

Fayetteville-Manlius Schools Technology Plan



2011-2017

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*Building on Excellence:
Preparing students for the 21st
Century*



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District Technology Vision

Computers and information technology have transformed the way the world learns, communicates, and conducts business. The rate of world change due to technological advances has necessitated a shift in our students' education. The Fayetteville-Manlius School District is committed to preparing students with the technological skills necessary to make wise decisions, work productively and compete globally. Every student will have the opportunity to utilize technology to access and analyze information, develop higher order thinking skills, solve problems, and contribute to the global community.

The Fayetteville-Manlius Central School District has a shared vision to provide equitable access, superior teaching, authentic experiences for students, and around the clock technology support for all students and staff with technology. From the Board of Education to the District Planning Team to in-service offerings and digital portfolios, Fayetteville-Manlius has created an innovative technology experience for students, teachers, administrators, and the community.

Today's educators must provide a learning environment that takes students beyond the walls of their classrooms and into a world of endless opportunities. Technology standards promote this classroom transformation by ensuring that digital-age students are empowered to learn, live, and work successfully today and tomorrow.

(ISTE, 2013)



District Goals

In keeping with the need to prepare students with 21st Century Skills, the technology plan has adopted the ISTE NETS (International Society for Technology Education, National Educational Technology Standards), the Common Core Standards and the District's vision to incorporate technology into daily instruction.

The following goals and objectives embrace the computer benchmarks (Appendix 1), and the NETS standards, and reflect the District's commitment to developing technologically literate students (Appendix 2). Teachers and students will meet the expectations of the technology benchmarks across the curriculum.

The following goals support the improvement of student achievement in preparation for college.

- Teachers and students of all abilities will use technology to increase personal productivity and efficiency.
- Teachers and students will use technology to evaluate, create, and archive instructional products that represent a mastery of knowledge.
- Teachers and students will become effective and efficient users of the Fayetteville-Manlius 21st Century skills and attributes (See Appendix 2).
- Teachers and students will demonstrate creativity and innovation by promoting creativity, inventiveness, and curiosity.
- Teachers and students will 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.
- Teachers and students will use 21st Century tools to think critically and solve problems (Appendix 3).
- Teachers and students will take personal responsibility by demonstrating knowledge of ethical and legal issues relating to technology.
- Teachers and students will become active users of technology in the global community and demonstrate social responsibility.
- Teachers and students will develop cultural understanding and global awareness by engaging with individuals of other cultures.



Professional Development

The Fayetteville-Manlius culture is one of collaboration, collegiality, and shared goals. Professional development is important to the district's motto of "excellence." The district offers a variety of professional development opportunities including, but not limited to, support from computer resource teachers, webinars, tutorials, district wide in-services, mini workshops, curriculum meetings, department and grade level collaboration meetings, support from individual teachers, team teaching collaborations, curriculum development opportunities, the annual technology and instruction fair, and community based conferences.

The district is committed to staying current with the ever changing technologies that support 21st Century skills. There is one computer resource teacher supporting K-4, another for grades 5-8, and a third is available at the high school. Resource teachers provide instruction in faculty meetings, one on one support, curriculum meetings, staff days, team teaching, and in-service classes. These teachers also regularly meet with grade levels/departments and offer mini workshops during planning periods or before and after school hours. In addition, they work closely with the computer lab assistants. Computer resource teachers evaluate and investigate the merits of new and emerging technologies.

In-service classes are also offered by colleagues. Instructors consist mostly of teachers but also include staff from the local BOCES Model Schools program. Workshops are also offered by professional vendors. In order to facilitate collaboration and teacher leaders, participants of in-service classes are asked to share lessons and activities. In relationship with BOCES, Syracuse University, and Fayetteville-Manlius Continuing Education, the district provides workshops for community members around the county.

The Coordinator of Technology offers mini workshops for administrators that include ways for administrators to use the same technology as teachers. Administrators also attend the Model Schools BOCES ITD Talks programs promoting new and developing technologies.

The technical staff is constantly updating knowledge with infrastructure growth, efficiency of running servers and switches, and security.

How-to videos created by the computer resource teachers are sent periodically to teachers quickly demonstrating practices such as how to use a document camera or when to export files for backup in SMARTNotebook.

In coordination with the District Professional Development Team, the District will plan large scale Instructional Fairs offered once a year to focus on the integration of technology in all content areas. These events will promote teacher leadership and will showcase at least 20 teachers in addition to consultants, vendors, and BOCES trainers.

Professional Development Goals

- Provide professional development to staff that is directed at supporting the District's technology benchmarks and promoting student achievement.
- Provide training for the integration of technology into curriculum and instruction.
- Provide ongoing support and staff development for teachers, support personnel and administrators for effective, efficient, and appropriate use of computer technology to support classroom instruction and the professional and personal use of computers to improve efficiency.
- Facilitate and inspire student learning and creativity through both face-to-face and virtual learning experiences.
- Design digital-age learning experiences and assessments by incorporating contemporary tools and resources to maximize content learning in context.
- Model digital-age work and learning by exhibiting knowledge, skills, and work processes that are representative of an innovative professional in a global and digital society.
- Promote digital citizenship and responsibility by understanding local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.
- Engage in professional growth and leadership opportunities to continuously improve professional practice and exhibit leadership in the classroom, school, and professional community by promoting and demonstrating the effective use of digital tools and resources.



Technology Program Assessment

Fayetteville-Manlius uses multiple groups to evaluate and review the integration of technology in addition to the infrastructure on a yearly basis through multiple means. The district follows ISO standards (International Standards Organization) to evaluate the quality of the technology infrastructure and technical staff. Organizational structures such as the ordering of software, backup, student systems user accounts, inventory, helpdesk procedures, technical training, and work orders are reviewed on a yearly basis. Two of these areas are audited on a yearly basis.

Yearly reports are presented to the Board of Education. The entire infrastructure, including wireless, controllers, switches, bandwidth and phone, is reviewed and updated annually (Appendix 7). During this time, the replacement plan is reviewed as technology hardware is purchased and disposed of (Appendix 8).

Each year an annual review of BOCES services is conducted that includes yearly technology purchases, online subscriptions, telecommunication services, and technology needs for the following school year.

The Technology Committee completes an annual review of the Technology Plan. This review includes surveys from staff and students, curriculum reviews, and feedback from teachers and administrators. The goal of the review is to stay updated with the ever changing technology and remain current with 21st Century changes. In turn, the Technology Committee will review feedback to create, update and maintain the District Technology Plan.

