

COMPUTERS AND TECHNOLOGY - GRADE 8

DIOCESAN STRAND A: LITERACY AND ETHICAL IMPLICATIONS

NC COMPETENCY, Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.

VALUES AND ATTITUDES Understand that some data should not be accessed
Understand the need for security and methods for achieving privacy

Students will be able to:

OBJECTIVES	STRATEGIES	ASSESSMENT	RESOURCES
<p>A.1 Understand the need for education in technical skills throughout their lives from careers to personal tasks</p> <p>A.2 Describe how technology has changed and will continue to change people's lives (M)</p> <p>A.3 Recognize that software allows people to do different kinds of work (M)</p> <p>A.4 Identify the place of technology in every day life (M)</p> <p>A.5 Develop confidence in simple programming and compatibility of software to hardware i.e. VCR, telephone, calculator</p> <p>A.6 Understand what constitutes plagiarism (M)</p> <p>A.7 Demonstrate understanding of privacy and security for information</p> <p>A.8 Understand the differences between networked and standalone configuration</p> <p>A.9 Develop search strategies (M)</p> <p>A.10 Solve software problems (M)</p> <p>A.11 Develop a basic understanding of video conferencing, distance learning and LAN functioning</p> <p>A.12 Demonstrate proficiency in care of computers</p> <p>A.13 Use peripheral devices for additional function of a computer</p> <p>A.14 Understand and use vocabulary: caching connectors patch cables menu video conferencing ROM processing speed distance learning</p>	<p>Develop technical support team of students to assist in computer maintenance issues, web site searches, and home page development</p> <p>Use newspaper ads from local computer sources to understand processing speed, capacity, memory available and what is required for programs to run</p> <p>Ask parents who are involved in computer development, implementation or maintenance to be guest speakers or assist the Technology Support Team</p> <p>Use 8th Grade students as resource for future technology planning</p>	<p>Provide basic care for various types of equipment: change printer cartridge, connect a VCR, use a scanner</p> <p>Assess what hardware is compatible with software packages</p> <p>North Carolina Computer Technology Test</p>	<p>Cable in the Classroom: www.ciconline.org provides access to most stations participating in Cable in the Classroom Most offer videos to be copied free Web sites provide teaching ideas</p> <p>Internet: courses on use and safety online</p>

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DIOCESAN STRAND B: COMMUNICATION

NC COMPETENCY, Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies

VALUES AND ATTITUDES Gain an appreciation of the importance of human communication
 Understand that skill development requires time and practice
 Understand the necessity of saving their work at regular intervals
 Appreciate their ability to produce quality work

Students will be able to:

OBJECTIVES	STRATEGIES	ASSESSMENT	RESOURCES
<p>B.1 Master all word processing skills assessed on the North Carolina Computer Competency Test</p> <p>B.2 Know how to create, save, open edit, cut, paste and format text documents (M)</p> <p>B.3 Type a minimum of 10 words per minute using correct finger placement (M)</p> <p>B.4 Enhance reports/projects using electronic materials (M)</p> <p>B.5 Find information online (M)</p> <p>B.6 Cite copyrighted material</p> <p>B.7 Understand how to share files</p> <p>B.8 Understand and use vocabulary: format drag and drop clip art layout font type preview hypertext folder WYSIWYG bullet file print</p>	<p>Assign students with stronger typing skills to be class research assistants online</p> <p>Access games and challenges to develop typing skills</p> <p>Participate in class or school web page design</p> <p>Use Internet to promote community outreach projects and to communicate with schools worldwide about justice issues</p> <p>Writing workshops for word processing and publishing</p> <p>Use clip art, graphs, charts and tables to communicate ideas</p> <p>Sharing files requires a LAN. The skill does not need to be mastered at the elementary level</p>	<p>Achieve typing skills of at least 10 words per minute</p> <p>Successfully pass the NC computer competency exam</p> <p>Produce a document of at least 3 pages demonstrating formatting ability and the addition of art graphs and/or charts and tables</p>	<p>AT&T Web page contest to compose joint web page with foreign schools</p> <p>Web page design and publication: www.bignosebird.com</p> <p>NC Computer Literacy Exam: available in Claris Works Works, DOS and Windows Office There is no Lotus format available</p> <p>www.thinkquest.com</p>

