

Digital Literacy Guidance

What is Digital Literacy?

Digital literacy is the ability to effectively use technology — including hardware and software — to obtain, evaluate, create, and communicate information accurately and efficiently. It encompasses a broad range of skills, including the responsible use of digital tools, critical thinking when navigating online resources, and an understanding of digital safety and ethics. Digital literacy also involves proficiency with various software applications, such as word processing, presentations, and web-based tools, which are essential for academic, professional, and personal success. As technology continues to evolve and integrate into daily life, fluency in digital tools is crucial for workforce readiness.

While digital literacy and computer science share a common foundation in technology, they serve distinct purposes. Digital literacy focuses on the practical application of technology for communication, collaboration, and problem-solving, emphasizing the effective use of digital tools, responsible online navigation, and critical assessment of digital content. In contrast, computer science demonstrates the principles and mechanics of technology, including programming, algorithms, data structures, and computational thinking, enabling individuals to design and develop new technologies rather than simply using existing tools. Both are essential in today's digital world — digital literacy ensures that individuals can effectively and proficiently engage with technology, while computer science empowers them to innovate and build future technologies.

Using This Guide

Schools and school systems can use this document to support students' digital literacy when modeling technology in instruction at the appropriate grade level. It serves as a guide, not a curriculum, providing educators with a flexible framework to help students develop essential technology skills. While this document does not dictate when or how teachers should use technology, it may help guide their instructional choices to ensure meaningful and authentic digital learning experiences.

This guide outlines digital literacy target skills by grade band for each core digital competency. It includes suggested subject area connections across Mathematics, ELA, Science, Social Studies, and Health Education, as well as examples of the Louisiana Student

Standards (LSS) that align with digital literacy target skills. These connections serve as a valuable resource for educators to integrate digital literacy into their existing instruction, thereby enhancing student engagement and technological proficiency.

The Subject Area and Louisiana Student Standards Connections listed in the Digital Literacy Guidance are examples of how digital literacy can be effectively integrated into instruction. These connections are not prescriptive. Educators are encouraged to explore additional opportunities to embed digital literacy skills into their classrooms. Teachers should use professional judgment to incorporate technology-rich learning experiences that best support their students' needs and instructional goals.

Digital Literacy Core Competencies

These digital literacy core competencies are designed to be integrated across various subjects and grade levels, ensuring students develop a comprehensive understanding of digital literacy, which is essential for academic success and future career readiness.

Computational Thinking & Problem Solving

[K-2](#) | [3-5](#) | [6-8](#) | [9-12](#)

- Decomposing complex problems into manageable parts.
- Recognizing patterns and abstracting general principles.
- Developing algorithms and applying coding skills.
- Utilizing computational thinking and applications like spreadsheets and graphing tools to analyze and solve problems in real-world scenarios.
- Applying logic and structured thinking frameworks to troubleshoot issues.

Creativity & Innovation

[K-2](#) | [3-5](#) | [6-8](#) | [9-12](#)

- Employing technology to design and implement innovative solutions.
- Exploring and integrating emerging technologies into learning experiences, including creating projects that incorporate text, graphics, audio, and video.
- Using various media tools to express ideas and concepts.
- Making strategic use of digital media to enhance communication and understanding.

Information & Data Literacy

[K-2](#) | [3-5](#) | [6-8](#) | [9-12](#)

- Collecting, organizing, and evaluating data from diverse digital sources, and using search engines and databases effectively to locate, evaluate, and cite information.
- Analyzing data to derive meaningful insights using spreadsheet applications and mathematical modeling.
- Communicating findings effectively using appropriate digital tools.
- Assessing the credibility and relevance of information.
- Differentiating between reliable and biased online resources.
- Applying research strategies, including Boolean operators and advanced search techniques.

Collaboration & Communication

[K-2](#) | [3-5](#) | [6-8](#) | [9-12](#)

- Utilizing digital platforms for effective communication in various contexts.
- Participating in responsible and respectful online interactions.
- Developing digital projects using cloud-based and collaborative tools.
- Using school or school system-approved tools to communicate and exchange ideas.
- Creating digital presentations, reports, and multimedia projects to communicate ideas.
- Using online tools, planning and implementing collaborative projects with students in other classrooms or schools.
- Using proper academic language and etiquette in online discussions.

Digital Responsibility & Ethics

[K-2](#) | [3-5](#) | [6-8](#) | [9-12](#)

- Understanding and adhering to legal and ethical standards in digital environments.
- Practicing safe, responsible, and respectful online behavior.
- Recognizing privacy concerns, intellectual property rights, and cybersecurity best practices.
- Evaluating the societal and cultural impacts of technology use.
- Explaining and demonstrating compliance with Acceptable Use Policies (AUP).
- Understanding copyright, plagiarism, and Fair Use guidelines when using digital content.
- Identifying potential online risks, such as misinformation and cyberbullying, and developing strategies to address them.

