#### Holland Patent Central School District Elementary Technology Curriculum

### \*HP Performance Indicators identified in parenthesis.

### **Standard 1:** Creativity and Innovation – Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

- a. Apply existing knowledge to generate new ideas, products, or processes.
  - How are we currently addressing this standard?
    - ★ *K*-5 Create, share and publish digital stories
    - 2<sup>nd</sup> Grade Create individual digital calendars that include events, images and milestones.
    - Grades 3-5 Use a variety of technologies and Internet tools to produce digital presentations or projects to illustrate concepts and ideas. (i.e. animal, country, planet, explorers, plants, Native Americans, Colonial Americans, states. Presidents, etc.)
  - What district performance indicators are addressing this standard?
    - Desktop publishing (7)
    - ✤ Graphics (8)
    - Spreadsheets (9)
    - ✤ Mobile devices (16)
    - Internet skills (11)
    - Internet safety (14)
    - ✤ Web 2.0 tools (15)
- b. Create original works as a means of personal or group expression.
  - How are we currently addressing this standard?
    - Grades 1-5 Use District software and Web 2.0 tools to develop innovative digital stories and multimedia projects to demonstrate creative thinking.
    - *K-3 Integrate student guided and/or generated SMARTBoard activities for group learning*
    - ✤ Grades 2-5 Create original graphic and/or edit clipart for digital projects.
    - Grades 4-5 Create video presentations documenting school events (assemblies, science fair, concerts, classroom activities
  - What district performance indicators are addressing this standard?
    - Desk top publishing (7)
    - ✤ Graphics (8)
    - Spreadsheets (9)
    - Presentation (10)
    - ✤ Web 2.0 tools (15)
    - Internet skills (11)
    - Internet safety (14)

- c. Use models and simulations to explore complex systems and issues.
  - How are we currently addressing this standard?
    - Grades 2-5 Use simulations and graphic organizers to explore and depict patters such as life cycles, water cycles, etc.
    - ✤ Grade 5 Create digital timelines of historical events, biographies, etc.
  - What district performance indicators are addressing this standard?
    - ✤ Graphic organizers (12)
    - ✤ Web 2.0 Tools (15)
    - Mobile devices (16)
- d. Identify trends and forecast possibilities.
  - How are we currently addressing this standard?
    - ★ *K*-5 Use graphic organizers to brainstorm ideas and organize concepts.
  - What district performance indicators are addressing this standard?
    - ✤ Graphic organizers (12)
    - Spreadsheets (9)
    - ✤ Web 2.0 tools (15)
    - Internet skills (11)
    - Internet safety (14)

# 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

- a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
  - How are we currently addressing this standard?
    - ✤ Grades 2-5 Work cooperatively and collaboratively to develop digital presentations that reflect classroom learning.
    - ✤ Grades 2-5 Create, share and publish digital media
    - ✤ Grades 4-5 Utilize student response systems
    - $\bigstar \quad K-5-Video \ conferencing$
  - What district performance indicators are addressing this standard?
    - Communicate and collaborate (17)
    - ✤ Web 2.0 tools (15)
    - Network Operations (3)

- Internet skills (11)
- Internet safety (14)
- Digital citizenship (4)

b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats.

- How are we currently addressing this standard?
  - ✤ Grades 2-5 Publish projects to class website, student newspaper, yearbook
  - Grades 3-5 Work independently or collaboratively to develop presentations or movies with text, graphics, audio and video.
  - What district performance indicators are addressing this standard?
    - ✤ Word Processing (6)
    - Desktop Publishing (7)
    - Graphics (8)
    - Presentation (10)
    - Internet skills (11)
    - ✤ Web 2.0 tools (15)
    - Communication and Collaboration (17)
    - Critical thinking, problem solving and decision making (18)
- c. Develop cultural understanding and global awareness by engaging with learners of other cultures.
  - How are we currently addressing this standard?
    - ✤ K-5 Engage peers and professionals beyond the geographic limits of the school district via video conference, email, Wikispaces, and more.
    - ✤ K-5 Engage in virtual field trips
    - What district performance indicators are addressing this standard?
      - Internet Skills (11)
      - Internet Safety (14)
      - ✤ Web 2.0 tools (15)
      - Communication and Collaboration (17)
      - Digital Citizenship (4)
- d. Contribute to project teams to produce original works or solve problems.
  - How are we currently addressing this standard?
    - Grades 2-5 Using technology multimedia tools, create instructional products demonstrating knowledge
    - Grades 4-5 Engage in collaborative projects online and via video conference