The Technology Committee fosters technological innovation through a formalized process where, at the request of the teachers, the technology is provided as a pilot. The pilot team of teachers becomes trainers and support staff for that hardware (Appendix 8).

Bibliography

- ISTE. (2013, May 22). *ISTE*. Retrieved May 22, 2013, from ISTE: <http://www.iste.org/standards/nets-for-students>
- Partnership for 21st Century Skills. (2013, May 25). *P21*. Retrieved May 25, 2013, from P21: <http://p21.org/>

Appendix 1 FM Technology Benchmarks (ISTE, 2013)

K-12 Technology Benchmarks 2007

I. Creativity and Innovation

Students think creatively, construct knowledge, and develop innovative products using technology. Students:

- A. Apply existing knowledge to generate new ideas and products.
- B. Use technology for creative self-expression.
- C. Use systems thinking to explore complex issues.
- D. Identify trends and forecast possibilities.

Performance Indicators:

Grades K-2

- Use a variety of media and technology resources for directed and independent learning activities.
- Create developmentally appropriate multimedia products with support from teachers, family members, or student partners.
- Understand multimedia applications for presentation and communication.

Lesson Examples

- Create multimedia projects using Animation-ish or Pixie that incorporate the paint palette tools. For example, design a book cover to enhance the books students publish. Discuss basic graphic design of the title and photo positioning as well as the ease of reproduction.
- Create a diagram of an animal of study using Pixie or Animation-ish.
- See examples at http://cnets.iste.org/students/s_example-k2.html
- Pass it on fairy tales. An entire class can begin a fairy tale using Pixie or Pixie and then pass it on to another class. Writing is modeled through the use of the computer and projector.
- Create a poster for a math concept. For example, when finding numbers that add to ten, students can give graphic examples of all the ways and then explain the implications for knowing all of the number combinations. Hang these up in the classroom or share with another class who has also done this.

Grades 3-4

- Use multimedia applications for group collaboration, presentation and communication.
- Use technology tools for mapping, planning and presenting.
- Use content specific software and simulations (virtual manipulatives, web tools, web quests etc.) to support learning and research.

Lesson Examples

- Animate a math algorithm, scientific experiment, or growth of a plant using Pixie or PowerPoint.
- Collect data, makes predictions and then draw conclusions using Pixie, Excel or TERC software.

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- Create a visual map of a fiction story to help in the planning process.
- Create a map or timeline to support a theory in a particular time period.
- Create a digital storybook using Story Photo 3

Grades 5-8

- Apply productivity and multimedia tools to support personal productivity, group collaboration, and learning throughout the curriculum.
- Use technology tools (multimedia, audio, video, web tools, visual mapping software, etc.) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.
- Use content specific software and simulations (science probes, graphing calculators, virtual manipulatives, web tools, music composition software, mathematics modeling, etc.) to support learning and research.
- Present information clearly and persuasively
- Integrate and combine data from multiple applications.
- Understand and use basic elements of visual design, techniques to enhance print, and multimedia products.

Lesson Examples:

- Energy Animations: students research a type of energy force and present and illustrate this energy source by creating multimedia animations.
<http://www.fmschools.org/eagle-hill.cfm?subpage=4058>
- Non-fiction Author Study – in teams, students research various aspects of a non-fiction author. Information is then presented in a webpage or other multimedia application.
<http://www.fmschools.org/eagle-hill.cfm?subpage=3572>
- Podcasts - Students research a topic and create a song, rap, essay, etc. that provides details about their topic and is persuasive. Songs/readings are recorded as podcasts and posted online.
<http://www.fmschools.org/eagle-hill.cfm?subpage=3510>
- Virtual Field Trips – students research various aspects of a world country. They then create web pages to create a virtual field trip to that country.
<http://www.fmschools.org/eagle-hill.cfm?subpage=277>
- Music Around the World Webpages - <http://www.fmschools.org/eagle-hill.cfm?subpage=1546>
- Science Lab Video podcasts – students create video podcasts of science labs for students to review from website.
- Literary animations that highlight a main point, or conflict in literature.
- Develop and present a group video 'on-the-scene' report of a historical event.
- Produce a multimedia eulogy for one of the victims of a historical event (podcast, animation, video, etc.).
- Digital storytelling using Photostory, video editing software or Powerpoint.
- Connect LOTE to social studies by learning about historical events or traditions that affect a specific group of people. Reinforce mapping and geography skills and replicate products of the period. Students share their knowledge through performing a reenactment of a typical day or event in the life of and produce a printed program guide with graphics. They use computer software to draw the itinerary of the day/event and produce an imaginary diary with pictures.
http://cnets.iste.org/students/pf/pf_les_voyageurs.html
- Students develop a project that demonstrates their knowledge of an overview of time, dating from the ancient world to the 21st century. The project requires researching, narrowing a topic, synthesizing and recording material, projecting and predicting change,

and constructing a product displaying the results.
http://cnets.iste.org/students/pf/pf_next_millennium.html

Grades 9-12

- Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.
- Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.
- Use content specific software and simulations (science probes, graphing calculators, virtual manipulatives, web tools, music composition software, mathematics modeling, etc.) to support learning and research.

Lesson Examples

- Students will develop digital video summaries of science labs which the teacher can post on Blackboard or websites for students to use as review or make up if they've missed a lab day. See examples of this at http://mabryonline.org/blogs/larkin/archives/2007/01/genetic_transfo_1.html
- Students will use digital storyboarding to represent research conducted on various topics in their classes.
- In language arts, students will record podcasts or use digital video to create book talks on books they've read in class.
- In social studies, students can recreate historic events and video tape them.
- Students use journalism writing by observing events in a novel. Students will write newspaper articles based on the events occurring in the novel and relate them to contemporary problems. Each story will be gathered into a newspaper or newsletter.
- LOTE students create websites, podcasts or videos on their favorite book, restaurant, or city in a foreign language.
- Have students blog in a foreign language.
- Using a Smart Board, students can record solutions to math problems for teachers to post on websites or blackboard.
- Use science probes to gather information and then graph it in excel to see trends or make inferences.
- Business students can use the stock market to forecast trends and show economic growth. Students will write a report, create a video or a podcast on the top ten growing companies based on their findings.
- Students will use digital video/storyboarding for creative writing pieces and poetry.
- Students will compose original lyrics for a "Round". They will develop a copyright, a recording company, and CD covers for their original pieces. Advanced and Honors students will compose their own original melody for this activity. The students will also teach these "rounds" to the students in their respective choral music classes.
- Students will use Publisher to create a CD booklet after studying "A Midsummer's Night Dream" in Language Arts.