Cybersecurity & Online Safety

[K-2](#) | [3-5](#) | [6-8](#) | [9-12](#)

- Identifying and mitigating cybersecurity threats, such as phishing and malware.
- Protecting personal and organizational data through robust security practices.

- Understanding digital footprints and maintaining online privacy.
- Recognizing and addressing cyberbullying and online harassment.
- Utilize effective security measures, including strong passwords, two-factor authentication, and antivirus software.
- Practicing safe, secure email use and recognizing the potential risks associated with online communication.

Technology Operations & Concepts

[K-2](#) | [3-5](#) | [6-8](#) | [9-12](#)

- Developing proficiency with various digital devices, software, and applications.
- Understanding computing components and troubleshooting technical issues.
- Managing digital resources, including file organization and cloud storage.
- Applying knowledge of hardware, software, and networks in diverse environments.
- Using peripheral equipment (e.g., scanners, digital cameras) and storage media (e.g., flash drives, cloud storage).
- Operating and troubleshooting basic technology systems independently.

Artificial Intelligence & Emerging Technologies

[K-2](#) | [3-5](#) | [6-8](#) | [9-12](#)

- Analyzing the effects of computing technologies, including AI and automation, on society, the economy, and culture.
- Directly engaging with emerging technologies through hands-on learning experiences.
- Defining and emphasizing the appropriate and responsible use of AI and emerging technologies.
- Developing a foundational understanding of what AI and other emerging technologies are and how they work, and understanding their capabilities and limitations.
- Preparing for future careers through exposure to innovative technological solutions.
- Identifying assistive technologies that enable individuals with disabilities to access and use digital tools.

