

Muscatine Community School District

Technology Plan

History of Technology Plan 1996 - 2016

In 1996, this committee wrote a vision statement, "A networked computer in every classroom by the year 2000: make it happen!" Although some doubted whether or not we could pull this off, we did! The State Technology Funds, The Roy J. Carver Charitable Trust and tremendous community support enabled us to wire all the buildings, install labs, and purchase computers for all of our classrooms. Classroom teachers wrote technology standards and benchmarks and made plans to carry them out within the classrooms. Appropriate educational software was analyzed, purchased, and installed. Hundreds of teachers were trained by New Horizons in Davenport, as well as by local trainers. In fact, in the year 2000, the Ohana Foundation named the Muscatine Community School District "Best Integrated Technology District in the State of Iowa".

MCSD Technology Timeline

1994 - 1997

- Established a wide area network (WAN) and modern local area networks in each building.
- Began publishing minimum hardware specifications and developed acceptable use policies.

1999

• Implemented SASIxp student accounting software district-wide

2000 - 2004

- Technology standards and benchmarks were written and approved by the board on July 10, 2000. Technology is integrated into every curricular area.
- Computer labs emerged at each building and software was used to augment the learning process (Novanet, Successmaker, Accelerated Reader etc.)
- The infrastructure and network speed was enhanced through installation of Muscatine Power and Water's cable modem technology.
- Doubled speed of connection between the district and AEA
- Computer lab and server replacement cycles were developed.

2005 - 2008

- Substantial growth in the amount of computers district-wide
- Network hardware in all buildings upgraded
- Wireless networking began to complement existing infrastructure
- Mobile laptop carts were put to use in all secondary buildings for use with Cognitive Math
- Many legacy software packages began migrating towards web-based applications (i.e. Web IEPs, PowerSchool, WebSmartt, Renaissance Place)
- New online resources (i.e. United Streaming, EBSCO)
- Many traditional textbooks now include online components
- Incorporation of technology into the district professional development plan ...

2008 - 2014

- Provided Google accounts to all staff members 2009
- Provided Mac laptops to all staff 2010

- Provided inservice technology training to each building monthly on Google accounts and Mac applications
- Annually have sent teachers to technology workshops and conferences
- Hired Technology Integrationist in 2010 to help implement technology in classrooms
- Implemented a 1:1 initiative grades 6-12 in 2011
- Purchased portable labs containing 50 Mac laptops and 50 iPads for each elementary building in 2011
- Created STEM classrooms in grades 6-12
- Now offer a variety of computer engineering and computer programming classes at the High School level
- Digital Imaging and Multi-media courses have been added to the curriculum at the high School
- Implemented a Digital Citizenship and Technology Curriculum for K-12
- Increased district wide infrastructure and increased wireless capabilities as well as increased district internet bandwidth to 400 Mb
- Evaluated hardware available in all buildings, attempted to increase the equity of technology for all students

2015

Refreshed grades 6-8 with Dell Chromebooks

2016

- Increased district internet bandwidth to 1 Gb and building intranet bandwidth to a min of 100 Mb to core network
- Refreshed grades 9-12 with Dell Chromebooks
- Re-issued 11" Macbook Airs previously part of the 9-12 1:1 initiative to grades 3-5; Elementary buildings used existing carts of 11" Macbook carts for grade 2 --- MCSD is now 1:1 grades 2-12.
- MCSD implemented new K-5 ELA curriculum (Journeys) including a rich online component through ThinkCentral.

MCSD Digital Citizenship and Technology Curriculum

Developed in 2015

K-2 Digital Citizenship

K-2 Digital Citizenship

Students understand and practice appropriate and safe uses of technology

Technology

Students use technology to create projects, identify patterns, and make predictions.

Students use a variety of technology tools and media-rich resources to work collaboratively with others.

Students utilize predetermined digital resources and tools to answer questions or solve problems

Students use technological resources to investigate given questions or problems.

Understand basic technology hardware and software and their application.

