Curriculum Standards and Indicators

APPLIED TECHNOLOGY

Performance Indicator, Standards and Objectives

A. Understand the uses and limitations of technological tools for achieving personal and workplace needs.

  1. Select appropriate technology to produce desired results

      A101 Identify common tools, equipment, machines, and materials required for one's job

      A102 Identify common business machines (for example, fax, copy machine, computer)

      A103 Identify capabilities and limitations of technology resources

      A104 Discuss problems related to the increased use of technology

  2. Apply technology to accomplish workplace objectives

      A201 Demonstrate appropriate use of telecommunications systems

      A202 Utilize common software, including word processing, database management, spreadsheet, and presentation software to accomplish workplace objectives

      A203 Use technology to gather information, make decisions, and present results of investigations

  3. Prevent or solve technology problems

      A301 Demonstrate appropriate care of computers, software and other technologies

      A302 Practice responsible use of technology

      A303 Identify potential maintenance or use problems with computers or other technologies

Curriculum Standards and Indicators

Applied Technology – AT A1

Topic	Select Technology
Performance Indicator	A. Understand the uses and limitations of technological tools for achieving personal and workplace needs.
Standard	1. Select appropriate technology to produce desired results
SCANS	Information 8; Systems 18
Show-Me Standards	1.4; 1.10; 3.1; SC 8
Objectives	A101 Identify common tools, equipment, machines, and materials required for one's job A102 Identify common business machines (for example, fax, copy machine, computer) Identify capabilities and limitations of technology resources A103 Discuss problems related to the increased use of A104 technology
Sample Activities	Compare product information for several brands of a piece of technology equipment of your choice. Based on the information, choose which product to purchase. Explain your choice to the class, including your need for the product, benefits and disadvantages of each brand, and rationale for purchasing that particular product. Interview the manager or supervisor at your place of employment to determine what problems they encountered with adding technology at work. Describe the problems to the class, and what solutions were used to correct the problems. Make a list of business machines used at your workplace. Describe the purpose of the machine, and how it is used at the workplace. If appropriate, suggest upgraded technology to replace the current machine. Submit your list in writing to your teacher. Locate two articles addressing the problems with increased use of technology in the workplace. In a brief written report describe: 1) the problems stated in the article; 2) possible solutions to the problems; and 3) how the problems relate to your workplace.

Curriculum Standards and Indicators

Applied Technology – AT A2

Topic	Apply Technology
Performance Indicator	A. Understand the uses and limitations of technological tools for achieving personal and workplace needs.
Standard	2. Apply technology to accomplish workplace objectives
SCANS	Information 8; Systems 19; Basic Skills 8
Show-Me Standards	1.4; 1.8; 2.5; 2.7; CA 1
Objectives	A201 Demonstrate appropriate use of telecommunications systems A202 Utilize common software, including word processing, database management, spreadsheet, and presentation software to accomplish workplace objectives A203 Use technology to gather information, make decisions, and present results of investigations
Sample Activities	Ask your supervisor or manager about workplace policies for use of telecommunications equipment. Present your findings to the class. Discuss the common and different policies and the reasons for them. Use appropriate techniques for telephone, fax and email communication at your workplace. Use word processing software to design a form to collect customer satisfaction information for your workplace. Ask your supervisor or manager to review the form. Design a simple inventory system using a database management program for a personal item, such as books, CD's, t-shirts, etc. Include fields which will help you manage that inventory. Share your system with the class. Identify three ways a database is used at your place of employment. Describe these uses and benefits to the business in an oral or written presentation. Select the appropriate software and prepare a job description for publication. Prepare a visual presentation which highlights the students and employers in your class. Use a spreadsheet to manage the budget for a fund raising event. Project possible results using future scenarios related to the event. Prepare financial reports from the spreadsheet. Prepare a 30 second TV ad and accompanying newspaper ad for your place of business. Ask your supervisor to review the ads. Show the ads to the class and discuss opportunities for improvement. Set up a spreadsheet to record your hours of employment, total hours worked, wages earned, taxes withheld, and other data related to your wages earned at the workplace.