Digital Literacy Target Skills by Grade Level

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
Computational Thinking & Problem Solving	K-2	- Recognize and describe patterns in simple activities. - Recognize sequencing (e.g., steps in a process, basic coding concepts with visual programming). - Solve basic problems using logical steps.	Mathematics: Engaging in problem-solving by recognizing patterns and understanding sequences, laying the foundation for computational thinking. - Identify and describe simple patterns in numbers, objects, and daily activities. - Recognize basic sequencing (e.g., first, next, last). - Follow step-by-step instructions (like a recipe or classroom routine). - Sort and classify objects using age-appropriate digital tools. - Arrange simple sequences using visual programming tools (e.g., ScratchJr). - Break down simple tasks into smaller steps (e.g., how to get ready for school). - Use arrows and symbols to represent movement in coding games.
			Science: Encourages observation and description of patterns in the natural and designed world, fostering early analytical skills. - Recognize cause and effect in simple activities. - Utilize digital tools to record observations, sort data, and construct explanations about natural phenomena.
Computational Thinking & Problem Solving	3-5	- Use digital tools (block-based coding, robotics) to create simple algorithms. - Break down larger tasks into smaller steps (Decomposition).	Mathematics: Focus on operations and algebraic thinking, where students solve problems using the four operations and identify patterns. - Decompose a larger task into smaller, logical steps. - Develop step-by-step instructions to solve fundamental math problems. - Recognize patterns in numbers, text, and images.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
		- Recognize patterns in numbers, text, and images. - Begin understanding loops (repeat actions) and conditionals (if-then statements) in coding.	- Identify and correct mistakes in logical sequences. - Identify loops (repeat actions) and conditionals (if-then statements). - Design simple if-then scenarios in a coding game.
			Science: Students plan and conduct investigations using simple algorithms to record and analyze data. - Decompose a problem into smaller parts that can be solved more easily. - Develop, with peers, a simple investigation to produce data to explain a natural phenomenon. - Recognize patterns in data and use those patterns to make predictions or to serve as evidence - Use spreadsheet tools to create a bar chart or line graph from data.
Computational Thinking & Problem Solving	6-8	- Apply computational thinking to solve real-world problems. - Use variables, conditionals, and loops in coding (block-based or text-based). - Develop flowcharts or pseudocode to plan algorithms.	Mathematics: Emphasis on expressions and equations, where students analyze and solve linear equations and pairs of simultaneous linear equations. - Create flowcharts and pseudocode to outline problem-solving strategies. - Apply logic to solve digital puzzles. - Use structured problem-solving techniques. - Implement loops, variables, and conditionals in basic block-based coding projects.
			Science: Emphasis on helping students understand, describe, predict, and change the world around them. - Utilize digital tools to collect, organize, and analyze large datasets for patterns and trends. Create algorithms to solve a problem or provide evidence for a claim. - Apply decomposition abstraction to real-world scenarios.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			- Develop Excel or Google Sheets formulas and functions to apply mathematical concepts to scientific or engineering questions and problems. - Identify logical errors in code, spreadsheets, or problem-solving steps.
Computational Thinking & Problem Solving	9-12	- Develop and implement algorithms for complex problem-solving. - Use different programming languages to solve computational problems. - Apply data structures (such as arrays and lists) in coding projects. - Utilize advanced digital tools for pattern recognition in complex datasets.	Mathematics: Advanced functions and modeling involving creating and solving complex equations to represent real-world scenarios. - Use programming languages to model functions. - Solve real-world problems using Python, Java, or JavaScript. - Apply spreadsheet tools to perform complex calculations and create visual representations, such as graphs and charts. - Utilize digital data visualization tools for accurate interpretation in real-world settings.
			Science: Engagement in scientific research, utilizing computational tools to model phenomena and solve intricate problems. - Write or revise code to model a phenomenon, designed device, process, or system. - Apply predictive modeling in scientific research. - Write complex algorithms involving nested loops, functions, and recursion. - Apply large data concepts to analyze trends and communicate information using spreadsheets, databases, and visualization tools. - Use SQL databases to manage large-scale datasets or utilize spreadsheets to track and visualize data effectively. - Utilize AI and machine learning concepts to recognize patterns in data.
Creativity & Innovation	K-2	Use age-appropriate digital tools to create drawings, stories, or multimedia projects.	ELA: Create and share stories using digital tools, enhancing narrative skills and digital creativity. Use digital tools to write and illustrate stories.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
		Explore how technology can be used to share ideas (e.g., digital storybooks, audio recordings, simple animation tools).	- Combine text, images, and voice recordings to enhance storytelling. - Arrange images and words to tell a story using presentation tools. - Use drawing and painting apps to create simple digital artwork. - Explore basic text input in a word processing tool or application (typing simple sentences). - Use stickers, emojis, and simple icons to visually express ideas. - Create simple digital storybooks. - Record short audio clips (e.g., explaining a drawing or narrating a story). - Use simple animation tools (e.g., ScratchJr or stop-motion animation) to create moving characters. - Use shared documents (e.g., Google Docs) for collaborative story writing. - Provide digital feedback using comments and peer editing tools. - Publish and share stories through secure platforms.
			Social Studies: Use of simple digital platforms to present information about local communities, fostering early research and presentation skills. - Use safe search engines to find information about local communities. - Using Google Earth to demonstrate relative and actual location. - Take notes in a word processing software (e.g., Google Docs or Microsoft Word) or a digital graphic organizer - Add text, images, and simple animations with presentation tools (e.g, Google Slides or PowerPoint). - Experiment with voice recordings and simple digital stickers.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			- Use basic augmented reality (AR) apps to interact with virtual objects. - Using a digital platform, create a short video explaining a local community feature.
Creativity & Innovation	3-5	- Use digital media (presentations, simple video editing) to express creativity. - Experiment with combining different media types (text, images, audio).	ELA: Development of multimedia presentations that combine text, images, and audio to convey information effectively. - Combine text, images, and simple animations in presentations. - Use voice recording to narrate a story or explain a concept. - Create short animated clips using digital tools. - Use basic stop-motion animation to create a sequence of images and add narration to tell a story. - Work in groups to create collaborative slideshows, podcasts, or digital stories.
			Social Studies: Creation of digital timelines and maps to represent historical events, integrating technology with learning. - Explore digital drawing apps. - Design posters and infographics with digital tools. - Create an animated video to explain historical events. - Explore virtual reality (VR) and augmented reality (AR) through simple apps.
Creativity & Innovation	6-8	- Develop original digital content (animations, coding projects, advanced multimedia). - Explore emerging technologies (3D modeling, VR, AR)	ELA: Students produce and publish writing using digital tools, collaborating with peers to enhance content. - Produce interactive e-books - Create and edit short videos and podcasts - Collaborate with peers to share ideas through blogs and digital journals. - Collaborate on group technology projects (e.g., making a class website).