II. Communication and Collaboration (4)

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:

- A. Collaborate, publish, and interact with peers, experts, and others employing a variety of digital media and formats.
- B. Communicate information and ideas effectively to multiple audiences utilizing a variety of media and formats.
- C. Develop cultural understanding and global awareness by engaging with learners of other cultures.
- D. Contribute to project teams to produce original works.

Performance Indicators:

Grades K-2

- Gather information and communicate with others using telecommunications, with support from teachers, family members, or student partners.

Lesson Examples

- Collect weather reports from a school in another state or country by communicating with another class (Teacher to access the account and report to students).
- Collect data with a neighboring city school and share class data (suburban vs. urban).
- Classify types of animals using Pixie template (in a small group).

Grades 3-4

- 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 classroom.
- Communicate, interact and work with others outside the district.

Lesson Examples

- Communicate with a school in another country to share and compile data using email/ video conferencing.
- Follow a ship's voyage or present day explorer through a web site. Example – <http://www.beworldwise.org/index.php>

Grades 6-8

- Use telecommunications efficiently and effectively to access remote information; communicate with others in support of direct and independent learning and pursue personal interests.
- 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 classroom.
- Design, develop, publish and present products using technology resources that demonstrate and communicate concepts to audiences inside and outside the classroom.
- Use a variety of online communication tools for collaboration and idea sharing such as email, IM, discussion boards, chats, blogs, and online collaborative environments.
- Communicate information using a variety of online tools, including e-mail; online discussions (e.g., listservs, threaded Web-based discussions, newsgroups); real-time communications (e.g., instant messaging services, chat rooms, IP telephony); desktop teleconferencing; and groupware on the Internet and local area networks.
- Determine best tools for various types of online communication and collaboration.

Lesson Examples

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- Blackboard online collaborative environments for messaging, blogs, chat and collaboration of ideas on subject specific topics.
- Video conferencing with real-world experts.
- Email / video conference with other classes to discuss authentic, real-world issues.
- Make electronic connections with classes in other countries, exchanging information for the purpose of exploring languages and cultures. During the yearlong exchange, schools work together on projects of common interest while students gain a truly international experience and perspective. http://cnets.iste.org/students/pf/pf_keypals.html
- Use the language of mathematics to describe in words a 3-D structure created with one-inch cubes. Interpret a written description of a 3-D structure and re-create it with one-inch cubes. Use QuickTime Virtual Reality (QTVR) technology to represent a 3-D structure made of one-inch cubes. Communicate mathematical ideas with others outside of their classroom. http://cnets.iste.org/students/pf/pf_what_structure.html
- Design your Dream Bedroom - Use metric measurement (including units for area and volume) to perform operations on decimals and percentages in an applied activity; Represent their mathematical problem by using a spreadsheet and drawing or painting software. http://cnets.iste.org/students/pf/pf_design_bedroom.html
- Walk in my Shoes - Assuming the role of a Palestinian, Jew, or Briton, students explore how their assigned group felt about Israel during the time of the formation of the Israeli state. Students research the viewpoints of the Palestinians, the Jews, and the Britons, synthesize the information, and then create a multimedia diary from the group's point of view. A fourth group investigates feelings of people today about the conflict in the Middle East (online communication). This group creates a multimedia diary representing all three points of view. Presentations are delivered to the whole class and followed up with discussion and debate. http://cnets.iste.org/students/pf/pf_walk_shoes.html

Grades 9-12

- Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence).
- Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity.
- Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.

Lesson Examples

- Students can use expert sites such as these:
<http://www.k12science.org/askanexpert2.html> to question, communicate and collaborate in specific subject areas with global experts.
- Have students use appropriate tools listed here to create collaborative environments
<http://school.discovery.com/schrockguide/edtools.html>
- Have students create digital stories or videos to represent their researched ideas in a given area.
- Have an exchange between your class and other classes in a school in your city, state or outside the country.
- Use distance learning to have discourse between two classes either in your school or outside your school to exchange ideas or conduct a class simultaneously.
- <http://www.k12science.org/curriculum/waterproj/index.shtml>

- Students can use Wikis to create and edit information and create an article about a topic; i.e., a novel, a scientific concept, current events, health issue, historic event, etc. They can also discuss these topics via discussion boards or other online means.
- See lesson examples at http://www.cnets.iste.org/students/s_book.html |

III. Research and Information Retrieval (5)

Students access, retrieve, manage, and evaluate information using digital tools. Students:

- A. Locate, organize, analyze, evaluate, synthesize, and use information from a variety of sources and media.
- B. Evaluate and select information sources and technological tools based on the appropriateness to specific tasks.
- C. Process data and report results.

Performance Indicators

Also refer to the information retrieval standards outlined by the library curriculum of 2006. Students begin electronic research in second grade. It is recommended that lessons are developed around the district's online resources (as opposed to commercial search engines and web sites) to ensure grade appropriate reading levels and content. For example, if you plan to do research on insects, choose the insects that are cited in the World Book or Grolier's Online Encyclopedias to see what insects have the best reading level for your students just as you would with choosing research books from the library.

Grades K-2

- Use technology resources effectively for curriculum research projects.

Lesson Examples

- Research an insect, animal (for the ELA non-fiction unit), historical figure, or planet and use the district online subscriptions such as World Book, Grolier's or InfoTrac. Use basic keyword searches. Discuss the importance of parental involvement if students would like to continue research at home.

Grades 3-4

- Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources.

Lesson Examples

- Understand and recognize accuracy and/ or bias of information, ethical, legal and safety implementations of technology by introducing the use of the internet in a webquest.
- Create a presentation using specific websites on an aspect of a country using advanced searches within the district online resources. Use Pixie to integrate sound and pictures.
- Create a persuasive 1 minute podcast using research from the library's online resources for research.

Grades 5-8

- Select and use appropriate technology resources effectively for curriculum research projects.
- Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.
- Present information clearly and persuasively using a range of technology tools and media.
- Appropriately choose from a variety of sources and efficiently scan sources for appropriate information.

