

Lake Washington School District
Teaching and Learning Framework

Grades K - 8

Technology

Power Standards

March 2008

Revised Draft Technology Power Standards

K - 8

Revised February 5, 2008

DRAFT

Kindergarten

K - Power Standard #1: CREATIVITY AND INNOVATION: Students think creatively, construct knowledge, and develop innovative products using technology.

- Students will use drawing programs (i.e. Paint)
- With assistance, students organize lists of ideas (Word, Kidspiration, Activboard)

K - Power Standard #2: COMMUNICATION AND COLLABORATION: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- With assistance, students will work collaboratively on a technology-oriented task (i.e. Paint, KidPix, Word, HeadSprout, etc.)
- With assistance, students will use a word processing program (i.e. MS Word) and/or use a drawing program (i.e. Paint) to communicate ideas
- Students use ACTIVboard and document camera to share work

K - Power Standard #3: RESEARCH AND INFORMATION RETRIEVAL: Students access, retrieve, manage, and evaluate information using digital tools.

- With assistance, students utilize favorites, desktop shortcuts, icons, and hyperlinks to access information.

K - Power Standard #4: CRITICAL THINKING, PROBLEM SOLVING and DECISION-MAKING: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools

- With assistance, students gather information from a graph created after using Activotes

K - Power Standard #5: DIGITAL CITIZENSHIP: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Students return materials to proper location (keyboard, mouse, headphones)
- Students take turns using the computer
- Students demonstrate positive, acceptable behavior at the computer
- Students practice appropriate behavior for technology use and show respect for technology equipment

K - Power Standard #6: TECHNOLOGY OPERATIONS & CONCEPTS: Students demonstrate a sound understanding of technology concepts, systems, and operations.

- Students identify keyboard, monitor, mouse, etc.
- Students interact with programs using keyboard and mouse
- Students use desktop icons to access programs
- Students are able to log off
- Students use window operations (i.e. resize, scroll, close)

First Grade

1 - Power Standard #1: CREATIVITY AND INNOVATION: Students think creatively, construct knowledge, and develop innovative products using technology.

- With assistance, students will use multimedia to share ideas (video, digital cameras, or podcasts)
- Students use word processing or drawing programs (Paint, Word Art, Kidspiration, Activstudio, Investigations software) to represent innovative ideas
- Students insert clipart or use Paint to create a picture to demonstrate or represent an idea

1 - Power Standard #2: COMMUNICATION AND COLLABORATION: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Students insert clipart or use Paint to create a picture to demonstrate or represent an idea?
- Students work collaboratively on a technology-oriented task
- Students use word processing software to communicate ideas
- Students share problem solving strategies using the Activboard

1 - Power Standard #3: RESEARCH AND INFORMATION RETRIEVAL: Students access, retrieve, manage, and evaluate information using digital tools.

- Students use teacher-created links to access specific websites
- Students communicate information about the websites they visited

1 - Power Standard #4: CRITICAL THINKING, PROBLEM SOLVING and DECISION-MAKING: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools

- With assistance, students create survey questions to collect and analyze data using Activotes
- With assistance, students use appropriate technology tools for solving problems and planning projects (i.e. Paint for pictures, Kidspiration for mind-mapping, ActivStudio)

1 - Power Standard #5: DIGITAL CITIZENSHIP: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Students demonstrate appropriate behavior for technology use and show respect for technology equipment
- Students visit only teacher-selected/approved websites and programs
- Students understand the consequences of inappropriate use of technology (see second grade bullet)

1 - Power Standard #6: TECHNOLOGY OPERATIONS & CONCEPTS: Students demonstrate a sound understanding of technology concepts, systems, and operations.

- Students are able to log on and log off
- Students are able to insert text and graphics
- Students are able to locate and type letters and numbers

Second Grade

2 - Power Standard #1: CREATIVITY AND INNOVATION: Students think creatively, construct knowledge, and develop innovative products using technology.

- Students choose technology for creative self expression (i.e. " use Publisher to make a poster")

2 - Power Standard #2: COMMUNICATION AND COLLABORATION: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Students clearly communicate ideas and/or knowledge using technology tools
- Students assigned specific tasks within a group project use technology tools present information

2 - Power Standard #3: RESEARCH AND INFORMATION RETRIEVAL: Students access, retrieve, manage, and evaluate information using digital tools.

- Students use LWSD library online catalog to retrieve information and materials
- Students use bookmarks, hyperlinks and URLs to access the internet
- Students use the elementary splash page to access approved internet search engines

2 - Power Standard #4: CRITICAL THINKING, PROBLEM SOLVING and DECISION-MAKING: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools

- With assistance, students gather, record, analyze, and/or evaluate data using Excel or other software

2 - Power Standard #5: DIGITAL CITIZENSHIP: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Students demonstrate appropriate behavior for technology use and show respect for technology equipment
- Students respect the privacy of others' data and workspace (i.e. shared class folder, individual student folders, etc.)
- Students begin to recognize internet danger signs and when to seek help (internet safety issues)

2 - Power Standard #6: TECHNOLOGY OPERATIONS & CONCEPTS: Students demonstrate a sound understanding of technology concepts, systems, and operations.