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			Social Studies: Utilization of digital archives and resources to create projects on historical inquiries, promoting innovative research methods. - Combine video, images, and audio to create news reports or presentations. - Design logos, infographics, and posters using digital tools and software. - Explore VR and AR applications. - Use 3D modeling software for simple designs. - Edit images with basic photo editing tools. - Create simple games or interactive media projects.
Creativity & Innovation	9-12	- Design and implement technology-based solutions (apps, simulations). - Integrate multiple emerging technologies into projects. - Consider audience, accessibility, and user experience in digital creation.	ELA: Creation of sophisticated digital content, such as blogs, podcasts, or videos, to express complex ideas and arguments. - Create interactive digital magazines, blogs, or vlogs. - Produce school-wide podcasts and video series. - Produce high-quality video projects with editing software - Use professional graphic design tools - Create digital animation - Design websites using HTML, CSS, and JavaScript. - Build simple mobile apps for creative projects. - Explore age-appropriate generative AI. - Experiment with machine learning tools for creative applications. - Create business branding materials (logos, marketing videos).
			Social Studies: Engagement in virtual simulations and the development of digital portfolios to demonstrate understanding of social studies concepts. - Create digital animations. - Use professional graphic design tools. - Develop VR simulations.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			- Participate in hackathons, innovation challenges, and startup incubators. - Work in cross-disciplinary groups on digital solutions for real-world problems.
Information & Data Literacy	K-2	- Identify different types of information (text, pictures, videos). - Understand that some online information may not be accurate.	ELA: Introduction to gathering information from digital sources with guidance, fostering early research skills. - Identify different types of information sources (pictures, videos, text). - Sort and group digital objects (e.g., organizing pictures into categories). - Recognize what a search engine does (e.g., “Google helps find pictures and facts”). - Use voice search tools to find simple answers. - Discern the difference between real and make-believe information. - Understand that not everything on the internet is accurate (e.g., “Unicorns aren’t real, even if a website says so”).
			Science: Recording observations using digital tools, aiding in the understanding of data collection. - Use simple tally charts or pictographs to organize basic data - Create simple digital presentations using images and voice recordings. - Explain findings in a basic sentence or picture format.
Information & Data Literacy	3-5	- Locate, evaluate, and use digital resources for school projects. - Differentiate between reliable and unreliable sources.	ELA: Students conduct short research projects using digital sources, developing skills in gathering and summarizing information. - Conduct simple surveys and create bar graphs or pie charts to represent results. - Express how to use search engines effectively (e.g., using keywords instead of complete sentences). - Differentiate between .gov, .edu, and .com domains, as well as other domain types.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			• Be aware that not all online sources are reliable. • Identify the author, date, and source of online content. • Discuss how advertisements and sponsorships can influence the information presented. • Begin citing sources (e.g., listing the name of a website and date accessed). • Demonstrate how to avoid plagiarism by putting information in your own words and citing the source.
			Science: Use of digital tools to collect and analyze data from experiments, enhancing interpretation skills. • Use spreadsheets or charting tools to organize basic data sets. • Use presentation tools to present research findings. • Create infographics and posters. • Compare datasets and assess the reliability of sources.
Information & Data Literacy	6-8	• Analyze digital sources for credibility and bias. • Use data visualization tools (charts, graphs) to interpret information.	ELA: Evaluation of the credibility of digital sources and integration of information to support research projects. • Apply quotation marks (“ ”) for exact searches and use Boolean operators (AND, OR, NOT). • Utilize academic or library databases for research purposes. • Analyze the reliability of primary and secondary sources. • Analyze different news articles on the same topic to detect bias. • Identify the differences between opinion vs. factual and/or evidence-based reporting. • Use online citation generators. • Recognize the importance of giving credit to authors.
			Science: Application of statistical tools to analyze experimental data, promoting critical evaluation of results. • Use spreadsheet formulas to analyze numerical data (e.g., averages, sorting, filtering).