Kindergarten:

Digital Citizenship

- Students state reasons why not to use first and last names online (Lesson Plan: <u>"Keep it Private"</u> Assessment: <u>"Keep it Private"</u> Teacher Presentation: Google Presentation)
- Students will understand three ways to stay safe when using the internet (lesson plan: <u>"Going Places Safely"</u>
 Assessment: <u>"Going Places Safely"</u> Teacher Presentation: <u>Google Presentation</u>)
 - o Always go places with an adult
 - Don't wander off on your own
 - Talk only with people you know

Technology

- Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology(iste.nets.s- standard 1)
- Students identify a URL
- Students log into a technology device or website
- Students use a mouse/trackpad or touchscreen to manipulate a cursor
- Students recognize that different icons represent different applications using teacher selected games and activities
- Students launch and quit programs
- Students work independently or with a partner on a technology device
- Students know appropriate ways to handle hardware and equipment

1st Grade

Digital Citizenship

- Students explain why there are logins and passwords on digital devices and websites (lesson plan: "Powerful Passwords" Assessment: "Powerful Passwords" Teacher Presentation: Google Presentation)
- Students generate safe usernames (lesson: "<u>Powerful Passwords</u>" Assessment: "<u>Powerful Passwords</u>")
- Students explain appropriate actions when using the internet. (lesson plan: "Show Respect Online" Assessment: "Show Respect Online" Teacher

Presentation: Google Presentation

 Students demonstrate to others how to use technology tools to assist learning. (lesson plan: "My Online Community" Assessment- "My Online Community" Teacher Presentation: Google Presentation

Technology

- Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology(iste.nets.s- standard 1)
- Students identify different types of domain names (.com, .org, .gov, etc.)
- Students use basic output devices (headphones, speakers, etc.)
- Students demonstrate how to clean screens appropriately (Use a soft, dry, lint-free cloth in most cases when cleaning the device. If necessary, the cloth may be dampened slightly to assist in the cleaning areas that do not appear to be coming clean with the dry cloth.)
- Students identify the home screen, applications, launching and closing of applications on a tablet device.
 Assessment

2nd Grade Digital Citizenship

- Students will describe why stealing the work of others is the same as stealing tangible items. (lesson: "My Creative Work" Assessment- "My Creative Work")
- Students identify ways to protect identity when contributing information online (lesson: "My Creative Work" Assessment-"My Creative Work")
- Students identify situations when an adult should be notified for assistance (device issues and/or inappropriate results) (please refer to the 1:1 handbook on appropriate use)
- Students demonstrate to others how to use technology tools to assist learning. (lesson: "<u>Screen out the Mean</u>" Assessment: "<u>Screen out the Mean</u>") Teacher Presentation: <u>Google Presentation</u>

- Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology collaboratively within a group.(iste.nets.sstandard 1)
- Students will save work to a specified location
- Students will use word processing skills to share an original writing or presentation with school members or the

- community.
- Students will appropriately search for content on the Iowa AEA Online (BookFLIX, Britannica Online, Kids InfoBits through GALE)
- Students will recognize the difference between hardware, software, applications, and web based tools.
 <u>Assessment</u>

3-5 Digital Citizenship

3-5 Digital Citizenship

Students understand and practice appropriate, legal, and safe uses of technology for lifelong learning.

Technology

Students use technology resources to create original products, identify patterns and problems, make predictions and propose solutions.

Students use interactive technologies in a collaborative group to produce digital presentations or products in a curricular area.

Students utilize digital tools and resources to investigate real-world issues, answer questions, or solve problems.

Students use technological resources to develop and refine questions for investigation.

