

Technology/Library/Media Literacy Standard One

Students demonstrate an understanding of the basic operations of technologies and recognize that media messages are constructed using specific techniques, which manipulate sound, image, text and movement to convey meaning.

Rationale:

Students need to construct a base of technical skills in order to be competent and confident users of technology. These basics will assure safe and efficient operation as students apply technology.

Media messages are representations of reality, rather than reality itself, but they affect people in very real ways. In order to understand messages sent through media and their ultimate impact on society, students need to realize that media messages are created with a specific goal or purpose in mind. Each form of media, whether newspaper, television or computer games, has its own unique “language” in which sounds, images, text and movement are manipulated to create the message. When students understand who creates the media messages and how the messages are created, they are less susceptible to manipulation by the media and are better able to enjoy media and use it effectively.

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Recognize targeted audiences and messages in media.	Critique established media forms.	Create and display a media message targeted to a specific audience.	M: Benchmark 1a: Evaluate and compare how media forms, content, and products are constructed for specific audiences.
Demonstrate knowledge of skills and procedures needed to operate various technologies. (e.g., Web browser)	Apply knowledge of skills and procedures to present. (e.g., PowerPoint)	Demonstrate skills and procedures as needed to operate various technologies.	M: Benchmark 1b: Use and enhance an established repertoire of skills and procedures as needed to operate various technologies.
Model the problem-solving sequence to solve technical problems.	Use problem-solving strategies to troubleshoot various equipment and software operations problems.	Use troubleshooting strategies to solve more complex problems.	M: Benchmark 2: Use and refine troubleshooting strategies to solve technical operations problems.
Demonstrate some terminology and basic care and maintenance of basic systems.	Demonstrate competence with tool set-up.	Continue to demonstrate and expand in all areas.	M: Benchmark 3: Demonstrate competence with basic system and tool set-up, technical terminology, basic care and maintenance.

Technology/Library/Media Literacy Standard Two

Students distinguish among and use a variety of technologies and media for a variety of purposes to enhance productivity.

Rationale:

Tools, materials and processes can be applied to improve efficiency and effectiveness and ease task completion. With an appropriate number of technologies, students can match the tool to the task and improve their productivity. As producers and consumers of media, students must select the media most appropriate for their specific needs. For example, some media may be effective for entertaining, but less suited for informing or persuading. Students need to understand the dynamic nature of media and the ways in which media change to adapt to the times so that they will be better able to select the media, which suits their purpose most appropriately.

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Develop skills and strategies for locating information in various media and ease task completion.	Demonstrate and continue to develop skills and strategies for locating information to create an original project using two different technologies.	Transfer knowledge learned to information gathering and task completion in various content areas using a variety of technologies.	M: Benchmark 1: Apply sophisticated skills and strategies to enhance performance and ease task completion while effectively locating information in various media using various technologies.
List and differentiate the abilities of various technologies available to design, develop, and manage projects.	Locate technology to design, develop, present, and manage projects.	Design a project using appropriate technology.	M: Benchmark 2: Integrate technology in designing, developing, presenting and managing projects.
Demonstrate the knowledge of media and technologies available for gathering information.	Apply media and technologies to a task.	Select the most appropriate media/technology for acquiring a particular type of information for a task.	M: Benchmark 3a: Analyze and evaluate a variety of media and technologies and match the best technology and media to a task.
Classify media based on origin and authority.	Discuss the biases, accuracy, and distortion of information in media.	Discuss the rationale behind a given media message and predict possible outcomes for varied audiences.	M: Benchmark 3b: Analyze the appropriateness of various media by evaluating the origin, authority, accuracy, bias and distortion for specific purposes and audiences and to predict outcomes.
Evaluate the current social and political climate.	Compare and contrast various media and discuss how one type of media influences others.	Show how one form of media has influenced the norms of society.	M: Benchmark 4: Analyze and evaluate which form of media influences other forms and responds to the social and political climate of the times.

Technology/Library/Media Literacy Standard Three

Students apply knowledge, skills and strategies to design and create media messages while using a variety of technologies. Students understand an inquiry process including how to access, evaluate, and use information.