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			- Conduct data-driven projects, such as tracking classroom energy use or weather patterns. - Create interactive presentations using digital tools. - Write short reports or blog posts summarizing research. - Create data visualizations using digital tools.
Information & Data Literacy	9-12	- Conduct advanced research using databases and multiple sources; - Apply data analysis techniques in real-world contexts (spreadsheets, coding); - Evaluate possible partiality and considerations in data use.	ELA: Conducting research, utilizing advanced search techniques, and critical analysis of digital information. - Use Boolean operators (AND, OR, NOT), advanced search filters, and database research tools. - Analyze peer-reviewed journals and government reports. - Evaluate algorithmic bias in search engines. - Investigate how AI manipulates digital content (e.g., deepfakes, altered images). - Use fact-checking websites to verify claims. - Use MLA, APA, or Chicago citation formats for academic papers. - Investigate copyright laws and fair use in research. - Publish research papers or digital reports in professional formats. - Engage in debates or panel discussions using research-based arguments.
			Science: Employing data modeling software to interpret complex datasets, facilitating informed conclusions. - Use complex spreadsheet formulas and pivot tables. - Conduct statistical analysis on real-world datasets. - Utilize data visualization tools (e.g., Tableau, Google Data Studio, Power BI) to interpret large datasets effectively. - Develop interactive dashboards for data presentation.
Collaboration & Communication	K-2	Use digital tools to communicate simple	ELA: Participation in group storytelling and sharing of digital creations, promoting collaborative communication.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
		- messages (e.g., drawing apps, voice recordings); - Work together on basic technology-based activities.	- Utilize simple digital tools (e.g., drawing apps, voice recorders) to express ideas effectively. - Use basic icons and emojis to communicate digitally. - Understand the importance of being kind and respectful in online interactions. - Recognize that others can read messages sent online.
			Social Studies: Collaborative projects exploring community roles, using simple digital tools to present findings. - Work on shared class projects using interactive whiteboards (e.g., Padlet). - Use teacher-led platforms (e.g., Seesaw) to record and share learning experiences. - Learn that private information should not be shared online. - Recognize trusted adults who can help with digital concerns.
Collaboration & Communication	3-5	- Collaborate using shared digital platforms (Google Docs, Microsoft Word, cloud tools); - Practice respectful online communication.	ELA: Engagement in collaborative writing projects using shared digital platforms, enhancing teamwork and communication skills. - Use cloud-based tools to create and share content. - Demonstrate how to write polite and constructive messages in online discussions. - Understand the importance of avoiding ALL CAPS (shouting) and using proper punctuation in messages. - Recognize what is appropriate to share online (e.g., first names are okay, personal addresses are not). - Identify cyberbullying and report it to a trusted adult.
			Social Studies: Group research projects on history, utilizing digital tools for collaboration and presentation. - Participate in group projects using digital collaboration tools. - Work with peers on multimedia projects (videos, slideshows, digital posters, or infographics). - Participate in virtual discussions with students from other schools.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
Communication & Collaboration	6-8	- Engage in structured digital discussions (forums, school-approved applications); - Use digital tools for team-based projects.	ELA: Participation in online discussions and peer reviews, fostering respectful and constructive digital communication. - Utilize email, discussion boards, and blogs to articulate ideas effectively. - Practice formal vs. informal digital communication (e.g., an email to a teacher vs. a text to a friend). - Understand digital footprints and how online behavior affects one's reputation. - Engage in moderated online forums and structured discussions. - Organize and lead group conversations and online study sessions.
			Social Studies: Collaborative analysis of historical events using digital archives, promoting shared investigation and discussion. - Utilize project management tools (e.g., Trello) for collaborative group tasks. - Create and share interactive multimedia presentations (e.g., Prezi, Canva, or WeVideo). - Work on cross-school or cross-country digital projects. - Recognize misinformation, clear reasoning, multiple viewpoints, and online conflicts. - Evaluate the credibility of digital conversations and discussions.
Communication & Collaboration	9-12	- Participate in global digital collaboration (virtual meetings, online projects). - Demonstrate professional communication using digital platforms.	ELA: Engagement in virtual collaborations with peers globally, developing advanced communication skills. - Work on group research papers using Google Drive or Microsoft Teams. - Use project management skills and digital tools to manage group projects. - Write clear, formal emails to teachers, mentors, and professionals.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			- Engage in digital networking and professional discussions. - Work on open-source projects or global research initiatives. Social Studies: Participation in digital forums and debates on contemporary issues, enhancing collaborative problem-solving abilities. - Create and deliver professional online presentations using video conferencing tools. - Develop public-facing digital content (blogs, vlogs, podcasts, infographics). - Participate in virtual exchange programs with students from around the world. - Engage in civil debates on digital forums by adhering to proper online etiquette. - Identify legal and ethical considerations in online publishing.
Digital Responsibility & Ethics	K-2	- Recognize safe behaviors when using digital devices and platforms. - Understand that online words can affect others.	ELA: Understanding the importance of respectful communication, both in person and digitally. - Practice being kind and respectful when using digital tools. - Understand that words typed online can affect others' feelings. - Recognize what cyberbullying is and understand that inappropriate messages can hurt people just as much as in-person bullying. - Practice telling an adult if something upsetting happens online or they see or experience cyberbullying. Social Studies: Learning about community rules and the concept of fairness, laying the groundwork for responsible behavior. - Recognize trusted adults who can help with online concerns. - Understand why personal information should not be shared online (e.g., name, address, school). - Follow school internet rules and discuss why they are in place.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			Recognize that pictures and ideas belong to people, and why students should draw their pictures or create their own work instead of copying.
Digital Responsibility & Ethics	3-5	- Identify personal information and why it should be protected. - Practice respectful online behavior. - Be aware that content posted online can remain accessible indefinitely, and deleting something doesn't always remove it completely.	ELA: Discussing the impact of words and actions in digital spaces, promoting empathy and responsibility. - Discuss how what you post online stays online (even deleted posts can be saved). - Recognize that future schools and jobs may see what you post today. - Follow school technology rules and Acceptable Use Policies (AUP). - Differentiate between appropriate vs. inappropriate websites. - Practice how to block, report, and ignore cyberbullies. - Recognize that spreading rumors or sharing embarrassing photos is harmful.
			Social Studies: Exploring the rights and responsibilities of citizens, including digital responsibility aspects. - Explore privacy settings and how to protect personal information. - Practice creating strong passwords, recognize why they are essential, and demonstrate how to keep them secure. - Practice how to block, report, and ignore cyberbullies. - Recognize ways to verify the accuracy of information. - Practice giving credit when using someone else's work. Using images, music, or videos from the internet also requires permission and citation.
Digital Responsibility & Ethics	6-8	- Acknowledge intellectual property rights and copyright laws; - Recognize ethical considerations in social	ELA: Analyzing case studies on digital ethics, encouraging critical thinking about online behavior. - Adjust privacy settings on social media and devices. - Recognize that companies collect and use data (including cookies, tracking, and ads).

