

Mount Pleasant CSD

Technology Benchmarks

Common Core Technology Integration

This document aligns the International Society for Technology in Education (ISTE) Standards with the Common Core State Standards, grade-level benchmarks, and suggested technology resources to support critical thinking skills in the 21st Century.

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(Adopted and Modified with Permission from [USD 473 Technology Plan/Common Core Technology Integration](#))

Ninth and Tenth Grade

Common Core Reading for Information Standard 7: Analyze various accounts of a subject told in different mediums (e.g., a person’s life story in both print and multimedia), determining which details are emphasized in each account.

Technology Standards	Technology Integration	Suggested Resources
<p>2. <i>Communication and collaboration</i> 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.</p> <p>3. <i>Research and information fluency</i> Students apply digital tools to gather, evaluate, and use information</p> <p>4. <i>Critical thinking, problem solving, and decision making</i> Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</p> <p>6. <i>Technology operations and concepts</i> Students demonstrate a sound understanding of technology concepts, systems, and operations.</p>	<ul style="list-style-type: none"> ● Students independently access and use information from a wide variety of online sources. ● Identify examples of accurate and inaccurate information found online. ● Determine the author's purpose prior to selecting an online resource, i.e., inform, persuade, entertain, etc. ● Realize that conflicting facts are found in different sources and understands the terms accurate, relevant, bias, and comprehensive. ● Recognizes facts, opinions, and point of view and sometimes determines when it is appropriate in one's own work. 	<ul style="list-style-type: none"> ● School Library resources <ul style="list-style-type: none"> ○ Library catalog ○ Subscription databases ○ Follett eBooks ○ Gale eBooks ● Mount Pleasant Public Library ● Google Advanced Search

Ninth and Tenth Grade

Common Core Writing Standard 7: Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Common Core Writing Standard 8: Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

Common Core Writing/History, Science & Tech Standard 8: Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

Common Core Writing Standard 2a: Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

Technology Standards	Technology Integration	Suggested Resources
<p>3. <i>Research and information fluency</i> Students apply digital tools to gather, evaluate, and use information</p> <p>5. <i>Digital citizenship</i> Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p>	<ul style="list-style-type: none"> ● Students independently access and use information from a wide variety of online sources. ● Find, evaluate, and select appropriate online sources to answer questions on their own. ● Decipher between primary and secondary sources found on the Internet. ● Recognize alternative systems for organizing and accessing information. (e.g., archives, government sources, digital collections, databases, Google Scholar, etc.) ● Independently refines electronic searches as needed. ● Constructs appropriate bibliographic citations for research papers including all required formatting. 	<ul style="list-style-type: none"> ● School Library resources <ul style="list-style-type: none"> ○ Library catalog ○ Subscription databases ○ Follett eBooks ○ Gale eBooks ● Mount Pleasant Public Library ● Google Advanced Search ● Google Scholar ● BooLify ● Noodletools ● Purdue OWL Formatting and Style Guide

Ninth and Tenth Grade

Common Core Writing Standard 6: Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information and to display information flexibly and dynamically.

Common Core Writing/History, Science, and Technology Standard 6: Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information and to display information flexibly and dynamically.

Common Core Speaking & Listening Standard 5: Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

Technology Standards	Technology Integration	Suggested Resources
<p>2. <i>Communication and collaboration</i> 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.</p> <p>5. <i>Digital citizenship</i> Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p> <p>6. <i>Technology operations and concepts</i> Students demonstrate a sound understanding of technology concepts, systems, and operations.</p>	<ul style="list-style-type: none"> ● Students will explore and use a wide range of technology tools available. ● Peer-evaluate each other’s products in Google Docs and provide feedback by effectively utilizing the Comments section. ● Gather information from an online collaboration site and compile the results for others to view. ● Use iMovie or other video editing software to produce a short video based off of a lesson. ● Respect copyright/intellectual property rights of creators and producers and follow the ethical and legal guidelines in gathering and using information. 	<ul style="list-style-type: none"> ● Google Drive ● Windows Live Movie Maker ● Flip Video Camera ● iPads ● Web 2.0 (e.g. VoiceThread, Animoto, Glogster, Prezi)

Ninth and Tenth Grade

Common Core Reading Standard 7: Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.