Curriculum Standards and Indicators

Applied Technology – AT A3

Topic	Solve Technology Problems
Performance Indicator	A. Understand the uses and limitations of technological tools for achieving personal and workplace needs.
Standard	3. Prevent or solve technology problems.
SCANS	Information 8; Systems 20; Personal Qualities 17
Show-Me Standards	1.10; 3.1; 3.8
Objectives	A301 Demonstrate appropriate care of computers, software and other technologies. A302 Practice responsible use of technology A303 Identify potential maintenance or use problems with computers or other technologies.
Sample Activities	Locate and read the product information brochure for a piece of technology at your workplace. Is the appropriate care being taken of the equipment? Do you have suggestions for improving the care of the equipment? Share your findings with your supervisor and class. Prepare written guidelines for using a piece of technology at your workplace or classroom. Share these guidelines with the class. List three problems that might arise from the improper care of a computer. In a class discussion, share your lists. Discuss the costs associated with those problems and how the problems could have been avoided. Interview your supervisor to find out how electronic files, programs, and operating systems are safeguarded at your workplace. Present your findings to the class.

Curriculum Standards and Indicators
APPLIED TECHNOLOGY RESOURCES

ActDen:
http://www.actden.com

American Library Association
http://www.ala.org

America's Learning Exchange
http://www.alx.org

Applying Advanced Word Processing Features and Techniques (Includes Lessons)
http://teachers.henrico.k12.va.us/CTE/BIT0304/AdvCIS/CISadvWP.html

Applying Spreadsheet Information (Lesson Plan)
http://www.uen.org/Lessonplan/preview.cgi?LPid=9104

Basic Spreadsheet Concepts
http://www.geekgirls.com/menu_spreadsheets.htm

Business Simulation Project
http://www.geocities.com/CollegePark/Quad/5687/cbp.html

Census Data
http://www.censusscope.org/

Comparing Prices of Dream Cars (Excel Spreadsheet Project)
http://www.successlink.org/gti/gti_lesson.asp?lid=2833

Computer Ethics
http://www.ethicsweb.ca/resources/computer/issues.html

Computer History
http://www.computerhope.com/history/index.htm

Computer Security and Privacy Issues (PowerPoint)
http://teachers.henrico.k12.va.us/CTE/BIT0304/AdvCIS/ComputerSecurityPrivacyIssues.ppt

Computer Technology – Create a Table (Lesson Plan)
http://www.uen.org/Lessonplan/preview.cgi?LPid=9266

Consumer Jungle
http://www.consumerjungle.org

Creating an Access Database
http://www.geekgirls.com/databasics_02.htm

CyberEthics: Featured Resources
http://www.cteresource.org/publications/featured/cyberethics/index.html

Database Dictionary
http://www.geekgirls.com/database_dictionary.htm#key%20field

Design a Mailing to Your Current Customers (using a database)
http://www.tensigma.org/pdf/l_n_e/lne_6_bcs/3066_scen.pdf

Don't Buy It (PBS Kids)
http://pbskids.org/dontbuyit/

E-Learning Guru
http://www.e-learningguru.com/

Electric Teacher
http://www.electricteacher.com/

ERIC/EECE Resource List
http://ericeece.org/pubs/reslist/compsw.html

Exploring Query Types
http://www.geekgirls.com/databasics_06.htm
http://www.geekgirls.com/databasics_07.htm

E-Z Instructions
http://www.ezinstructions.com/

Find the Word Processing Changes (Lesson Plan)
http://www.uen.org/Lessonplan/preview.cgi?LPid=4983

FindTutorials
http://tutorials.findtutorials.com/Digital Cameras
http://kodak.com/US/en/nav/takingPics.shtml

Fortune Magazine Online, Check Stock Prices
http://www.fortune.com

Free Excel file downloads
http://www.j-walk.com/ss/excel/files/general.htm (Master List of General Downloads)
http://www.j-walk.com/ss/excel/files/timesht.htm (Employee Timesheet)
http://www.j-walk.com/ss/excel/files/apptcal.htm (Appointment Calendar Maker)

FreeSkills
http://www.freeskills.com Freeskills.com provides hundreds of free online IT tutorials.

Games Economists Play
http://mcnet.marietta.edu/~delemeeg/games/{no computer needed}

Getting Information out
http://www.geekgirls.com/databasics_05.htm

Graphics Links
http://www.lttechno.com/links/graphic.html

Graphs Online: N.C.E.S.
http://nces.ed.gov/nceskids/

Home Improvement Toolbox
http://www.energystar.gov/homeimprovement

How Stuff Works: Computer Stuff
http://computer.howstuffworks.com

Inflation Calculator
http://www.westegg.com/inflation/

Information Technology Terminology
www.slais.ubc.ca/courses/libr500/00-01-wt2/computer.htm

International Society for Technology in Education (ISTE)
www.iste.org

Internet Resources for Teachers
http://ejw.i8.com/ Very comprehensive and easily displayed

Introduction to Spreadsheets
http://www.cs.indiana.edu/classes/a106-fulc/spreadsheet.intro.html