- Accurately cite source information from a variety of online sources

Lesson Examples

- Energy Animations: students research a type of energy force and present and illustrate this energy source by creating multimedia animations.
- <http://www.fmschools.org/eagle-hill.cfm?subpage=4058>
- Non-fiction Author Study – in teams, students research various aspects of a non-fiction author. Information is then presented in a webpage or other multimedia application.
- <http://www.fmschools.org/eagle-hill.cfm?subpage=3572>
- Podcasts - Students research a topic and create a song, rap, essay, etc. that provides details about their topic and is persuasive. Songs/readings are recorded as podcasts and posted online.
- <http://www.fmschools.org/eagle-hill.cfm?subpage=3510>
- Virtual Field Trips – students research various aspects of a world country. They then create web pages to create a virtual field trip to that country.
- <http://www.fmschools.org/eagle-hill.cfm?subpage=277>
- Ancient India Webquest - <http://www.fmschools.org/eagle-hill.cfm?subpage=3869>
- Music Around the World Webpages - <http://www.fmschools.org/eagle-hill.cfm?subpage=1546>
- Read and do research in the biography genre to look for common characteristics and actions that make famous people great. Students analyze the person's life for his or her outstanding contributions to society, and then develop a symbol to represent that contribution as part of a grade-level artistic representation of famous people.
- Students develop a project that demonstrates their knowledge of an overview of time, dating from the ancient world to the 21st century. The project requires researching, narrowing a topic, synthesizing and recording material, projecting and predicting change, and constructing a product displaying the results.
http://cnets.iste.org/students/pf/pf_next_millennium.html
- Walk in my Shoes - Assuming the role of a Palestinian, Jew, or Briton, students explore how their assigned group felt about Israel during the time of the formation of the Israeli state. Students research the viewpoints of the Palestinians, the Jews, and the Britons, synthesize the information, and then create a multimedia diary from the group's point of view. A fourth group investigates feelings of people today about the conflict in the Middle East (online communication). This group creates a multimedia diary representing all three points of view. Presentations are delivered to the whole class and followed up with discussion and debate. http://cnets.iste.org/students/pf/pf_walk_shoes.html

Grades 9-12

- Evaluate technology-based options, including distance and distributed education, for lifelong learning.
- Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity.
- Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.

Lesson Examples

- Students use current events to write articles and report on them creating podcasts about their news articles. All stories are current news events.
- Students can create digital stories on any topic in any subject area using video editing software, pictures and a microphone. Students would research their topic via the Internet.

- Students can research an Artist and create their report in the form of a digital story about the artist, a PowerPoint presentation, a web site, etc.
- See lesson examples at http://www.cnets.iste.org/students/s_book.html
- Students will use information retrieval sources to “...engage actively in the construction and interpretation of American history.” See <http://cnets.iste.org/students/pdf/9-12Gettysburg?Address.pdf>

IV. Critical Thinking, Problem-Solving and Decision-Making (6, 3)

Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools. Students:

- A. Identify and define authentic problems and significant questions for investigation and plan strategies to guide inquiry.
- B. Plan and manage activities to develop solutions and complete projects.
- C. Collect and analyze data to identify solutions and make informed decisions.
- D. Use multiple processes and diverse perspectives to explore alternative solutions.

Performance Indicators:

Grades K-2

- Use technology resources (e.g., puzzles, semantic webs, logical thinking programs, writing tools, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories.

Lesson Examples

- Use data to create and display different graphs using Pixie. Decide which graph gives the most meaning.
- Use mapping software, such as Pixie or SmartIdeas, to create a map diagramming major parts of a community and show the interconnectedness.
- Create a story planning map for a fiction story.
- Create math story problems to illustrate algorithms. Use Pixie or KidPix to illustrate the problem.
- Use Investigations 2 Software for logic, graphing and problem solving.

Grades 3-4

- Use technology resources (e.g., calculators, educational software) for problem solving, self-directed learning, and extended learning activities.

Lesson Examples

- Collect, input, organize and manipulate data. Use data to create and display different graphs using Pixie or Excel. Decide which graph gives the most meaning.
- Compare and contrast the United States to other countries of study using concept mapping software (Pixie, SmartIdeas).
- Create a story planning map for a writing project.
- Create a database to answer a question.
- Use Investigations 2 Software for logic, graphing and problem solving.

Example: What categories can I create to organize the extrasolar planets discovered so far? What background does it take to get elected mayor in a small US city? What Asian animals could I put in a petting zoo? How is the color red used in flags?

Grades 5-8

- Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources.
- Select and use appropriate tools and resources to accomplish a variety of tasks.

- Apply productivity and multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.
- Use technology resources (research databases, web tools, software, video, data probes, etc.) for problem solving, self-directed learning, and extended learning activities.
- Effectively read and analyze data presented digitally in the form of tables, charts, graphs, and databases (document literacy).
- Determine what is known and what is needed for problem solving and identify different sources of information, including text, people, video, audio, and databases.
- Identify the essential elements in a problem as well as the interaction between those elements and use electronic tools to facilitate analysis.
- Use the real-world technology tools of field practitioners as a bridge between theory and practice
- Generate charts, tables and graphs using electronic spreadsheets and other graphing programs

Lesson Examples

- Data Analysis Project: students create and administer a survey. Information is entered into a data table and made into various types of graphs. Students create a presentation that displays the various graphs along with an analysis of what is the most and least effective graph for the data they are working with. Possible programs: Excel, PowerPoint, Producer, Video Editing.
<http://www.fmschools.org/eagle-hill.cfm?subpage=4245>
- Problem solving activities that use graphing calculators.
- Organize data in tables, charts, or graphs for analysis and decision making.
- Summarize, analyze and communicate data and results of investigations in a variety of ways, including written reports, graphs, charts, data tables, and oral presentations.
- Use computers to collect, measure, analyze, research, document, and/or communicate data (science probes, tables, charts, spreadsheets, etc.)
- Read, construct, compare, and contrast displays of data using appropriate techniques and technology.
- Use technology to interpret and construct maps, globes, models, charts, and geographic databases.
- Research and write an article for publication in a classroom political newspaper.
- Read and do research in the biography genre to look for common characteristics and actions that make famous people great. Students analyze the person's life for his or her outstanding contributions to society, and then develop a symbol to represent that contribution as part of a grade-level artistic representation of famous people.
- Students use technologies such as spreadsheets, the Internet, and presentation software to represent and solve a problem that involves large numbers, number sense, place value, and the real world. http://cnets.iste.org/students/pf/pf_million_dollar.html
- Use the language of mathematics to describe in words a 3-D structure created with one-inch cubes. Interpret a written description of a 3-D structure and re-create it with one-inch cubes. Use QuickTime Virtual Reality (QTVR) technology to represent a 3-D structure made of one-inch cubes. Communicate mathematical ideas with others outside of their classroom. http://cnets.iste.org/students/pf/pf_what_structure.html
- Pythagorean Theorem Activity - Measure the sides of these various right triangles and record measurements in a spreadsheet. Use spreadsheet to look for possible patterns in the measurements and to square the values of each measurement and look for possible relations among squared values. Generate visual proofs using duplicate cutouts of right triangles and the dynamic software. Search the Web for information on Pythagoras and many different visual proofs investigate the possible generalization of the theorem to other similar shapes drawn on the sides of right triangles using dynamic geometry