Rationale:

Today's and tomorrow's citizens need to communicate effectively using appropriate technologies. Citizens need to use appropriate communication technologies to collaborate and to exchange ideas and information. An effective way for students to understand how media messages are created is to design and create their own media messages. While available equipment may vary from school to school, all students can learn to select appropriate media to convey effective media messages and how to apply those strategies to their own productions. Equally important, they develop skills to assess the strengths and weaknesses of the strategies selected and make adjustments for future productions. Students encounter overwhelming amounts of information in today's world. They must be prepared to access, evaluate and use resources that effectively and efficiently meet their information search. The inquiry process provides a systematic approach that applies to all academic and personal interests and work endeavors. Students who have the opportunity to practice a process that orders and organizes the vast quantities and varying qualities of information are empowered lifelong learners.

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List telecommunications tools available for specific projects and design a media message targeted at a classroom audience, incorporating text and still images.	Use available telecommunication technology in the classroom and create a media message targeted at other subject areas, incorporating text, still images, and animation and exchange ideas and information.	Specify and use the most appropriate tools to create a media message containing text, still images, sound, and video targeted at an adult audience (i.e., school board, parent group, chamber of commerce).	M: Benchmark 1: Design, create, and display media messages in a variety of forms, targeting different audiences and purposes and select and apply telecommunications tools to exchange ideas and information (e.g., geographic information system map, multi-media presentation, web page).
Create personal media messages containing text and still images and modify appropriately.	Examine personal media messages containing text, still images and animation and modify as needed.	Evaluate personal media messages designed for adult audiences and modify appropriately.	M: Benchmark 2a: Evaluate the technical and aesthetic appeal of personal media messages, modifying appropriately.
Participate in a collaborative online project using a single telecommunications tool (e.g., email).	Participate in a collaborative online project using two telecommunications tools (e.g., email, video-conferencing).	Participate in a collaborative online project using three or more telecommunications tools (e.g., email, streaming video, video-conferencing).	M: Benchmark 2b: Use telecommunications tools to participate in collaborative online projects.

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Identify the question or problem, locate and evaluate potential resources.	Gather information, create a new product, and evaluate potential resources.	Synthesize information and evaluate the product and process.	M: Benchmark 3a: Analyze and adapt the inquiry process to satisfy individual and group information needs (i.e., identify the question or problem, locate and evaluate potential resources, gather and synthesize information, create a new product, and evaluate the product and process.)
Identify the information need to meet a specific format and purpose.	Identify the information need based on the scope of the project.	Revise the information needs to meet format, purpose and scope of the project.	M: Benchmark 3b: Refine and revise the information need to meet the specific format, purpose, and scope of the project.
Develop a plan to obtain needed information through interviews.	Develop a plan to obtain needed information through questionnaires and surveys.	Develop a plan to obtain information using other research and investigative strategies.	M: Benchmark 3c: Develop a plan to obtain needed information using a variety of research and investigative strategies (e.g., interviews, questionnaires experiments, surveys).
Use a rubric provided by the teacher to assess information coverage.	Develop a rubric to assess information coverage and presentation.	Use multiple criteria to assess information sources needed for a specific task.	M: Benchmark 4: Assess information sources using multiple criteria (e.g., coverage, misleading presentation, and manipulated data).
Determine a purpose and find information to help meet the purpose.	Using a variety of information create a new product.	Use information to create a product for a specific purpose.	M: Benchmark 5: Synthesize information to create a new product that meets a specific purpose or vision.
Review the inquiry process.	Determine criteria to judge the effectiveness of the process.	Create and use criteria to determine the effectiveness of the product of the inquiry.	M: Benchmark 6: Critique the process and the product of the inquiry.

Technology/Library/Media Literacy Standard Four

Students use technology and identify, analyze, and evaluate the impacts of technology and media on individuals and societies demonstrating an understanding of ethical, legal, and social responsibility in accessing, evaluating, and using information, materials and technologies.