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
		media and digital communication.	- Recognize clickbait, misinformation, and biased news sources. - Practice reporting and preventing online harassment. - Practice digital etiquette when discussing controversial topics online and recognize both the positive and negative impacts of digital platforms. - Discuss how technology influences culture, privacy, and mental health.
			Social Studies: Studying the evolution of technology-related laws and understanding the legal implications of digital actions. - Differentiate between citing sources and plagiarism. - Create original content instead of copying from others. - Recognize phishing scams and malware, and demonstrate how to avoid online threats.
Digital Responsibility & Ethics	9-12	- Apply digital responsibility in personal and academic use. - Evaluate the impact of digital footprints on future opportunities.	ELA: Engaging in debates on digital privacy and freedom of expression, developing nuanced perspectives on digital rights. - Manage your digital footprint for college and job applications, and understand how social media affects your career opportunities. - Discuss ethical concerns related to AI, surveillance, and data tracking. - Evaluate how algorithms influence news feeds, advertising, and politics. - Practice using Creative Commons, public domain, and Fair Use guidelines. - Use proper MLA, APA, and/or Chicago citations when incorporating digital content. - Engage in debates and recognize misinformation in global issues. - Explore censorship and digital freedom worldwide.
			Social Studies: Investigating the role of digital media in society, analyzing its influence on public opinion and policy.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			- Recognize deepfakes, AI manipulation, and digital misinformation. - Practice using Creative Commons, public domain, and Fair Use guidelines. - Investigate internet laws, cybercrime penalties, and digital rights. - Discuss the legal consequences of online harassment, hate speech, doxxing, and sharing images with or without permission.
			Career and Technical Education (CTE): Discuss the role of technology in different careers. Explore ethical hacking and cybersecurity careers.
Cybersecurity & Online Safety	K-2	- Demonstrate basic password security (using simple, strong passwords); - Recognize when to ask an adult for help online.	Health Education: Recognize the importance of personal safety and identifying trusted adults. - Identify that personal information (name, address, school) should not be shared online. - Identify trusted adults who can help with online concerns. - Understand that some websites and messages may be unsafe. - Discern the difference between "real" friends and "online" strangers. - Recognize that passwords should not be shared (except with parents or teachers). - Recognize that strong passwords are crucial for safeguarding your accounts. - Recognize the difference between "good screen time" and "too much screen time."
Cybersecurity & Online Safety	3-5	Discern how to identify potential cybersecurity threats (scams, phishing);	Health Education: Identify methods of personal hygiene to prevent common health problems, and extend this to understanding personal information protection. Recognize the importance of not sharing passwords and using strong passwords.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
		Learn best practices for protecting personal information.	- Identify how to adjust privacy settings on apps and games. - Learn to recognize suspicious links and pop-ups. - Be aware of the risks associated with downloading files or clicking on unknown links. - Identify spam emails and messages. - Understand why clicking on unknown links in emails can be dangerous. - Recognize the importance of device updates and antivirus software. - Demonstrate how to properly log out of devices and accounts.
Cybersecurity & Online Safety	6-8	- Apply cybersecurity strategies (two-factor authentication, secure browsing); - Recognize and report cyber threats.	Health Education: Discuss the impact of technology on personal health and safety, including online interactions. - Use strong passwords and secure sharing practices. - Recognize phishing attempts and online scams. - Identify phishing emails, scam websites, and fake social media accounts. - Identify common cyberattack tactics, including social engineering. - Use password managers or create complex passwords. - Explain how two-factor authentication (2FA) enhances security. - Demonstrate how to intervene safely if witnessing online harassment. - Recognize how social media algorithms amplify toxic behavior. - Discover how companies collect data (cookies, targeted ads, tracking). - Discern how social media and apps store and sell personal information. - Recognize "spear phishing" (targeted email scams) and social engineering tricks. - Recognize why email attachments and unknown links can carry malware.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			- Learn about Wi-Fi safety (public vs. private networks and VPNs). - Identify how firewalls, encryption, and antivirus software protect devices. - Use two-factor authentication (2FA) for extra security.
Cybersecurity & Online Safety	9-12	- Explore careers in cybersecurity and ethical hacking. - Understand legal aspects of cybersecurity policies and data protection.	Health Education: Analyze the influence of technology on personal and community health, including aspects of digital responsibility and cybersecurity. - Discover how personal data is tracked online. - Utilize privacy settings to safeguard your accounts and sensitive information. - Identify phishing attempts, deepfake videos, and manipulated media. - Recognize how hacking methods like keyloggers, spyware, and social engineering work. - Secure personal and school/work accounts with strong security protocols. - Indicate how to use VPNs, encrypted messaging, and secure browsers. - Learn how to mitigate digital footprint damage (e.g., removing old accounts and managing reputation). - Understand laws related to hacking, identity theft, and cybercrime. - Discuss how AI and automation impact cybersecurity and online privacy. - Learn about business email security, work collaboration tools, and encrypted communications. - Recognize cyber threats in professional settings (corporate data breaches, password leaks). - Learn about hacking, identity theft, and online fraud prevention.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			Career and Technical Education (CTE): Discuss the role of technology in different careers. - Learn about ethical hacking and cybersecurity certifications (CompTIA Security+, CEH). - Participate in cybersecurity competitions like CyberPatriot.
Technology Operations & Concepts	K-2	- Learn basic device functions (using a mouse, touchpad, opening apps); - Identify different types of technology (computers, tablets, smart devices).	ELA: With guidance and support, explore a variety of digital tools to produce and publish writing. - Identify and use different types of digital devices (computers, tablets, smartboards). - Identify basic functions of a keyboard, mouse, and touchscreen. - Demonstrate how to turn devices on and off correctly. - Open and use basic apps (drawing tools, simple educational games, browsers). - Identify how to use icons, buttons, and menus in apps. - Save and open a file with teacher guidance. - Recognize what a "folder" is and how files are stored. - Understand that not all websites are safe and that a trusted adult should approve online activity. - Demonstrate basic rules for using classroom devices. - Exhibit how to take a simple photo using a tablet or digital camera. - Recognize what a printer does and how it prints images/text.
Technology Operations & Concepts	3-5	- Develop proficiency in using standard software (word processors, presentations); - Organize files and define cloud storage.	ELA: Use technology to produce and publish writing, demonstrating sufficient command of keyboarding skills. - Use a keyboard to type efficiently (introduction to touch typing). - Navigate files and folders in a computer system. - Identify basic formatting skills in word processors (bold, italic, bullet points).

