what you do 	<ul style="list-style-type: none"> • accuracy 	

Technology Curriculum Framework - Grade 1

Big Idea: Safety and Ethical/Social Issues

<p>and ethical behavior in using technology</p>	<p>on a network affects other users</p> <ul style="list-style-type: none"> begin to discuss the importance of giving credit to others for their work discuss individual's rights of ownership of created works including computer-generated work begin to identify and discuss issues regarding selection and use of materials for multimedia projects (e.g., personal information of the student and others, images, appropriateness and accuracy of information) 	<ul style="list-style-type: none"> network ownership 	
<ul style="list-style-type: none"> T-P-SESI-S-E2 adhere to the Acceptable Use Policy (AUP) as well as other state and federal laws 	<ul style="list-style-type: none"> begin to discuss the privileges and consequences of an Acceptable Use Policy (AUP) discuss what a computer virus is and how it can harm a computer begin to discuss techniques to avoid computer virus infection 	<ul style="list-style-type: none"> AUP consequences privileges virus 	<ul style="list-style-type: none"> compare the effects of a person catching a virus to the effects of a computer catching a virus don't open email without permission

Skills and Concepts – Social Issues

<p>Program of Studies Primary Students will:</p>	<p>Grade 1 Students will:</p>	<p>Grade 1 Vocabulary:</p>	<p>Grade 1 Activities/Resource Location:</p>
<ul style="list-style-type: none"> T-P-SESI-S-SI1 work cooperatively with peers, family members and others when using technology 	<ul style="list-style-type: none"> discuss the importance of being a good classmate when using technology begin to respect other people's point of view and ideas when completing a class project share available technology resources 	<ul style="list-style-type: none"> cooperate peers responsible 	
<ul style="list-style-type: none"> T-P-SESI-S-SI2 collaborate with peers, family members and others 	<ul style="list-style-type: none"> work with others as a team to complete a task when using 		

Technology Curriculum Framework - Grade 1

Big Idea: Safety and Ethical/Social Issues

when using technology	technology		
<ul style="list-style-type: none">• T-P-SESI-S-SI3 explain how technology is used in jobs and careers	<ul style="list-style-type: none">• discuss the various types of technology used in careers (e.g., bar code scanners, handhelds, mobile phones, GPS's)• discuss as a class types of assistive technology used to help others	<ul style="list-style-type: none">• assistive technology• career	
<ul style="list-style-type: none">• T-P-SESI-S-SI4 describe how assistive technology supports learning			

Technology Curriculum Framework - Grade 1

Big Idea: Research, Inquiry/Problem-Solving and Innovation

Students understand the role of technology in research and experimentation. Students engage technology in developing solutions for solving problems in the real world. Students will use technology for original creation and innovation.

Primary Academic Expectations

- 1.1 Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.
- 2.3 Students identify and analyze systems and the ways their components work together or affect each other.
- 5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.
- 5.2 Students use creative thinking skills to develop or invent novel, constructive ideas or products.
- 5.4 Students use a decision-making process to make informed decisions among options.
- 5.5 Students use problem-solving processes to develop solutions to relatively complex problems.
- 6.1 Students connect knowledge and experiences from different subject areas.

Primary Enduring Knowledge – Understandings

Students will understand that

- T-P-RIPSI-U-1 technology assists in gathering, organizing and evaluating information from a variety of sources to answer an essential question.
- T-P-RIPSI-U-2 technology is used to analyze real world data and support critical thinking skills through inquiry/problem-solving in order to produce results and make informed decisions.

Skills and Concepts – Research

Program of Studies Primary Students will:	Grade 1 Students will:	Grade 1 Vocabulary:	Grade 1 Activities/Resource Location:
<ul style="list-style-type: none"> • T-P-RIPSI-S-R1 use teacher-directed Internet sources as a resource for information 	<ul style="list-style-type: none"> • identify and discuss the Internet as a source of information at school, home, and at the public library • discuss when an Internet search may be effective as a class • begin to scan for information within an Internet document • begin to make a distinction between fact and opinion as a class • begin to explore Internet resources and information using teacher 	<ul style="list-style-type: none"> • bookmark • browser • fact • favorites • index web page • Internet • navigate • online • opinion • resources 	<ul style="list-style-type: none"> • EduHound • KidsClick • KYVL • community helpers

Technology Curriculum Framework - Grade 1

Big Idea: Research, Inquiry/Problem-Solving and Innovation

	<ul style="list-style-type: none"> created bookmarks/favorites • use hyperlinks by single clicking on the link • begin to use keywords to broaden and narrow searches as a class activity • begin to use index web pages to locate websites preselected by the teacher • begin to navigate the World Wide Web • begin to use teacher-selected Internet resources to locate, discuss, and compare information within content areas as a class/group 	<ul style="list-style-type: none"> • scan • site • web address • web page • web links • World Wide Web 	
<ul style="list-style-type: none"> • T-P-RIPSI-S-R2 use electronic resources to access and retrieve information 	<ul style="list-style-type: none"> • determine best resource for gaining information to answer an essential question as a class activity (e.g., electronic, print, people) • begin to use video and audio information • explain that an e-mail is a message written and read by using the computer • begin to use electronic mail (e-mail) to contact appropriate sources and receive information as a class • scan electronic resources for relevant information as a class activity • use prepared electronic databases as a class activity to conduct keyword searches to meet 	<ul style="list-style-type: none"> • databases • dictionary • electronic • electronic mail (e-mail) • interactive • keywords • OPAC • resource • scan • search • Web Collection Plus 	<ul style="list-style-type: none"> • OPAC • Web Collection Plus

