

DARIEN PUBLIC SCHOOLS

Instructional Technology Standards

STANDARD # 1 - Basic Skills and Operations

- **Students demonstrate a sound understanding of the nature and operation of technology systems**
- **Students are proficient in the use of technology**

Kindergarten – Grade 2

- Use input and output devices to successfully operate computers, technology systems, CD / DVD technology
- Use a variety of media and technologies for directed and independent learning activities
- Communicate about technology using appropriate developmental terminology
- Use a variety of developmentally appropriate multi-media and technology resources for directed and independent learning
- Discuss common uses of technology and the advantages and disadvantages those technologies provide

Grade 3 – Grade 5

- Begin to develop keyboarding skills
- Use keyboard and other common input and output devices efficiently and effectively
- Independently operate school computers and demonstrate ability to use software and special features
- Investigate software to create products in a range of formats
- Demonstrate the ability to use basic features, entering information and data, create and use word processing, spreadsheets, and using databases
- Apply strategies for solving common hardware/ software problems

Grade 6 – Grade 8

- With assistance, develop strategies for solving common hardware/ software problems
- Demonstrate an understanding of concepts of underlying hardware/ software
- Demonstrate an understanding of connectivity and of practical application to learning and problem – solving
- Demonstrate the ability to use personal productivity software independently to create formats
- Describe general criteria used to evaluate and compare different types of computers, peripherals, and other technology tools
- Demonstrate proficiency in keyboarding skills

Grade 9 – Grade 12

- Make informed choices among technology systems, resources and services
- Produce a variety of products using advanced features in technology systems

STANDARD # 2 – Social, Ethical and Human Issues

- **Students understand the ethical, cultural and societal issues related to technology**
- **Students practice responsible use of technology systems, information and software**
- **Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits and productivity**

Kindergarten – Grade 2

- Be exposed to responsible and appropriate use of technology systems and software
- Demonstrate positive social behaviors when using technology

Grade 3 – Grade 5

- Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse
- Understand the concept of, accuracy, relevance, comprehensiveness, and bias of electronic information sources
- Apply established citation standards for giving credit for information or ideas used from electronic sources
- Demonstrate an understanding of the concepts of ownership of ideas and information

Grade 6 - Grade 8

- Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society
- Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems
- Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use

Grade 9 – Grade 12

- Identify and assess emerging tech resources and apply these systems and services to address individual needs
- Analyze advantages and disadvantages of widespread use and reliance on technology in school, the workplace, and in society as a whole
- Comply with all ethical and legal restraints in copying and using material from any print, non - print or electronic resources
- Demonstrate an understanding of the process for copyrighting/ protecting their original work
- Observe and comply with all state and national laws and policies and procedures regarding legal the use of computers, other technologies and networks

**STANDARD #3 – Technology Productivity and
Communication Tools**

- **Students use telecommunications to collaborate, publish and interact with peers, experts and other audiences**
- **Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences**

Kindergarten – Grade 2

- Use a variety of media and technology resources for directed and independent learning activities
- Use technology resources for problem- solving, communication, and illustration of thoughts, ideas, and stories

Grade 3 – Grade 5

- Use content -specific tools, software, and simulations to support or remediate learning and research
- Use technology tools for individual and collaborative communication, publishing activities for audiences inside and outside school
- Use appropriate software to construct, organize, calculate, analyze, and interpret ideas and data, and present conclusion
- Use telecommunications efficiently and effectively to access remote information, communicate with others in support of direct and indirect learning and pursue personal interests

Grade 6 – Grade 8

- Apply productivity / multimedia tools and peripherals to support personal productivity, group collaboration and learning throughout the curriculum
- Use technology tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum
- Create databases, spreadsheets and a variety of graphic presentations to communicate numeric and visual information using applications with varied and more sophisticated features

- Use telecommunications and online resources to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classrooms

Grade 9 – Grade 12

- Demonstrate advanced application of technology tools and resources for managing and communicating personal and professional information
- Investigate and apply expert systems, intelligent agents, and simulations in real world situations
- Create advanced written, oral, numeric, and visual communications (e.g. web pages) using appropriate applications to construct, organize, analyze and interpret ideas and data, and present conclusions
- Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications and productivity

STANDARD # 4 – Technology Resource Tools

- **Students use telecommunications to collaborate, publish and interact with peers, experts and other audiences**
- **Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences**

Kindergarten - Grade 2

- Use simple menus to locate information from electronic media

Grade 3 – Grade 5

- Perform key word searches
- Use Internet resources and other electronic information resources with assistance

- Use telecommunications and on-line resources to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom

Grade 6 – Grade 8

- Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems
- Determine the best tool for locating information and use key word descriptors and Boolean logic to perform advanced on-line and CD-ROM searches
- Demonstrate the ability to identify, develop and apply criteria for evaluating Internet resources
- Search, find, sort, and evaluate database information from computers, CD-ROM and on-line resources and know how to apply established specific features of different search engines

Grade 9 – Grade 12

- Evaluate technology-based options, including distance and distributed education, for lifelong learning
- Select and apply technology tools for research, information analysis, problem solving and decision making in content learning
- Independently use Boolean logic with two or more variables to search electronic databases
- Independently demonstrate ability to solve problems by collecting, analyzing and interpreting data through the use of data management software
- Independently select and use an appropriate search engine or directory related to a specific task

Approved: September 24, 2002