3rd Grade Digital Citizenship

- Students understand creative credit and copyright (lesson: <u>Whose is it, Anyway?</u>" Assessment: <u>Whose is it, Anyway?</u>)
- Students explain ways identity is protected and shared online (lesson plan: "Private and Personal Information" Assessment: "Private and Personal Information" Teacher Presentation: Google Presentation
- Students will consider information a stranger could find online (lesson plan: "Private and Personal Information" Assessment: "Private and Personal Information" Teacher Presentation:
- Students show others how to use technology that assists learning (lesson: "<u>The Key to Key Words</u>")
 Assessment: "<u>The Key to Key Words</u>")

Technology

- Students recognize menus/toolbars and their uses
- Students use word processing skills to manipulate and change text
- Students use a keyboard to maneuver or complete projects on technology devices
- Students use proper fingering of home row keys to develop speed and accuracy
- Students create a multimedia presentation in a collaborative group
- Students create and access shared files and collaborate with others through their google account Assessment

4th Grade Digital Citizenship

- Students protect personal information of others when publishing online and give credit to owner of visual media (Lesson: "Rings of Responsibility" Assessment: "Rings of Responsibility")
- Students use technology responsibly to explore and pursue personal interests (lesson: <u>"Super Digital Citizen"</u>
 Assessment: <u>"Super Digital Citizen"</u>)

- Students identify the positive value of technology
- Students understand the use of multiple windows, tabs, and

Students understand technology hardware and software system operations and their application.

desktops

- Students create a multimedia presentation to be shared with community
 - presentation follows a professional etiquette
 - one transition
 - complimentary colors
 - readability
 - visual graphic
 - hyperlink
 - citation of sources
 - variety of text that flows nicely
- Students key alphabet accurately and confidently
- Students conduct internet searches using educational search engines and databases
- Students explore google drive and google calendar for creation and organization Assessment

5th Grade

Digital Citizenship

- Students describe consequences when people do not protect personal information when using social networking tools (Lesson: "Talking Safely Online" Video: Internet Safety Assessment: "Talking Safely Online")
- Students recognize digital resources that are copyright free (online databases)
- Students demonstrate use of the research tool in Google documents and use of citation tools within online databases to give credit for information used
- Students describe how communication changes online versus face-to-face (Lesson: "What is Cyberbullying?" Video: Cyberbullying Virus Video: Stand Against Bullying:Don't Be a Bystander Assessment: "What is Cyberbullying?")

- Students choose the appropriate technology tool to accomplish a particular task
- Students apply advanced formatting tools
- Students key letters and numbers at a productive speed
- Students demonstrate proficiency in using google drive and google calendar in order to prepare for the 1:1 implementation.
 - Students demonstrate the use of the Google calendar as a resource for assignments and appointments
 - Students demonstrate the use of Google Drive by

- sharing documents, presentations, spreadsheets, and forms in a collaborative effort.
- Students use Google Drive as an organizational tool to house assignments, homework, and projects with the use of folders and labels.
- Students explore bookmarking and highlighting within Mackinvia

<u>Assessment</u>

6-8

Digital Citizenship

Students understand the legal and ethical issues as related to individuals, cultures, and societies

Technology

Students demonstrate creative thinking in the design and development of innovative technology products and problem solving

Students collaborate with peers, experts, and others using technology.

Students plan strategies utilizing digital tools to gather, evaluate, and use information.

Students use critical thinking skills to conduct research, solve problems, and make informed decisions using appropriate technological tools and

Grade 6

Digital Citizenship

- Students recognize copyright law, understand plagiarism and fair use
 - * Copyright Law lesson: Whose is it, Anyway?
 Assessment: "Whose is it, Anyway?"
 - * Fair Use lessons: "A Creator's Rights", "A Creator's

Responsibilities"

Assessments: "A Creator's Rights"

"A Creator's Responsibilities"

* Plagiarism lesson: "Creative Credit"

Technology

- Students use quick fix tips to troubleshoot basic computer errors
 - reboot computer
 - press command-option-escape to force quit when application isn't responding
 - o turn on and off wireless
 - o look for updates in Self-Service
- Students explore organizational tools to help with personal learning styles
 - calendars
 - stickies
 - highlighting text
- Students use online collaboration tools to complete a task
- Students collaborate through electronic communications to explore, share, and publish with other learners
- Students key with effective rate and accuracy
- Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology collaboratively within a group (iste.nets.sstandard 1)