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			• Save files in different locations, such as the local drive, USB drive, or cloud storage (e.g., Google Drive or Microsoft OneDrive). • Organize files into folders and rename documents. • Identify common computer problems (frozen screen, no internet, printer issues). • Demonstrate how to restart a device to fix simple errors. • Recognize what Wi-Fi is and how devices connect to the internet. • Learn how to check internet connections and refresh pages. • Use scanners, webcams, and projectors in school projects. • Transfer files using USB drives, SD cards, or cloud-based storage
Technology Operations & Concepts	6-8	• Troubleshoot basic technical problems (Wi-Fi issues, software settings); • Learn about hardware components and how they function.	ELA: Use technology to produce and publish writing and present relationships between information and ideas efficiently. • Work with multiple file types (documents, images, spreadsheets, PDFs). • Organize, rename, and share files using cloud storage (Google Drive, OneDrive, Dropbox) • Identify basic computer components (CPU, RAM, hard drive, motherboard, GPU, power supply). • Recognize how to install and uninstall applications. • Resolve common issues such as Wi-Fi disconnection, printer malfunctions, and application crashes. • Identify how to clear the cache, update software, and check system settings. • Explore how home and school networks work (Wi-Fi, LAN, IP addresses). • Identify how data travels across a network. • Use external hard drives, USB flash drives, SD cards, and cloud storage for backups. • Connect and use external monitors, keyboards, and projectors.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
Technology Operations & Concepts	9-12	- Effectively navigate, manage, and troubleshoot digital tools and networks to support communication, collaboration, and problem-solving in a digital environment. - Explore IT careers and certifications (CompTIA, Cisco, etc.).	ELA: Use technology to produce, publish, and update individual or shared writing products in response to ongoing feedback. - Utilize digital tools to produce, publish, and refine individual or shared writing in response to feedback. - Work with a variety of file types (documents, images, spreadsheets, and PDFs) to organize and present information effectively. - Manage file systems across multiple platforms (Windows, Mac, Linux, Chrome OS). - Utilize cloud storage solutions (such as Google Drive, OneDrive, and Dropbox) to organize, rename, and share files efficiently. - Apply responsible digital practices to manage and collaborate on online content. - Identify and understand the function of essential computer components (CPU, RAM, hard drive, motherboard, GPU, power supply). - Install and uninstall applications to maintain an optimized digital workspace. - Troubleshoot common technical issues, such as Wi-Fi disconnection, printer malfunctions, and software crashes. - Maintain digital devices by clearing cache, updating software, and adjusting system settings for optimal performance. - Recognize how home, school, and enterprise networks function, including Wi-Fi, LAN, and IP addressing. - Explore how data travels across a network and impacts digital communication. - Use a variety of digital storage solutions (external hard drives, USB drives, SD cards, cloud storage) for file backups and management. - Connect and use external peripherals, such as monitors, keyboards, projectors, and assistive technology.