- Students are able to identify specific input and output devices
- Students use peripheral devices (printer, mouse (right click), keyboard, document camera, Activboard, Activotes)
- Students are able to print/publish completed work
- Students are able to format text and insert graphics into a document
- Students are able to create and present multimedia using a template (i.e. Power Point presentations)
- Students know home-row position for keyboarding

Third Grade

3 - Power Standard #1: CREATIVITY AND INNOVATION: Students think creatively, construct knowledge, and develop innovative products using technology.

- Students create and enhance technology products with graphics and sounds

3 - Power Standard #2: COMMUNICATION AND COLLABORATION: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Students create group and individual presentations using digital media (i.e. Activstudio, Activotes, and PowerPoint)

3 - Power Standard #3: RESEARCH AND INFORMATION RETRIEVAL: Students access, retrieve, manage, and evaluate information using digital tools.

- Students use a variety of teacher-selected media to gather information (newspaper, books, online sources, etc)
- Students use online databases
- Students begin to use online databases
- Students use online databases
- Students interpret information from graphs, charts diagrams and tables

3 - Power Standard #4: CRITICAL THINKING, PROBLEM SOLVING and DECISION-MAKING: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools

- With assistance, students plan and conduct research using teacher-selected technology resources (calculators, videos, educational software, online library catalogs, databases, and encyclopedias)
- Students identify and use appropriate technology tools to manage group and individual projects

3 - Power Standard #5: DIGITAL CITIZENSHIP: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Students differentiate between original work and plagiarized work.
- Students identify internet danger signs and know how to seek help

3 - Power Standard #6: TECHNOLOGY OPERATIONS & CONCEPTS: Students demonstrate a sound understanding of technology concepts, systems, and operations.

- Students consistently use correct keyboard position and type 15 WPM using district typing program.
- Students use basic formatting/paragraph/style commands and editing tools (spacing, bullets, color, justification, hyperlinks, cut/paste, spell check etc.)
- Students access network software and server
- Students are able to open, save, print, and name files

Fourth Grade

4 - Power Standard #1: CREATIVITY AND INNOVATION: Students think creatively, construct knowledge, and develop innovative products using technology.

- Students use a combination of graphics, sounds, music, and/or videos to create and enhance products
- Students use digital media and/or production software to problem solve (email, blogging, discussion board)

4 - Power Standard #2: COMMUNICATION AND COLLABORATION: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Students begin to use email as a tool for collaboration and communication

4 - Power Standard #3: RESEARCH AND INFORMATION RETRIEVAL: Students access, retrieve, manage, and evaluate information using digital tools.

- Students begin to use keywords, phrases, and other research techniques to refine searches
- Students begin to recognize bias in web pages.

4 - Power Standard #4: CRITICAL THINKING, PROBLEM SOLVING and DECISION-MAKING: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools

- Students plan and conduct research using available technology resources.

4 - Power Standard #5: DIGITAL CITIZENSHIP: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Students begin to practice email etiquette
- Students can identify ways technology is used everyday
- Students follow copyright and plagiarism laws/rules in regard to publishing.
- Students practice internet safety skills

4 - Power Standard #6: TECHNOLOGY OPERATIONS & CONCEPTS: Students demonstrate a sound understanding of technology concepts, systems, and operations.

- Students demonstrate basic troubleshooting skills (checks connections, task manager, checks printer queue)
- Students are able to install a network printer
- Students type 30 WPM using district typing program
- Students format various layouts in word processing (alignment, columns, margins, tabs, page setup, headers, footers, etc.)
- Students create and manipulate tables
- Students use spreadsheets to input data and create a bar graph and use basic features of spreadsheets (Excel, cells, rows, columns)

Fifth Grade

5 - Power Standard #1: CREATIVITY AND INNOVATION: Students think creatively, construct knowledge, and develop innovative products using technology.

- Students create a product using elements of design
- Students independently use production software (Word, Publisher, etc) and digital media (web pages, podcasts, videos, etc.) to communicate their learning in a given subject

5 - Power Standard #2: COMMUNICATION AND COLLABORATION: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Students use shared data folders, drop boxes, and the portal to collaborate and communicate without paper
- Students use internet communication tools available (i.e. email, blogs, wikis, podcasts, etc.) to collaborate and interact with peers

5 - Power Standard #3: RESEARCH AND INFORMATION RETRIEVAL: Students access, retrieve, manage, and evaluate information using digital tools.

- Students begin to understand structure of the internet (i.e. search engines, personal web pages, government pages, "grammar of URL") and refine search strategies
- Students use digital tools and research processes (such as Big 6) to gather information

5 - Power Standard #4: CRITICAL THINKING, PROBLEM SOLVING and DECISION-MAKING: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools

- With assistance, students select appropriate websites and databases as related to the project or task

5 - Power Standard #5: DIGITAL CITIZENSHIP: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Students understand and demonstrate email etiquette
- Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.
- Students understand consequences and abide by LWSD code of conduct and guidelines

5 - Power Standard #6: TECHNOLOGY OPERATIONS & CONCEPTS: Students demonstrate a sound understanding of technology concepts, systems, and operations.