Technology Standards	Technology Integration	Suggested Resources
<p>3. <i>Research and information fluency</i> Students apply digital tools to gather, evaluate, and use information</p> <p>4. <i>Critical thinking, problem solving, and decision making</i> Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</p>	<ul style="list-style-type: none"> ● Students will explore and use a wide range of technology tools available. ● Use government online data to analyze and make predictions (e.g., the federal census records to analyze ethnic diversity). ● Analyze graphs and charts to assist in the development of research projects. 	<ul style="list-style-type: none"> ● U.S. Census Online ● School Library resources <ul style="list-style-type: none"> ○ Library catalog ○ Subscription databases ○ Follett eBooks ○ Gale eBooks ● Mount Pleasant Public Library ● Google Advanced Search ● Google Scholar

Common Core Speaking & Listening Standard 2: Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.

Technology Standards	Technology Integration	Suggested Resources
<p>2. <i>Communication and collaboration</i> 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.</p> <p>3. <i>Research and information fluency</i> Students apply digital tools to gather, evaluate, and use information</p> <p>4. <i>Critical thinking, problem solving, and decision making</i> Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</p>	<ul style="list-style-type: none"> ● Students will explore and use a wide range of technology tools ● Demonstrate adaptability by changing the inquiry focus, questions, resources, or strategies when necessary to achieve success when searching online. ● Display emotional resilience by persisting in information searching despite challenges. ● Display persistence by continuing to pursue information online to gain a broad perspective. ● Utilize interviews and sources to collaborate and share information using multiple sources of technology. 	<ul style="list-style-type: none"> ● School Library resources <ul style="list-style-type: none"> ○ Library catalog ○ Subscription databases ○ Follett eBooks ○ Gale eBooks ● Mount Pleasant Public Library ● Windows Live Movie Maker ● Flip Video Cameras ● iPads ● Google Advanced Search ● Google Scholar ● Skype

Ninth and Tenth Grade

Mathematical Practices 1: Make sense of problems and persevere in solving them.

Mathematical Practices 2: Reason abstractly and quantitatively.

Mathematical Practices 3: Construct viable arguments and critique the reasoning of others.

Mathematical Practices 5: Use appropriate tools strategically.

Technology Standards	Technology Integration	Suggested Resources
<p>1. <i>Creativity and innovation</i> Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.</p> <p>4. <i>Critical thinking, problem solving, and decision making</i> Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</p>	<ul style="list-style-type: none"> ● Students will employ curriculum specific simulations to practice critical thinking processes. ● Students will develop a problem solving portfolio where they solve various problems using their appropriate mathematical level, using multiple perspectives to solve a problem focused on several problem solving strategies throughout the course of the year. ● Students will develop skills to argue and persuade others on the process used to solve their problem. 	<ul style="list-style-type: none"> ● Graphing Calculator ● Wikispaces ● Google Drive

Mathematical Practices 4: Model with mathematics. Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace.

Mathematical Practices 5: Use appropriate tools strategically. Mathematically proficient students consider the available tools when solving a mathematical problem.

Technology Standards	Technology Integration	Suggested Resources
<p>3. <i>Research and information fluency</i> Students apply digital tools to gather, evaluate, and use information</p> <p>6. <i>Technology operations and concepts</i> Students demonstrate a sound understanding of technology concepts, systems, and operations.</p>	<ul style="list-style-type: none"> ● Students will select digital tools or resources to use for a real-world task and justify the selection based in their efficiency and effectiveness. ● Use observations, simulations, surveys and experiments to record data. ● Problem Solving may not involve the outside world, were mathematical modeling begins with a situation in the real world for which we wish to understand. 	<ul style="list-style-type: none"> ● Graphing Calculator ● Geometer's Sketchpad ● Venier Probes ● Fathom

Eleventh and Twelfth Grade

Common Core Reading for Information Standard 7: Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

Technology Standards	Technology Integration	Suggested Resources
<p>2. <i>Communication and collaboration</i> 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.</p> <p>3. <i>Research and information fluency</i> Students apply digital tools to gather, evaluate, and use information</p> <p>4. <i>Critical thinking, problem solving, and decision making</i> Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</p> <p>6. <i>Technology operations and concepts</i> Students demonstrate a sound understanding of technology concepts, systems, and operations.</p>	<ul style="list-style-type: none"> ● Students will explore and use a wide range of technology tools available. ● Utilize sources inside and outside of the school setting to obtain information. (i.e., library databases, ebooks, public library online tools) ● Locate and use online applications successfully (e.g., educational applications, scholarships, job applications, etc.) 	<ul style="list-style-type: none"> ● School Library resources <ul style="list-style-type: none"> ○ Library catalog ○ Subscription databases ○ Follett eBooks ○ Gale eBooks ● Mount Pleasant Public Library ● Google Advanced Search ● Google Scholar ● Naviance

Eleventh and Twelfth Grade

Common Core Writing Standard 2a: Introduce a topic; organize complex ideas, concepts and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful in aiding comprehension.