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			Demonstrate and apply best practices for online security, including password management, encryption, and safe browsing.
			Career and Technical Education (CTE): Discuss the role of technology in different careers. - Learn about IT certifications (CompTIA, Cisco, Microsoft IT Specialist). - Explore computer support, network administration, cybersecurity, and software development careers.
Artificial Intelligence & Emerging Technologies	K-2	- Identify ways technology helps people in daily life. - Explore emerging or new digital tools.	Science: Identify ways technology helps people in daily life. - Recognize how computers, tablets, and smart devices help people in daily life. - Explore technologies in different environments (home, school, hospitals, scientific exploration, and research). - Discuss basic AI applications. - Identify robots used in daily life (e.g., Roomba, robotic arms in factories). - Explore technologies, assistive technologies, and how they can assist people in communicating and learning. - Discuss what is fair and unfair in digital spaces (e.g., sharing vs. taking credit for someone's work). - Recognize that technology should be used to help, not harm, others.
Artificial Intelligence & Emerging Technologies	3-5	- Examine how computers and the internet facilitate global connections and communication. - Discuss the role of technology in different careers.	Computer Science: Identify how computers and the internet connect people globally. - Identify how computers and automation change jobs and daily life. - Discuss the positive and negative effects of technology on communication and work. - Discuss how AI can recognize speech, faces, and suggest content (Netflix, YouTube recommendations).

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			- Experiment with basic AI-powered educational tools. - Explore tools like speech-to-text, screen magnifiers, and adaptive keyboards. - Discuss why accessibility matters in digital tools and apps. - Discuss how websites and companies use personal data. - Discuss the limitations of AI, including its potential for inaccuracy.
			Career and Technical Education (CTE): Discuss the role of technology in different careers. - Explore careers related to technology (engineers, game designers, programmers). - Identify how STEM careers shape the world.
Artificial Intelligence & Emerging Technologies	6-8	- Investigate the societal implications of AI, automation, and large-scale data sets. - Explore ethical dilemmas in new technologies.	Science: Investigate the societal impact of AI, automation, and large-scale data sets. - Explore how AI makes predictions (Search engines, self-driving cars, facial recognition). - Discover how large-scale data sets are applied in marketing, healthcare, and scientific research. - Participate in introductory coding or STEM projects related to emerging tech. - Discuss how technology can bridge accessibility gaps in schools and workplaces, enabling a more thorough exploration of the natural world. - Investigate the potential impact of AI on the hydrosphere.
			Social Studies: Explore ethical dilemmas in new technologies. - Discuss how social media algorithms influence opinions and behavior. - Examine the impact of automation and robotics on job markets. - Discuss privacy concerns with technology (tracking, bias, surveillance).

Digital Literacy Core Competency	Grade Band	Digital Literacy Target Skills	Subject Area Connection Examples
			Analyze how social media algorithms promote specific content.
			Career and Technical Education (CTE): Discuss the role of technology in different careers. Investigate fields like cybersecurity, robotics, and software development.
Artificial Intelligence & Emerging Technologies	9-12	- Analyze the long-term impacts of AI, quantum computing, and automation on jobs and society. - Engage in discussions about tech policy and ethical responsibilities. - Be able to craft precise and effective prompts and queries. - Demonstrate proficiency in researching and verifying results.	Social Studies: Engage in discussions about tech policy and ethical responsibilities. - Evaluate how automation and AI impact global industries. - Research historical and future trends of technological advancements. - Explore machine learning, neural networks, and real-world AI applications. - Explore quantum computing, blockchain, and other futuristic innovations. - Analyze deepfakes, digital surveillance, and the ethical use of AI. - Debate technology's role in privacy, cybersecurity, and human rights. - Research and design tech-based solutions for accessibility challenges. - Discover how AI is being applied in medicine, education, and assistive technologies.
			Career and Technical Education (CTE): Discuss the role of technology in different careers. - Explore job opportunities in AI, robotics, cybersecurity, and data science. - Participate in coding competitions, hackathons, or STEM internships.