ITAA Workforce and Education
http://www.itaa.org/workforce

ITS Connection
http://www.itsconnection.com Created by Texas Information Technology Educators

Jones Telecommunications and Multimedia Encyclopedia
http://www.digitalcentury.com/encyclo/update/

Keyboarding Speed & Accuracy Program
http://www.typingmaster.com

KRBC 9 News: Does It Work?
http://www.krbctv.com/does_it_work.htm

Lemonade Stand Business (Spreadsheet, Internet, and PowerPoint Project)
http://www.teachers.net/lessons/posts/1542.html

Lesson on the Basics of Using a Computer
http://www.tensigma.org/pdf/l_n_e/lne_6_bcs/3022_pa.pdf

"Living Within Your Means" Webquest
http://www.angelfire.com/stars2/lifeskill/

Maintaining and Troubleshooting Systems
http://teachers.henrico.k12.va.us/CTE/BIT0304/AdvCIS/CISadvMT.html (Includes Lessons)

Manipulate a Spreadsheet to Determine Important Information
http://www.tensigma.org/pdf/l_n_e/lne_6_bcs/3082_assign.pdf

MarketingTeacher.com
http://www.marketingteacher.com/

Mary's MS Word Page
http://www.oops.bizland.com/maryswordideas.htm

Medicine and Madison Avenue
http://scriptorium.lib.duke.edu/mma/

Microsoft Education Instructional Resources
http://www.microsoft.com/education/Default.aspx

Microsoft in Education
http://www.microsoft.com/education/schools/default.

Microsoft Lesson Plans, Tutorials, Case Studies
http://www.microsoft.com/Education/LessonPlans.aspx

MS Office Links
http://www.oops.bizland.com/msofficelinks.htm

NetLingo
http://www.internet-trainer.com/glossary.htm

On-line Computer Applications tutorials
http://www.internet4classrooms.com/on-line.htm

Planning and Designing a Database
http://www.geekgirls.com/databasics_03.htm
http://www.geekgirls.com/databases_from_scratch_2.htm

Possess Basic Word Processing Skills (rubric)
http://www.tensigma.org/pdf/l_n_e/lne_6_bcs/3025_rubric.pdf

PowerPoint Tips and Tricks
http://www.greece.k12.ny.us/taylor/tips/ppt/

Preparing the Resume
http://trackstar.hprtec.org/main/display.php3?track_id=47550

Shop and Compare Hardware (How to Buy – Brands and Pricing)
http://eshop.msn.com/category.aspx?catId=255

Spreadsheets (Lesson Plan)
http://www.uen.org/Lessonplan/preview.cgi?LPid=9114

Spreadsheets in the Classroom
http://scrtec.org/track/tracks/f03050.html

Stock Market Basics:
http://www.tulsaworld.com/StockMktBasics/StockBasicspage9.asp

Streamlining Data Entry
http://www.geekgirls.com/databasics_04.htm

Table it or Spread it? (Word/Excel Lesson Plan)
http://www.successlink.org/gti/gti_lesson.asp?lid=3325

Tech Depot: Hardware and Software
http://techdepot.officedepot.com/search.asp?Operator=ALL&CONTEXT=SITE&Keyword=
computer+software&x=18&y=4?AffID=11334

Technology for Teachers (lots of Web links and lessons)
http://www.bhsu.edu/education/edfaculty/lturner/Technology_for_Teachers.htm#computer
skills

Technology Terminology Study Guide
www.caroline.k12.va.us/pages/term1.html

Technology Terminology
http://fc.fms.k12.nm.us/~rmilliken/terms.pdf

"The ABC's of Excel"
http://www.forsyth.k12.ga.us/kadkins/abc.htm

The Computer Museum
http://www.tcm.org

Troubleshooting Computers
http://www.barnettcomputerservices.com/troubleshooting/troubleshooting.htm

U.S. Department of Commerce
http://www.ta.doc.gov/Go4IT/

Using and Evaluating Web Sites
http://www.kn.sbc.com/wired/21stcent/sitemap.html#questioning

Using Spreadsheet Software as a Database and for Designing Forms (Lesson Plan)
http://www.successlink.org/gti/gti_lesson.asp?lid=3829

Wall Street Journal Career Section
http://careers.wsj.com

WebQuest for Search Activities
http://scrtec.org/track/tracks/f03468.html

Windows XP/2000: Getting Started
http://help.unc.edu/?id=167

Word Processing Basics: Proofreading (Lesson Plan)
http://www.uen.org/Lessonplan/preview.cgi?LPid=7649

Working Safely with Computers
http://www.rowett.ac.uk/compcode/safety.html