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DIOCESAN STRAND C: DATA USE AND DISPLAY

NC COMPETENCY, Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

VALUES AND ATTITUDES Understand that unauthorized duplication of programs, information, and graphics is illegal
Understand the advantages of the visual display of data

Students will be able to:

OBJECTIVES	STRATEGIES	ASSESSMENT	RESOURCES
<p>C.1 Master sorting and searching techniques with a database to solve a given question (M)</p> <p>C.2 Filter a database and create a report</p> <p>C.3 Enter and edit data in a spreadsheet (M)</p> <p>C.4 Use a spreadsheet to solve "what if" questions</p> <p>C.5 Enter data and create a graph or chart and use similar data to generate a different form of display (M)</p> <p>C.6 Interpret information from a chart, graph or table (M)</p> <p>C.7 Use equations to manipulate data in a spreadsheet</p> <p>C.8 Use order of operations formula</p> <p>C.9 Create a simple database</p> <p>C.10 Locate information in a simple database</p> <p>C.11 Begin to create tables in web page design</p> <p>C.12 Understand /use vocabulary: field links</p>	<p>Use data gathered in class activities to create databases and spreadsheets, i.e. data obtained in science class can be entered, edited, graphed and sorted</p> <p>Display historical timelines on charts or graphs</p> <p>Manipulate spreadsheets by changing equations or formulas</p> <p>Create a school or class web site</p> <p>Use editing tool program or basic HTML to present information online in a table format</p>	<p>Sort and edit a given database</p> <p>Use a spreadsheet to enter data for numerical analysis</p> <p>Understand basic web page design</p>	<p>Editing tools for writing HTML: Microsoft Front Page Adobe Pagemill Hot Metal Netscape Communicator</p> <p>Designing and publishing website: www.Bignosebird.com</p> <p>Data display online: National Census Bureau www.cia.gov</p>

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DIOCESAN STRAND D: RESEARCH

NC COMPETENCY: This is not a separate goal in the NC Standard Course of Study

VALUES AND ATTITUDES Understand that information on the world wide web is not necessarily accurate, reviewed or authentic
 Understand that plagiarism applies to work presented on CD and on the Internet
 Develop ethics regarding personal Internet use (sample Code of Honor in Appendix)

Students will be able to:

OBJECTIVE	STRATEGIES	ASSESSMENT	RESOURCES
D.1 Recognize the basic characteristics of web sites (M)	Use CD encyclopedia to research topics then compare with similar information from a web site	Find reliable sources of information on CD	Links to educational sites: www.learnnc.org Links Library
D.2 Demonstrate the ability to use multimedia and online resources for credible research (M)	Communicate online with researchers and educators Use charts, graphs and tables from electronic sources in all curriculum areas	Distinguish between authentic and inaccurate sources of information online	Online encyclopedias: Compton's Encyclopedia Americana
D.3 Correctly cite information from the Internet		Articulate what constitutes responsible behavior regarding the Internet	Past periodicals on CD
D.4 Evaluate online information for accuracy, truthfulness and appropriateness		Select appropriate tools to accomplish a variety of tasks and solve problems	Online news services: www.nytimes.com
D.5 Identify questionable Information gathered on the Internet			Student search engine: www.metacrawler.com
D.6 Demonstrate and understanding of the power of technology to connect to primary sources for research			
D.7 Distinguish between credible and less than credible information			
D.8 Use charts, graphs and tables from electronic sources in all curriculum areas (M)			
D.9 Refine search techniques			
D.10 Use a search engine (M)	Evaluate search engines for effectiveness		
D.11 Use a browser (M)			
D.12 Understand and use primary sources from the Internet (M)			
D.13 Understand/use vocabulary: URL Web Site Boolean search			