Common Core Writing/History, Science & Tech Standard 6: Use technology, including the internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

Common Core Speaking and Listening Standard 5: Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

Technology Standards	Technology Integration	Suggested Resources
<p>1. <i>Creativity and innovation</i> Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.</p> <p>2. <i>Communication and collaboration</i> 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.</p> <p>5. <i>Digital citizenship</i> Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p>	<ul style="list-style-type: none"> ● Students will understand the ethical, cultural, and societal issues related to technology. ● Use knowledge and information skills and dispositions to engage in public conversation online and debate around issues of common concern. ● Practice responsible usages of technologies (e.g., download legally, install licensed software, adhere to copyright restrictions and appropriately cite your sources.) ● Understand that ethical considerations are important in the development, selection, and use of technologies. ● Demonstrate personal productivity by completing projects to express learning. ● Debate the ethical considerations involved in the development or deployment of new technologies. (privacy laws, cyberbullying, security) ● Present information quickly and clearly in a graphical manner 	<ul style="list-style-type: none"> ● Word/Google Document ● Excel/Google Spreadsheet ● PowerPoint/Google Presentation ● Publisher ● Windows Live Movie Maker ● Flip Video Camera ● iPads ● Web 2.0 tools (i.e. Animoto, Blogger, Glogster, Prezi, VoiceThread, Wikispaces) ● Noodletools

Eleventh and Twelfth Grade

Common Core Writing Standard 7: Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Common Core Writing/History, Science & Tech Standard 8: Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and over-reliance on any one source and following a standard format for citation.

Technology Standards	Technology Integration	Suggested Resources
<p>3. <i>Research and information fluency</i> Students apply digital tools to gather, evaluate, and use information</p> <p>5. <i>Digital citizenship</i> Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p>	<ul style="list-style-type: none"> ● Students will use technology tools to enhance learning, increase productivity, and promote creativity. ● Demonstrate mastery of technology tools to access information and pursue inquiry. ● Demonstrate confidence and self-direction by making independent choices in the selection of online resources and information. ● Analyze and integrate information and ideas from personal experiences found in personal blogs, opinion pages, personal essays, etc. ● Cite your sources according to accepted formats 	<ul style="list-style-type: none"> ● School Library resources <ul style="list-style-type: none"> ○ Library catalog ○ Subscription databases ○ Follett eBooks ○ Gale eBooks ● Google Advanced Search ● Google Scholar ● Noodletools ● Purdue OWL Formatting and Style Guide

Eleventh and Twelfth Grade

Common Core Reading for Literacy in Science and Technical Subjects Standard 7: Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

Common Core Reading in History Standard 7: Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

Common Core Speaking & Listening Standard 2: Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

Technology Standards	Technology Integration	Suggested Resources
<p>2. <i>Communication and collaboration</i> 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.</p> <p>3. <i>Research and information fluency</i> Students apply digital tools to gather, evaluate, and use information</p> <p>4. <i>Critical thinking, problem solving, and decision making</i> Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</p>	<ul style="list-style-type: none"> ● Students will use a variety of technology tools to enhance learning and understanding. ● Maintain a critical stance by questioning the validity and accuracy of all information. ● Monitor gathered information and assess for gaps or weaknesses. ● Recognizes that the style of format has an effect on the content. ● Identify capabilities and limitations of contemporary and emerging technology resources to address lifelong learning and workplace needs. ● Understand the importance of diverse information and access to information in a democratic society. ● Understands and is able to articulate the development of technology which may be influenced by societal opinions and demands, in addition to corporate cultures. ● Contrast ethical considerations and how they are important in the development, selection and use of technology. ● Independently demonstrates the knowledge and skills to analyze synthesize and evaluate information on more complex topics from multiple sources and multiple formats to create new meaning. 	<ul style="list-style-type: none"> ● School Library resources <ul style="list-style-type: none"> ○ Library catalog ○ Subscription databases ○ Follett eBooks ○ Gale eBooks ● Mount Pleasant Public Library ● Google Advanced Search ● Google Scholar ● Skype

Eleventh and Twelfth Grade

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