- software. Find an estimate for the diagonal distance between two points on opposite sides of their school building. http://cnets.iste.org/students/pf/pf_get_it_right.html
- Teams of students study, chart, and write about the weather and its effects on a particular city, for the month. The team constructs a multimedia presentation of its findings. The class constructs a final project that uses and merges the teams' findings to demonstrate weather patterns around the world.
 - Students develop a project that demonstrates their knowledge of an overview of time, dating from the ancient world to the 21st century. The project requires researching, narrowing a topic, synthesizing and recording material, projecting and predicting change, and constructing a product displaying the results.
http://cnets.iste.org/students/pf/pf_next_millennium.html
 - Walk in my Shoes - Assuming the role of a Palestinian, Jew, or Briton, students explore how their assigned group felt about Israel during the time of the formation of the Israeli state. Students research the viewpoints of the Palestinians, the Jews, and the Britons, synthesize the information, and then create a multimedia diary from the group's point of view. A fourth group investigates feelings of people today about the conflict in the Middle East (online communication). This group creates a multimedia diary representing all three points of view. Presentations are delivered to the whole class and followed up with discussion and debate. http://cnets.iste.org/students/pf/pf_walk_shoes.html

Grades 9-12

- Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence).
- Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity.
- Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity.
- Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.
- Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.
- Use content specific software and simulations (science probes, graphing calculators, virtual manipulatives, web tools, music composition software, mathematics modeling, etc.) to support learning and research.
- Use various digital content and media (research databases, web tools, podcasts) to solve problems and support learning and research.

Lesson Examples

- Use spreadsheets to collect data and graph outcomes, make predictions and report findings.
- Collect data using scientific probes or graphing calculators to make predictions and/or produce findings. Information can be graphed and reported on in various formats like a presentation, a podcast, a website, etc.
- See lesson examples at http://www.cnets.iste.org/students/s_book.html

V. Digital Citizenship (2)

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- A. Advocate and practice safe, responsible use of information and technology.
- B. Exhibit positive attitudes toward technology uses that support collaboration, learning, and productivity.
- C. Demonstrate personal responsibility for lifelong learning.
- D. Exercise proactive leadership for digital citizenship.

Performance Indicators:

Grades K-2

- Work cooperatively and collaboratively with peers, teachers, and others when using technology in the classroom.
- Demonstrate positive social and ethical behaviors when using technology.
- Practice responsible use of technology systems and software.

Lesson Examples

- Discuss appropriate use of technology and continue to have these discussions throughout the year. Focus on the use of the hardware (being patient when a page or program loads, reading pop-up menu directions, and handling CD's).

Grades 3-4

- Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use.
- Demonstrate positive social and ethical behaviors when using technology.
- Practice responsible use of technology systems and software.
- Identify the role of technology in a variety of careers.
- Recognize the ethical and legal implications of plagiarism.
- Discuss the Fayetteville-Manlius Acceptable Use Policy

Lesson Examples

- Create a bibliography for website research to attach to a research project. Discuss the ethical and legal implications of plagiarism of materials.
- Use the Internet Safety WebQuest before using the internet. Review safety issues from the WebQuest throughout the year.
- When using technology throughout the year, refer to the computer as a tool for learning. Discuss how changes in technology impact the workplace.
- Go over the F-M Acceptable Use Policy at the beginning of the year. Discuss proper use of technology in schools and at home.

Grades 5-8

- Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use.
- Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society.
- Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.
- Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
- Understand copyright and cite electronic sources for text, images, video, audio, etc.

- Demonstrate ethical behavior related to security, privacy of server accounts, and passwords. Be aware of files and programs that could be harmful to computers and networks. Understand personal Internet safety issues
- Demonstrate ethical online behavior related to copyright and behavior such as bullying, harassment, and security of personal information
- Follow agreed practices as outlined in the FM Internet Use Agreement form

Lesson Examples

- Netsmartz vignettes and lesson activities - <http://www.netsmartz.org/resources/reallife.htm#realfeathers>
- Internet Safety and Ethics Webquest
- Discussion and review of Internet/network use agreement forms
- Character education activities with discussion on how topics such as bullying relate to online behavior.

Grades 9-12

- Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs.
- Make informed choices among technology systems, resources, and services.
- Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.
- Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information.

Lesson Examples

- Students will be given an Internet Safety survey on 9th grade orientation. The results will be published. Internet safety will be discussed during orientations in the fall.
- Students will be asked to complete a webquest on internet practices
- See lesson examples at http://www.cnets.iste.org/students/s_book.html

VI. Technology Operations and Concepts (1, 3)

Students demonstrate a sound understanding of technology concepts, systems, and operations.

Students:

- A. Understand and use technology systems.
- B. Identify and use applications effectively and productively.
- C. Troubleshoot systems and applications.
- D. Transfer current knowledge to learning of new technologies.

Performance Indicators:

Grades K-2

- Use input devices (e.g., mouse, keyboard, remote control) and output devices (e.g., monitor, printer) to successfully operate computers.
- Communicate about technology using developmentally appropriate and accurate terminology.
- Use developmentally appropriate multimedia resources (e.g., interactive books, educational software, elementary multimedia encyclopedias) to support learning.
- Keyboarding – Input and access text and data using appropriate keyboarding techniques.

Grade 1

Template keyboard in classroom until December. Microsoft Word dictations. *Read, Write and Type.*

Indicators: Feedback from teachers and lab assistants

Grade 2

TTL, JR. December or January – TTL

Assessments after first four lab times (consecutive *TTL, Jr.*) and then the first week of June.