Rationale

Students need to understand that today's technology and media are extremely powerful tools impacting all aspects of human life. In using technology and media students should demonstrate both sound judgment and respect. They must analyze media to determine the point of view embedded in messages and the accuracy of the message. They must actively evaluate the influence that media have on behaviors, values, and democracy and learn to use media in legal and ethical ways. Libraries provide equitable access for all citizens to a variety of information. For students to contribute positively in a learning community, they must respect open access to information, intellectual property rights, ideas and backgrounds of others and library policies. Students will be able to collaborate with others and make informed, reasoned decisions as they participate in our democratic society and interdependent world.

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Demonstrate safe use of various technology and workplace tools appropriate to this grade level.	Model safe use of various technologies appropriate for this grade level.	Model safe use of various technologies appropriate for this grade level.	Benchmark 1: Safely use and synthesize various technologies (e.g., robotics, workplace tools) while refining the information required to meet the specific format, purpose, and scope of a project or to create a new product.
Model appropriate ethical standards and use for the technology and media at this level.	Discuss personal accountability in the context of media and technology and continue to model appropriate ethical standards.	Model personal accountability when using technology.	Benchmark 2: Model and exemplify a high standard of ethics for the uses of technology (e.g., privacy, intellectual property) and assume personal accountability for responsible media use (e.g., adherence to copyright laws, proper attention to citations).
Compare and contrast the current state of society, economy and environment with the state of past economies, societies and environment.	Classify the technology available currently and discuss possible impacts on society, economy, and environment.	Research the effect of current growth trends of technology tools and possible future growth.	M: Benchmark 3: Evaluate the present and future impacts of technology and equitable access to information on a democratic society, economy and the environment.
Dramatize a skewed bias as an accepted bias to show how a bias can impact our thinking (a single variable situation that can possibly effect our democratic process).	Compare media in other societies and how they impact their cultures and what messages and conveyed by their media.	Formulate a judgment on subtle usage of bias or authority and determine the intent of these messages. Predict the impact on a society.	M: Benchmark 4: Evaluate the origin, authority, accuracy, bias and distortion of information and ideas in media. Analyze media's influence on governmental, social, and cultural norms and their impact on democratic processes.

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Cite sources properly in presentations and papers.	Write or email a publisher or author requesting permission to use information in a presentation or paper.	Adhere to copyright laws when using information or creative works of others.	M: Benchmark 5: Use information in an ethical manner by adhering to copyright laws, requesting permission to use information, and properly citing sources).
Demonstrate knowledge of the acceptable use policy of the school with computers.	Demonstrate knowledge of the circulation policies of the school library.	Follow school guidelines for responsible use of information resources.	M: Benchmark 6: Follow school guidelines for responsible use of information resources (e.g., circulation policies, acceptable use policies).
In small groups in class identify an information problem and seek a solution.	Through email collaborate with at least two other people to identify an information problem and seek a solution.	In small groups, in person or electronically, identify a problem, seek solutions and generate new information.	M: Benchmark 7: Collaborate with others, both in person and through technologies, to identify information problems, seek solutions, and generate new information.

Technology/Library/Media Literacy Standard Five

Students develop the skills, knowledge and abilities to apply a variety of technologies to conduct research, manage information and solve problems. They distinguish among, evaluate and appropriately use current emerging media and technologies in the inquiry process.

Rationale

Current and emerging technology tools will provide increased and alternative methods for problem-solving and thinking. Students must be able to access the credibility of information sources, use sophisticated search technologies to support research, problem-solving and decision making. Current emerging technologies and media require students to recognize the possibilities these tools can play in their information-rich futures. The variety of formats for both creating and presenting abound. Therefore, students must recognize and analyze how different media and technologies contribute to their own inquiry processes.