Technology Curriculum Framework - Grade 1

Big Idea: Research, Inquiry/Problem-Solving and Innovation

	<p>information needs (e.g., automated circulation, OPAC, Web Collection Plus, CD-ROM encyclopedias, KYVL)</p> <ul style="list-style-type: none"> • use developmentally appropriate multimedia resources to support learning (e.g., interactive books, educational software, picture dictionary) 		
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Skills and Concepts – Inquiry/Problem-solving

Program of Studies Primary Students will:	Grade 1 Students will:	Grade 1 Vocabulary:	Grade 1 Activities/Resource Location:
<ul style="list-style-type: none"> • T-P-RIPSI-S-IP1 gather technology information/data and use for problem solving in all content areas 	<ul style="list-style-type: none"> • prepare a simple spreadsheet to organize data • use a graph as a class to make predictions • begin to use a prepared spreadsheet to create a graph as a class to produce results and make informed decisions to answer a real life question • begin to use technology resources for problem solving and illustration of thoughts as a class (e.g., puzzles, logical thinking programs, digital cameras, drawing tools) • begin to use teacher-created web activities for problem solving and critical thinking as a class (e.g., webquests, IMMEX) 	<ul style="list-style-type: none"> • bar graph • chart wizard • data • graph • legend • line graph • pictograph • pie graph • table • title • webquest 	<ul style="list-style-type: none"> • Graph Club • IMMEX • Excel
<ul style="list-style-type: none"> • T-P-RIPSI-S-IP2 describe at least one strategy for problem solving while using technology (e.g., 	<ul style="list-style-type: none"> • begin to use problem solving/simulation software as a class (e.g., Freddi Fish, Fizz & 	<ul style="list-style-type: none"> • simulation 	

Technology Curriculum Framework - Grade 1

Big Idea: Research, Inquiry/Problem-Solving and Innovation

inquiry/problem solving software, troubleshooting technology issues)	Martina series) <ul style="list-style-type: none"> begin to determine appropriate software and hardware to use in solving a real life problem as a class activity 		
	<ul style="list-style-type: none"> begin to know when and who to ask for help with technical difficulties 		

Skills and Concepts – Innovation

Program of Studies Primary Students will:	Grade 1 Students will:	Grade 1 Vocabulary:	Grade 1 Activities/Resource Location:
<ul style="list-style-type: none"> T-P-RIPSI-S-I1 use technology for original creations/innovation in classroom 	<ul style="list-style-type: none"> create original work using developmentally appropriate software (e.g., Paint, Word, KidPix) begin to modify an existing linear or sequential multimedia story to include student narration as a class/group activity 	<ul style="list-style-type: none"> narrate original 	<ul style="list-style-type: none"> Modify an existing editable United Streaming video
<ul style="list-style-type: none"> T-P-RIPSI-S-I2 express creativity both individually and collaboratively using technology 	<ul style="list-style-type: none"> begin to create multimedia projects individually or as a class activity using age appropriate software (e.g., KidPix, Microsoft Movie Maker) begin to express innovative and/or entrepreneurial ideas using technology as a tool (e.g., entreSchool, Lemonade Stand) 	<ul style="list-style-type: none"> entrepreneur entrepreneurial innovative 	<ul style="list-style-type: none"> Biography using Photo Story or Movie Maker KidPix

Technology Skills Checklist

Grade 1

By the end of first grade all students should be able to demonstrate the following skills within assignments in all content areas. **Completion of this checklist does not meet all of the requirements of the Program of Studies.** Please refer to Program of Studies for specifics.

General Computer Skills

- Mouse skills – click, double click, drag, scroll
- Name computer components
- Open, close, and use programs
- Start, log on, log off, & shut down computer
- Proper care and upkeep of equipment
- File basics – open, close, save, print
- Use appropriate terminology (see vocabulary)
- Follow on-screen directions

Keyboarding

- Use left hands for left keys and right hands for right keys
- Display proper body position

Word Processing

- Introduce formatting – font, size, word wrap
- Introduce editing – undo, backspace, moving cursor to insert

Graphical Representation

- Create simple graph (e.g., Graph Club, Create a Graph Website - <http://nces.ed.gov/nceskids/graphing/>)

Paint

- Change paint color
- Use the following tools: paint bucket (fill tool), brush, air brush, shape tools, eraser
- Projects should move beyond scribbles toward an actual creative product

Internet

- Follow hyperlinks (text or graphic)
- Use Back and Home buttons
- View video information (e.g., KET EncycloMedia)

Graphic Organizers (e.g., Kidspiration)

- Use a template or activity

E-Communications

- Use e-mail as a class

Safety/Ethical

- Acceptable Use Policy
- iSAFE skills
- Ethical use of material

This is the checklist for Kindergarten. Students should come to first grade with these skills.

General Computer Skills

- Mouse skills – click, double click, drag, scroll
- Name computer components
- Open, close, and use developmentally appropriate programs
- Start, log off, & shut down computer
- Proper care and upkeep of equipment
- File basics – open, close, save, print
- Use appropriate terminology (see vocabulary)
- Follow on-screen directions

Keyboarding

- Locate keys as needed
- Begin to use both hands for keyboarding
- Display proper body position

Word Processing

- Type a sentence with ending punctuation
- Introduce formatting – word wrap
- Introduce editing – undo, backspace

Graphical Representation

- Create simple graph as a class (e.g., Graph Club, Create a Graph Website - <http://nces.ed.gov/nceskids/graphing/>)

Paint

- Change paint color
- Use the following tools: paint bucket (fill tool), brush, air brush, shape tools, eraser

Internet

- Follow hyperlinks (text or graphic)
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Safety/Ethical

- Acceptable Use Policy
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