- Students independently select appropriate program and effectively utilize tool bars and menu systems
- Students manage documents in various/specific places (i.e. save to CD or to flash drive)
- Students type 50WPM using district keyboarding program (Type to Learn)

Sixth Grade

6 - Power Standard #1: CREATIVITY AND INNOVATION: Students think creatively, construct knowledge, and develop innovative products using technology.

- Students create a variety of products using elements of design
- Students integrate multiple formats (Word, Publisher, Web Pages, podcasts, PowerPoint, graphics, etc.) to create product using elements of design.

6 - Power Standard #2: COMMUNICATION AND COLLABORATION: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Students use internet communication tools available (i.e. email, blogs, wikis, podcasts, etc.) to collaborate and interact with peers and people outside the school community

6 - Power Standard #3: RESEARCH AND INFORMATION RETRIEVAL: Students access, retrieve, manage, and evaluate information using digital tools.

- With assistance, students evaluate a web page for bias, accuracy and relevance for information retrieval
- Students use a research protocol (e.g. Big 6, scientific design process, etc. especially focusing on Information Seeking Strategies and Use of Information)

6 - Power Standard #4: CRITICAL THINKING, PROBLEM SOLVING and DECISION-MAKING: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools

- Students plan and manage multiple solutions to authentic problems using appropriate technology
- With assistance, Students use web communication tools (i.e. wikis, blogs, discussion boards) to discuss alternative viewpoints on the same idea

6 - Power Standard #5: DIGITAL CITIZENSHIP: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Students cite original author(s) when using web resources (articles, sites, pictures, sounds, etc.)
- Students have a working knowledge of the LWSD Acceptable Use Policy and consequences for not following guidelines

6 - Power Standard #6: TECHNOLOGY OPERATIONS & CONCEPTS: Students demonstrate a sound understanding of technology concepts, systems, and operations.

- Students are able to independently operate classroom technology (document cameras, projectors, digital cameras, etc)
- Students are able to follow basic troubleshooting steps
- Students create basic formulas in a spreadsheet

Seventh Grade

7 - Power Standard #1: CREATIVITY AND INNOVATION: Students think creatively, construct knowledge, and develop innovative products using technology.

- Students create and share products using information gathered from multiple resources in a variety of ways (web sites, Word, Publisher, podcasts, videos, Power Points, graphics, ACTIVstudio, etc.)

7 - Power Standard #2: COMMUNICATION AND COLLABORATION: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Students collaborate to publish and present ideas effectively to multiple audiences utilizing a variety of media

7 - Power Standard #3: RESEARCH AND INFORMATION RETRIEVAL: Students access, retrieve, manage, and evaluate information using digital tools.

- Students effectively use multiple searching techniques and a variety of search engines and LWSD databases for different purposes
- Students evaluate multiple web pages for bias, accuracy, and relevance

7 - Power Standard #4: CRITICAL THINKING, PROBLEM SOLVING and DECISION-MAKING: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools

- With assistance, students evaluate websites for accuracy, authority, objectivity, currency, and coverage
- Students plan and conduct appropriate research using multiple resources.

7 - Power Standard #5: DIGITAL CITIZENSHIP: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Students consistently practice internet safety
- Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.

7 - Power Standard #6: TECHNOLOGY OPERATIONS & CONCEPTS: Students demonstrate a sound understanding of technology concepts, systems, and operations.

- Students are able to transfer files from home to school
- Students are able to manage multiple network printers
- Students are able to format tables, graphics, and text boxes.
- Students are able to log on and access school resources from both school and locations outside of school (portal, databases, grades, email)

Eighth Grade

8 - Power Standard #1: CREATIVITY AND INNOVATION: Students think creatively, construct knowledge, and develop innovative products using technology.

- Students create and share products in multiple formats for multiple audiences
- Students use new and familiar technology in new and unconventional ways (i.e. Excel in an LA/SS class)

8 - Power Standard #2: COMMUNICATION AND COLLABORATION: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Students collaborate, publish, and interact with peers, experts, and others by employing a variety of digital media and formats

8 - Power Standard #3: RESEARCH AND INFORMATION RETRIEVAL: Students access, retrieve, manage, and evaluate information using digital tools.

- Students independently evaluate web pages for bias, accuracy, and relevance
- Students expand use of databases to include non-LWSD databases

8 - Power Standard #4: CRITICAL THINKING, PROBLEM SOLVING and DECISION-MAKING: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools

- Students find and evaluate websites for accuracy, authority, objectivity, currency, and coverage
- Students plan, conduct and manage research using valid and independently selected resources

8 - Power Standard #5: DIGITAL CITIZENSHIP: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Students follow copyright law when using digital and print resources
- Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.

8 - Power Standard #6: TECHNOLOGY OPERATIONS & CONCEPTS: Students demonstrate a sound understanding of technology concepts, systems, and operations.

- Students demonstrate an understanding of technology concepts, systems, and operations