- What district performance indicators are addressing this standard?
  - Communication and collaboration (17)
  - Critical thinking, problem solving and decision making (18)
  - Internet skills (11)
  - Internet safety (14)
  - Digital citizenship (4)

## **Standard 3. Research and Information Fluency - Students apply digital tools to gather, evaluate, and use information.**

- a. Plan strategies to guide inquiry.
  - How are we currently addressing this standard?
    - Grades 1-5 Utilize teacher provided resources to evaluate reliability of websites
    - Grades 3-5 Use online encyclopedias, databases and Web sites to access information for research assignments.
    - ✤ Grades 4-5 Use bookmarks and/or social bookmarking for retrieving sources
    - ✤ Grades 4-5 Cite sources appropriately
  - What district performance indicators are addressing this standard?
    - Net work operations (3)
    - Internet skills (11)
    - Internet Safety (14)
    - ✤ Web 2.0 tools (15)
    - Digital citizenship (4)
- b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
  - How are we currently addressing this standard?
    - ✤ Grades 1-5 Navigate resources within the District webpage
    - Grades 3-5 Develop Internet search strategies which will enable efficient access to reliable information.
    - Grades 3-5 Use age appropriate multimedia resources (ebooks, educational software, online databases, etc.) to support learning
    - Grades 5-4 Identify search engines/browsers
    - Grade 5 Select and apply digital tools to collect, organize and analyze data.
    - Grade 5 Save data in multiple formats (graphs, charts, columns, etc.)
  - What district performance indicators are addressing this standard?
    - Net work operations (3)
    - ✤ Internet skills (11)

- Internet Safety (14)
- ✤ Web 2.0 tools (15)
- Digital citizenship (4)
- c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
  - How are we currently addressing this standard?
    - Grade 5 Evaluate the accuracy and relevance of electronic sources for research assignments at appropriate grade level.
    - ✤ Grade 5 Recognize bias in digital resources
  - What district performance indicators are addressing this standard?
    - Net work operations (3)
    - ✤ Internet skills (11)
    - Internet Safety (14)
    - ✤ Web 2.0 tools (15)
    - Digital citizenship (4)
- d. Process data and report results.
  - How are we currently addressing this standard?
    - Grades 3-5 Finalize research assignments utilizing various digital formats
    - Grades 4-5 Create charts and graphs based on Excel spreadsheet data
  - What district performance indicators are addressing this standard?
    - Word Processing (6)
    - Desktop Publishing (7)
    - ✤ Graphics (8)
    - Spreadsheets (9)
    - Presentations (10)
    - ♦ Web 2.0 tools (15)

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 digital tools and resources.

a. Identify and define authentic problems and significant questions for investigation.

- How are we currently addressing this standard?
  - Grades 2-5 Utilize Web 2.0 tools to create graphic organizers to plan writing
  - Grades 3-5 Using spreadsheet tools, create worksheets and/or graphs to analyze and represent data.

- What district performance indicators are addressing this standard?
  - Spreadsheets (9)
  - ✤ Graphic organizers (12)
  - Critical thinking, problem solving and decision making (18)
  - Internet skills (11)
  - Internet safety (14)

b. Plan and manage activities to develop a solution or complete a project.

- How are we currently addressing this standard?
  - Grades 1-5 Using graphic organizer software, develop logical thinking and problem solving skills.
- What district performance indicators are addressing this standard?
  - Spreadsheets (9)
  - ✤ Graphic organizers (12)
  - Critical thinking, problem solving and decision making (18)
- c. Collect and analyze data to identify solutions and/or make informed decisions.
  - How are we currently addressing this standard?
    - Grades 3-5 Use a variety of digital tools to locate, analyze and/or interpret primary source documents
    - ✤ Grades 3-5 Use graphic organizers for persuasive writing pieces
  - What district performance indicators are addressing this standard?
    - Spreadsheets (9)
    - ✤ Internet skills (11)
    - ✤ Graphic organizers (12)
    - Internet Safety (13)
    - ✤ Web 2.0 tools (15)
    - Critical thinking, problem solving and decision making (18)
- d. Use multiple processes and diverse perspectives to explore alternative solutions.
  - How are we currently addressing this standard?
    - Grades 3-5 In completing activities such as Webquests and Internet Scavenger Hunts, select and use the digital tools and resources necessary to solve an interdisciplinary inquiry based project.
  - What district performance indicators are addressing this standard?

- ✤ Internet skills (11)
- Internet safety (14)
- ✤ Web 2.0 tools (15)
- ✤ Mobile devices (16)

## Standard 5. Digital Citizenship - Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

a. Advocate and practice safe, legal, and responsible use of information and technology.