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Describe usage of technology resources for a specific subject area (e.g., computer-aided drafting software).	Compare use of two or more resources, choose the more effective method for solving the problem.	Apply knowledge base to the technology usage for a specified projects, using varied resources and problem solving.	M: Benchmark 1: Ask questions and use technology resources for self-directed learning and problem-solving.
Illustrate a defined bias or inaccuracy of electronic information in a controlled situation.	Compare two sources of electronic information and analyze them for accuracy, comprehensiveness and bias.	Use an accurate and relevant source of electronic information for a specific task (e.g., Civil War web site to gather information for history paper).	M: Benchmark 2: Evaluate the accuracy, relevance, appropriateness, comprehensiveness and bias of electronic information.
Identify and use technical sources of information. (e.g., online encyclopedia).	Compare or contrast information from technical and non-technical sources of information (e.g., newspaper vs. Internet).	Use and compare at least three technical sources of information and communicate findings.	M: Benchmark 3: Organize and analyze information from technical sources and communicate findings.
Develop research strategies to locate information in various media and technologies.	Analyze and evaluate various media and technologies necessary to complete a specific task.	Demonstrate research strategies effective in locating information to complete a specific task.	Benchmark 4: Develop and demonstrate research strategies to effectively locate information and analyze and evaluate various media and technologies necessary to complete a specific task.
Identify bias and distortion of information in various media.	Identify the origin and evaluate its appropriateness for the quality of the information provided.	Using given criteria determine the accuracy of information from various media and technologies.	Benchmark 5: Generate and apply criteria to evaluate the origin, authority, accuracy, bias and distortion of information from a variety of media and technologies.

Technology/Library/Media Literacy Standard Six

Students seek a variety of materials for independent learning and personal enjoyment and apply technological abilities and knowledge to appreciate literature and other creative expressions and to construct new personal understanding.

Rationale

Technologies develop in response to the changing needs of the individual and society. Technological literacy implies not only understanding current applications of technology to common tasks and problems, it implies that students use technology to build new understandings, formulate novel hypotheses, and generate innovative solutions to challenging problems. Technological tools should be applied in ways that foster exploration and invention appropriate to the age and ability of the student. Central to lifelong learning is a respect and appreciation for the many voices and cultures, such as American Indian cultures, that contribute to the arts, literature and expressions of human productivity and creativity. Students must understand the ephemeral nature of information and value the enduring expressions of universal experiences. Students deserve to experience the satisfaction of fulfilling academic tasks as well as to connect with the excitement of independent learning.

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Critique existing information to develop understanding for personal use at this level.	Appraise existing information and develop understanding for personal use at this level.	Interpret existing information and develop understanding for a personal use at this level.	M: Benchmark 1: Compare, analyze and evaluate existing information, literature and creative expressions from diverse cultures to generate personal understanding.
Develop a portfolio, selecting appropriate working material for it (i.e., spreadsheets and graphs).	Expand portfolios using various technologies (i.e., video and audio).	Compare at last two discipline areas for two or more problems.	M: Benchmark 2: Create a portfolio of original work using various technologies.
Use a variety of technologies to solve a complex problem in a single discipline area for a single problem.	Select a variety of technologies and use them to solve a single problem across two disciplines	Assess at least two discipline areas for two or more problems, choosing appropriate technologies for their solution.	M: Benchmark 3: Evaluate and apply a variety of technologies to investigate complex problems in multidisciplinary contexts.
Identify an authentic problem and propose solutions to problems.	Design solutions to solve authentic problems.	Validate the solution to an authentic problem.	Benchmark 4: Apply and evaluate personal understanding to develop an invention or innovative solution to an authentic problem.
Select literature and other creative expressions from diverse origins and connect them to their own lives.	Select and analyze literature and other creative expressions from diverse origins and connect them to their own lives and to the human experience.	Evaluate literature and other creative expressions from diverse origins and connect them to their own lives and to the human experience.	Benchmark 5: Select, analyze and evaluate literature and other creative expressions from diverse origins and connect them to their own lives and to the human experience.
Visit another library and find information applying their knowledge of their school library.	Visit an on-line library and find information based on what they have learned from the organization of their school library.	Compare the way their school library is organized to the way a search engine on the Internet is organized.	Benchmark 6: Apply their knowledge of their use of libraries to a variety of new information environments.