Indicators: TTL Assessment – First week of October and June - Level 9, 7 WPM, 75 % accuracy

Total time using program - 300 minutes

Lesson Examples

- Create non-fiction book covers using Pixie. Insert photographs from file or clip art. Discuss how illustrations and books are mass produced with the technology just as a student could after printing his/her illustration.
- Demonstrate the applications for the keyboarding curriculum using Pixie.
- Type spelling words. Discuss spell check and the red underline. Point out issues with homophones (their, there).

Grades 3-4

- Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively.

Grade 3

TTL

Assessments at the end of the week long lab time (second full week of school) and then the first week of June.

Minutes using TTL will be recorded to compare levels, WPM and accuracy.

Indicators: TTL Assessment – Third week of September and first week of June - Level 10, 15 WPM, 80% accuracy

Total time using program - 400 minutes

Grade 4

Mavis Beacon

Assessments at the end of the week long lab time (first full week of school) and then first week of school using TTL Assessment program.

Indicators: TTL Assessment – First week of school and of June - Level 15, 25 WPM, 85% accuracy

Total time using program – 400 minutes

Student scores will be compared from one year to the next to determine if the curriculum changes have improved over the previous years' curriculum.

- Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.
- Use general purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum.
- Use technology tools (e.g., multimedia authoring, presentation, Web tools, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.
- Determine which technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems.

Lesson Examples

- Use Google Earth to fly to a country of study and visit cities, land formations and neighboring countries. Discuss the use of satellite images in the working world.
- Use Microsoft Word to compose, edit and revise a piece of writing.
- Use presentation software such as PowerPoint to present findings from data collection. Use the table tool.

- Keep a Day In The Life journal using Microsoft Word. For example, after spending a day as a student in colonial times, students can compose two journal entries in the 21st century using the technology, but reflecting on life in the colonial times. Or, compose a journal entry as an explorer in the past and in the future.
- Create a digital storybook using Pixie or PowerPoint. Place it on your web page.
- Apply keyboarding skills by using Microsoft Word, Excel or PowerPoint.

Grades 5-8

- Use keyboards and other devices efficiently and effectively.
- Discuss common technology uses in daily life and the advantages and disadvantages those uses provide.
- Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.
- Demonstrate an understanding of concepts underlying hardware, software, connectivity, and of practical applications to learning and problem solving.
- Troubleshoot tasks and software application questions by successfully using help features and online resources.
- Effectively navigate computer environments and manage and organize electronic files and applications.

Sample Lessons

- Typically general computer and navigation skills will be embedded into projects outlined under other benchmark areas.

Grades 9-12

- Make informed choices among technology systems, resources, and services.
- Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs.
- Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.
- Use content specific software and simulations (science probes, graphing calculators, virtual manipulatives, web tools, music composition software, mathematics modeling, etc.) to support learning and research.
- Use digital content and media to solve problems and support learning and research.

Lesson Examples

- See lesson examples at http://www.cnets.iste.org/students/s_book.html

Lesson Example Disclaimer

The lessons listed are just samples to give you some ideas. Many of you are already teaching projects that meet the technology benchmarks, or have projects where technology could be integrated into the project. Think about what you are doing already first, and then as you are planning instructional units, think about how technology could be used to enhance an existing project and make it more authentic. The benchmarks should be a guide for you when designing any learning experience and will encourage you to use technology tools throughout the learning process. Most lessons you develop will address multiple benchmark areas.

See Lesson Examples of Multidisciplinary Units that address multiple benchmark areas at: http://cnets.iste.org/students/s_book.html

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Appendix 2 – Fayetteville-Manlius District Attributes

The district's 21st Century Learner Attributes describe the qualities F-M students will need to function effectively in a modern world. These attributes are being incorporated into the district's continuous improvement process. The building planning teams are paying close attention to them as they develop their annual educational plans.

Our students will become **Effective Communicators** as evidenced by:

- Mastering skills in listening, speaking, reading, and writing in English and other languages
- Exhibiting appropriate interpersonal skills for effective dialogue
- Collaborating strategically in a technology-rich environment

Our students will become **Global Learners** as evidenced by:

- Understanding and respecting individual and cultural differences
- Seeking out new cultural experiences that broaden perspectives
- Drawing upon the strengths of other cultures
- Collaborating in languages other than English
- Working with others to understand current events and pose solutions for global issues
- Exhibiting positive interpersonal relationships that value multiple languages, cultures, and all persons

Our students will become **Critical Thinkers** as evidenced by:

- Soliciting and considering different points of view prior to decision making
- Evaluating resources in all forms for validity and accuracy
- Applying information and appropriate skills to new contexts/situations
- Articulating solutions to real-world problems that demonstrate a sound rationale

Our students will become **Socially Responsible Citizens** as evidenced by:

- Participating in school and community initiatives
- Exhibiting responsibility for personal well-being and compassion for the well-being of others
- Following the civic principles, ethics, and virtues necessary for sustaining the common good in a democracy
- Understanding the importance of sustaining a healthy planet
- Pursuing a range of interests that exhibit a balance of physical, social, and intellectual activity
- Demonstrating a strong work ethic

Appendix 3 – 21st Century Skills 2p2 site

Core Subjects and 21st Century Themes

Mastery of **core subjects and 21st century themes** is essential to student success. Core subjects

include English, reading or language arts, world languages, arts, mathematics, economics, science, geography, history, government and civics.

In addition, schools must promote an understanding of academic content at much higher levels by weaving

21st century interdisciplinary themes into core subjects:

- **Global Awareness**
- **Financial, Economic, Business and Entrepreneurial Literacy**
- **Civic Literacy**
- **Health Literacy**
- **Environmental Literacy**

Learning and Innovation Skills

Learning and innovation skills are what separate students who are prepared for increasingly complex life

and work environments in today's world and those who are not. They include:

- **Creativity and Innovation**
- **Critical Thinking and Problem Solving**
- **Communication and Collaboration**

Information, Media and Technology Skills

Today, we live in a technology and media-driven environment, marked by access to an abundance

of information, rapid changes in technology tools and the ability to collaborate and make individual

contributions on an unprecedented scale. Effective citizens and workers must be able to exhibit a range of

functional and critical thinking skills, such as:

- **Information Literacy**
- **Media Literacy**
- **ICT (Information, Communications and Technology) Literacy**

Life and Career Skills

Today's life and work environments require far more than thinking skills and content knowledge. The ability

to navigate the complex life and work environments in the globally competitive information age requires

students to pay rigorous attention to developing adequate life and career skills, such as:

- **Flexibility and Adaptability**
- **Initiative and Self-Direction**
- **Social and Cross-Cultural Skills**
- **Productivity and Accountability**
- **Leadership and Responsibility**

<http://p21.org/>

(Partnership for 21st Century Skills, 2013)

**Appendix 4
Technology Survey**

Technology Plan 2011	
Click on any answer below to drill the results down to just those people if necessary.	
Select the top three reasons you use technology in your instruction.	
<i>Multiple Select Option</i>	
Efficiency	91 selected
Motivating to students	130 selected
Prepare students for graduation	12 selected
Prepare students for a global community	57 selected
Improve instruction	150 selected
Meet instructional goals	58 selected
How often do you use a mobile lab or laptops?	
Less than once a month	92 (55.09%)
Daily	34 (20.36%)
Once a week	14 (8.38%)
Once a month	12 (7.19%)
Once every two weeks	8 (4.79%)
Once every three weeks	7 (4.19%)
How often do you use the computer lab?	
Less than once a month	51 (30.54%)
Once a week	51 (30.54%)
Once a month	30 (17.96%)
Once every two weeks	14 (8.38%)
Once every three weeks	11 (6.59%)
Daily	10 (5.99%)
Select the three top priorities you feel the District should designate funds.	
<i>Multiple Select Option</i>	
Mobile Labs	40 selected
Laptops for teachers	86 selected
Small groups of laptops stationed in the classroom	108 selected
Bandwidth	82 selected
Computer Labs	71 selected
Global Communication	28 selected
Web 2.0 Tools	52 selected

Select the two hardware devices you would like to have permanently in your classroom.	
Digital Camera: Document Camera:	37 (22.16%)
Flip Camera: Document Camera:	30 (17.96%)
Digital Camera: Flip Camera:	24 (14.37%)
Document Camera: Web Cam:	18 (10.78%)
Flip Camera: Web Cam:	13 (7.78%)
Document Camera:	12 (7.19%)
Digital Camera:	9 (5.39%)
Digital Camera: Web Cam:	9 (5.39%)
Web Cam:	2 (1.20%)
Web Cam: and microphone	1 (0.60%)
Web Cam: for skype	1 (0.60%)
Web Cam: Vlogs for instruction and student presentations.	1 (0.60%)
Digital Camera: Web Cam: my laptop may have this?	1 (0.60%)
Digital Camera: no Flip Camera: no Document Camera: no Web Cam: no	1 (0.60%)
Digital Camera: use my own Document Camera:	1 (0.60%)
Digital Camera: Flip Camera: Document Camera:	1 (0.60%)
Digital Camera: Flip Camera: currently have	1 (0.60%)
Flip Camera: Document Camera: Web Cam:	1 (0.60%)
Flip Camera: Document Camera: currently have and it is great.	1 (0.60%)
Document Camera: I now have one in my classroom	1 (0.60%)
Document Camera: maybe	1 (0.60%)
Flip Camera:	1 (0.60%)
What other devices/ digital tools do you think teachers should use to support instruction?	
click here to see ALL ANSWERS for this question	28 of 167

Select the top three ways you prefer to learn and practice new technology.

Multiple Select Option

FM Inservice	109 selected
Staff Days	121 selected
BOCES Workshops	25 selected
Conferences	21 selected
Curriculum maps	3 selected
Online courses	29 selected
Blogs,wikis and learning communities	10 selected
Emails from Computer Resource Teachers and Coordinator of Technology	21 selected
Curriculum/ department meetings	58 selected
Individual development time	98 selected

When do you find professional development to be the most helpful?

Early afternoon:	44 (26.35%)
Online:	26 (15.57%)
Summer:	18 (10.78%)
Summer: Early afternoon:	13 (7.78%)
Summer: Evenings:	10 (5.99%)
Online: Early afternoon:	9 (5.39%)
Online: Summer:	8 (4.79%)
Evenings:	6 (3.59%)
Summer: Weekends:	5 (2.99%)
Summer: Evenings: Early afternoon:	4 (2.40%)
Online: Weekends:	4 (2.40%)
Online: Summer: Early afternoon:	3 (1.80%)
Online: Summer: Evenings:	2 (1.20%)
Evenings: Early afternoon:	2 (1.20%)

Weekends:	2 (1.20%)
	1 (0.60%)
Summer: Evenings: Early afternoon: Weekends:	1 (0.60%)
Summer: Evenings: Weekends:	1 (0.60%)
Summer: Evenings: after 4:00pm	1 (0.60%)
Early afternoon: Weekends:	1 (0.60%)
Online: Early afternoon: or after school?	1 (0.60%)
Online: Evenings: Early afternoon:	1 (0.60%)
Online: Summer: Weekends:	1 (0.60%)
Online: 1 Summer: 2 Weekends: 3	1 (0.60%)
Online: sdfgdfgfdg Summer:	1 (0.60%)
Summer: Early afternoon: Weekends:	1 (0.60%)

Appendix 5
Replacement Plan

Equipment	Column1	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
SMARTBoards \$1350														
Elementary Schools			1	5	5	20								X
Middle Schools			1	5	5		30							
High School			1	5	5		25	25						
Color Printers - Labs \$1700														
Elementary Schools					X									
Middle Schools					X									
High School						X								
B & W Printers - Labs \$1500														
Elementary Schools		X										X		
Middle Schools		X										X		
High Schools		X										X		
DESKTOPS \$800														
<i>Secretaries</i>														
HS						X								
WW, EH						X		X						
Elementary						X		X						
<i>Guidance</i>														
HS								X						
WW						X								
EH							X							
Elementary				X								X		
<i>Maintenance</i>						X								
<i>Transportation</i>	X								X					
<i>District Office</i>						X								
<i>Libraries - All</i>								X						
<i>Aides - HS</i>								X						
<i>HS Departments</i>								X						

<i>Classroom Desktop</i>															
Equipment		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Middle Schools			X								X				
High Schools		X								X					
Labs															
HS					Photo		1161A	1161B							
					Art		1120	Theory							
							2130	BroJo							
							CAD								
Middle Schools			X							X					
CAD Labs							X				X				
Elementary Schools				X											
Broadcast Journalism															
Cameras (2)								X							
Teleprompters								X							
Mobile Labs (15000)															
Replace when needed if more than \$100 to repair until 2014															
Elementary			1 lab										X		
Middle Schools			2 labs				1, WW						X		
High School			5 1/2										X		
Classroom Laptops Netbooks \$500															
Elementary						ER	MR, FE								
Middle Schools							EH	30							
High School							64 Misc								
Wireless \$350000								X							
Phones	X														
Servers 4@ \$12000 each							X								
Exchange Software \$11000								X							