- How are we currently addressing this standard?
  - Grades 1-5 Learn to navigate educational websites without following links to ads or other content.
  - ✤ Grades 3-5 Develop an understanding of proper netiquette when communicating online.
  - ✤ Grades 4-5 Understand the purpose of filtering systems.
- What district performance indicators are addressing this standard?
  - Digital citizenship (19)
  - Internet safety (14)
  - Critical thinking, problem solving, and decision making (17)
  - ✤ Internet skills (11)

b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.

- How are we currently addressing this standard?
  - Grades 3-5 Develop an understanding of the responsibilities and safe strategies for creating online screen names, managing friend lists, keeping personal information private and methods of responding to others online, along with gaining a perspective about the benefits of online communications (socialization, collaboration, etc.) as well as the dangers.
- What district performance indicators are addressing this standard?
  - ✤ Internet safety (14)
  - Communication and collaboration (17)
  - Digital citizenship (19)
- c. Demonstrate personal responsibility for lifelong learning.
  - How are we currently addressing this standard?

- Grades 2-5 Understand the concept and dangers of Cyberbullying and develop prevention strategies. Understand copyright regulations, intellectual property, plagairism and file sharing concepts.
- What district performance indicators are addressing this standard?
  - Critical thinking, problem solving, and decision making (18)
  - ✤ Mobile devices (16)
  - Internet safety (14)
  - Digital citizenship (19)
  - Internet skills (11)
- d. Exhibit leadership for digital citizenship.
  - How are we currently addressing this standard?
    - Grades 3-5 Apply Internet safety knowledge to social networking sites and online collaborative opportunities.
  - What district performance indicators are addressing this standard?
    - Internet safety (14)
    - ✤ Mobile devices (16)
    - Critical thinking, problem solving, and decision making (18)
    - Digital citizenship (19)

**Standard 6. Technology Operations and Concepts - Students demonstrate a sound understanding of technology concepts, systems, and operations.** 

a. Understand and use technology systems.

- How are we currently addressing this standard?
  - ★ *K*-1 Identify the basic parts of a computer and their functions.
  - ★ *K*-1 Understand and use basic keyboard and mouse functions and operations.
  - $\star$  K-5 Use individual account names and passwords to gain access to network resources.
  - ★ *K*-5 Understand the difference between shutdown/log off/restart
  - ★ *K*-5 Develop proper keyboarding techniques for fluent data entry.
  - ✤ Grades 2-5 Utilize spell check/grammar functions
  - Grades 2 5 Understand and apply basic file management concepts such as open, save, save as, print
  - ✤ Grades 3 5 Format documents (headers and footers, margins, page orientation, etc.)
- What district performance indicators are addressing this standard?
  - ✤ Basic computer skills (1)
  - ✤ Operating system environment (2)
  - ✤ Network operations (3)
  - ✤ Keyboarding (5)
  - ✤ Word processing (6)

b. Select and use applications effectively and productively.

- How are we currently addressing this standard?
  - ★ *K*-5 Launch software programs through icons, and navigate and operate applications.
  - Grades 2-5 Identify toolbars and functions within (font size, color, justification, page orientation, etc.).
  - ✤ Grades 3-5 Utilize paragraph functions such as line spacing, tabs, indent, etc.
  - ✤ Grades 3-5 Navigate between multiple applications utilizing cut/copy/paste.
  - Grades 3-5 Utilize peripherals such as scanners, digital cameras, flash drives as a way to add functionality to a computer system.
- What district performance indicators are addressing this standard?
  - ✤ Operating system environment (2)
  - Network operations (3)
  - ✤ Word Processing (6)
  - Desktop publishing (7)
  - ✤ Graphics (8)
  - Spreadsheets (9)
  - Presentations (10)
  - Internet skills (11)
  - ✤ Graphic organizer (12)
  - ✤ Web 2.0 tools (15)

- c. Troubleshoot systems and applications.
  - How are we currently addressing this standard?
    - Grades 1-5 Discuss common uses of technology in daily life, and compare advantages and disadvantages for users.
  - What district performance indicators are addressing this standard?
    - ✤ Basic computer skills (1)
    - ✤ Operating system environment (2)
    - ✤ Network operations (3)
- d. Transfer current knowledge to learning of new technologies
  - How are we currently addressing this standard?
    - Grades 2-5 Students use district software as well as Web 2.0 tools to create brochures, flyers, documents, presentations and more to demonstrate classroom learning.
  - What district performance indicators are addressing this standard?
    - ✤ Mobile devices (16)
    - Presentation (10)
    - Desktop publishing (7)