Assessment

Grade 7

Digital Citizenship

- Students choose settings in account profiles that protect personal information when online and understand concept of a digital footprint
 - * Protecting Info lesson plan: <u>"Scams and Schemes"</u>
 Assessment: <u>"Scams and Schemes"</u>
 Teacher presentation: Google Presentation

resources

Students understand the underlying structure and application of technology systems

- * Cummulative lesson: "Privacy"
- * Digital Footprint lesson "Trillion Dollar Footprint"
 Assessment: "Trillion Dollar Footprint" Teacher

Presentation: Google Presentation

Technology

- Students explore organizational tools to help with personal learning styles
 - speech features for text
 - managing desktops
- Students use online collaboration tools to complete a task
- Students collaborate through electronic communications to explore, share, and publish with other learners
- Students key with effective rate and accuracy
- Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology collaboratively within a group (iste.nets.sstandard 1)

Assessment

Grade 8

Digital Citizenship

- When Students interact and collaborate with peers, experts, and others they follow the rules of digital etiquette
 - * Cyberbullying lessons: <u>"Be Upstanding"</u>, "Crossing the Line"

Assessments: "Be Upstanding", "Crossing the Line"

* Digital Passport lesson "Cyberbullying Virus Evolve"

Technology

- Students use online collaboration tools to complete a task
- Students collaborate through electronic communications to explore, share, and publish with other learners
- Students key with effective rate and accuracy
- Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology collaboratively within a group (iste.nets.sstandard 1)

Assessment

9-12

Digital Citizenship

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to learning of others

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology

Technology

Students apply digital tools to gather, evaluate, and use information

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

Students demonstrate critical thinking skills using appropriate tools and resources to plan and conduct research, manage products, solve problems, and make informed decisions

Grades 9 Digital Citizenship

- 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 (Lesson: "Digital Life 102")
 Assessment: "Digital Life 102")
- Students explain the impact of digital footprint to both personal and professional settings (Lesson: "Oops! I Broadcast it on the Internet" Assessment: "Oops! I Broadcast it on the Internet")
- Students identify the intellectual property rights of personal content (Lesson: "Rights Remixes and Respect")
 Assessment: "Rights Remixes and Respect")

Technology

- Students choose appropriate technology tools to create digital content for information and expression
- Students apply digital tools to gather, evaluate, and use information
- Students utilize a working knowledge of technology and technology support services to identify problems/issues and solutions

Assessment

Grade 10

Digital Citizenship

(All benchmarks will be assessed using Common Sense Media unit assessments and further instruction will be determined based on the results. Pre-assessment)

- 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 explain the impact of digital footprint to both personal and professional settings
- Students identify the intellectual property rights of personal content

- Students choose appropriate technology tools to create digital content for information and expression
- Students apply digital tools to gather, evaluate, and use information

 Students utilize a working knowledge of technology and technology support services to identify problems/issues and solutions

Assessment

Grade 11

(No direct instruction will be given, however students will be expected to apply all standards and benchmarks in their daily curricular work.)

Digital Citizenship

- 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 explain the impact of digital footprint to both personal and professional settings
- Students identify the intellectual property rights of personal content

Technology

- Students choose appropriate technology tools to create digital content for information and expression
- Students apply digital tools to gather, evaluate, and use information
- Students utilize a working knowledge of technology and technology support services to identify problems/issues and solutions

Assessment

Grade 12

(No direct instruction will be given, however students will be expected to apply all standards and benchmarks in their daily curricular work.)

Digital Citizenship

- 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 explain the impact of digital footprint to both personal and professional settings
- Students identify the intellectual property rights of personal content

- Students choose appropriate technology tools to create digital content for information and expression
- Students apply digital tools to gather, evaluate, and use information

	Students utilize a working knowledge of technology and technology support services to identify problems/issues and solutions Assessment
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