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Exchange Server \$14000								X						
SAN \$28,000							X							
VMWare \$43,000							X							
Backup \$6600							X							

Appendix 6 Equipment Assessment

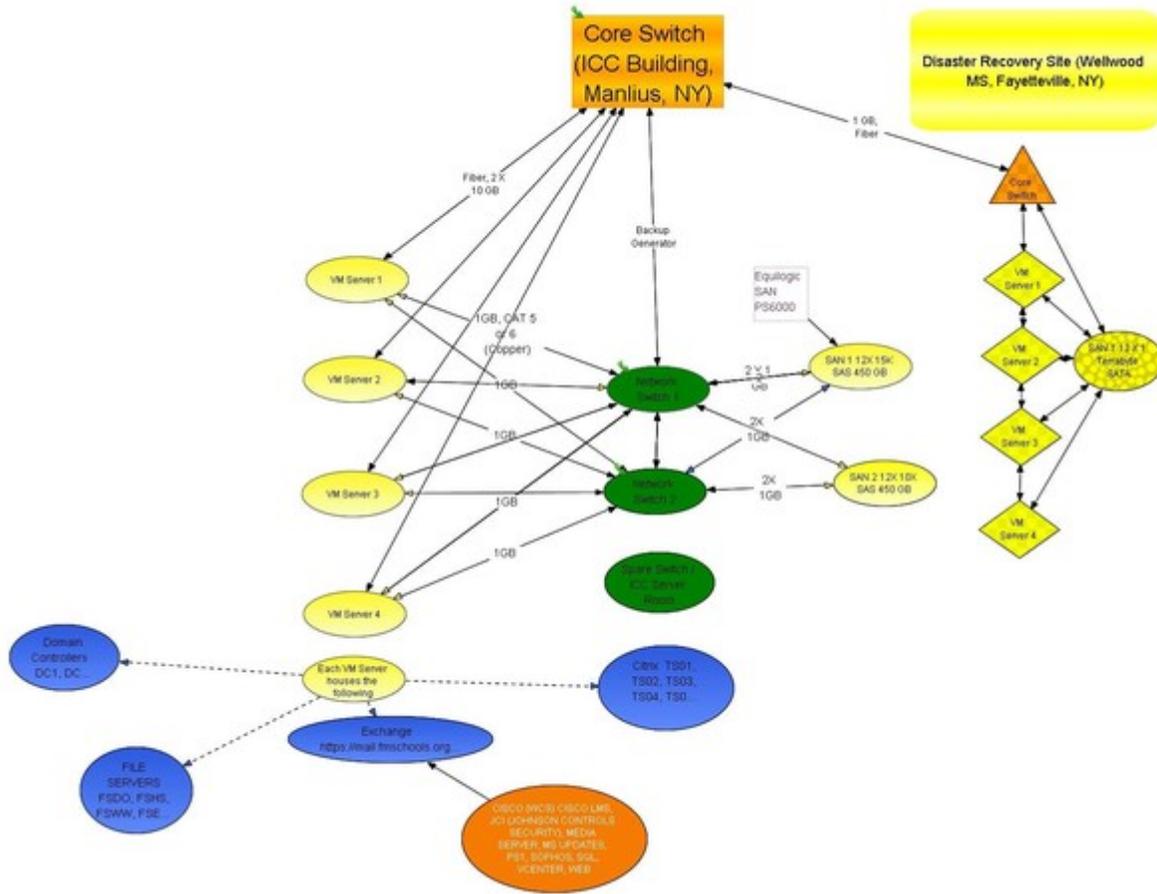
Hardware	FM HS	WW	EH	MR	FE	ER
Number of Students	1617	687	733	412	499	556
Percent of Teachers with computers	100	100	100	100	100	100
Percentage of laptops for administrators	100	100	100	100	100	100
Percentage of laptops for teachers *Includes loaner laptops at each school	29 %	47 %	45 %	51 %	68 %	65 %
Percentage of teachers with a smartboard	98	99	99	100	100	100
Number of LGIs	3	1	1	0	0	0
Number of computer labs/Total Computers in labs	6/ 209	4/ 100	4/100	1/ 28	1/28	1/28
Number of desktop computers in libraries	60	17	20	10	12	11
Number of laptops/ netbooks	180	105 (4 labs) +24 inclusion=129	75 (3 labs)+ 42 + 12 inclusion rooms + 10 departments=139	64	64	81
Ratio of students to computers	3:1	5:1	3:1	4:1	5:1	4.6:1
Number of Mobile Labs	5	2	4	1	1	1
Number of digital cameras in the building	50	33	24	10	11	9
Number of video cameras in the building	71	40	36	25	31	26

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Number of Document Cameras	25	20	20	19	19	21
Number of web cams in building	20	20	20	20	20	20
Number of professional video conferencing appliances	1	1	1	1	1	1
GPS Devices	60	15	15	0	0	0
iPod Touch	0	30	30	0	0	0

*Laptops in classrooms: Elementary Schools: 5 in each kindergarten room, 6 in each 4th grade room, EH 2 inclusion, 4 department, WW 4 inclusion, 2 grade levels, HS, 60 dispersed according to need

Appendix 7 Infrastructure



Appendix 8

New Technology Request Process

1. Fill out New Technology Request Form found online on the Technology Department web page.
2. Submit request form to Computer Resource Teacher.
3. Request is reviewed with the teacher, Coordinator of Technology and Computer Resource Teachers for:
 - a. support of the District Computer Benchmarks.
 - b. support of Technology Plan.
 - c. longevity/ life span (Will the technology be outdated in two years?).
4. Requestor to present technology to the Technology Committee.
5. Technology is purchased as a pilot.
6. Technology Committee recommends the technology to DCC and the board of education.
7. Requestor helps develop implementation plan and training.

Form

Name of Technology Requested _____

Contact Information

Provide a summary of how technology would be integrated into instruction.

Describe the areas from the Technology Plan and District Benchmarks that this technology supports.

What makes this exceptional that no other item could do in regards to instruction?

Please email this to your computer resource teacher and carbon copy the request to your principal and the Coordinator of Technology.