# Navigating Now: A Practical Toolkit for Information Literacy in the Age of Al



# The Big Picture: What This Toolkit Is and Why It's Important

Today's students are surrounded by more technology than any generation before them. From social media and online videos to search engines and AI tools, they're constantly receiving messages that shape how they think, feel, and act. That's why **information literacy** is no longer a "nice to have." It's essential.

This toolkit is designed to help educators, school leaders, and support staff build a shared understanding of what information literacy is, why it matters, and how to teach it across all grade levels and subject areas. You'll find clear guidance, practical strategies, and ready-to-use resources to support your work.

#### Inside, you'll find tools to:

- Build a **common understanding** of **information literacy and related skills** like media, digital, and data literacy.
- Understand the strong link between **information literacy and student well-being**, including how it affects confidence, relationships, and critical thinking.
- Explore ways to **engage your whole school community**, students, families, and staff, in learning about and supporting information literacy.
- Learn how **Artificial Intelligence (AI)** is changing the information landscape, making information literacy both more important and more complex.
- Discover **teaching strategies** you can use in any content area, with tips for adapting them in light of AI tools and challenges.
- See where information literacy connects with **academic standards** across subjects, helping you embed these skills in everyday instruction.
- Access a **curated list of high-quality resources** including articles, lessons, and tools to help you start or strengthen your school's approach to information literacy.

#### This is not a cover-to-cover guide.

This toolkit is designed so you can **jump into the sections that matter most to you**, when you need them. Each part stands on its own and can be used individually or alongside others, depending on your goals and your students' needs.

Whether you're just beginning or looking to deepen your school's approach, this toolkit is here to support you in preparing students to think clearly, act responsibly, and thrive in a world full of information.

#### **Choose Your Path**

Use this guide in the way that works best for you. Explore a section, revisit later, or share with a colleague. Here's what you'll find:

#### **Topic** Start here if you want to... Build a shared understanding of what UNDERSTANDING INFORMATION LITERACY information literacy is and why it matters Explore how information impacts mental STUDENT WELL-BEING & INFO LITERACY health, relationships, and self-perception Get ideas for involving families, staff, and **ENGAGING YOUR SCHOOL COMMUNITY** students in this important work Learn how generative AI changes how AI & INFORMATION LITERACY students access, evaluate, and create information Find adaptable techniques for teaching CLASSROOM STRATEGIES information literacy in any content area Discover where information literacy fits **CURRICULUM & STANDARDS CONNECTIONS** with instructional materials and content standards Access curated tools, lessons, and articles ADDITIONAL RESOURCES to deepen your practice

### **Understanding Information Literacy**

Information literacy is "a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." In other words, it's about making sense of the huge amount of information students come across every day<sup>1</sup>.

Today's students face more information than any generation before them. What they read, watch, and hear can shape how they see themselves, how they relate to others, and how they think about the world. It influences their decisions, beliefs, and behaviors – sometimes in lasting ways.

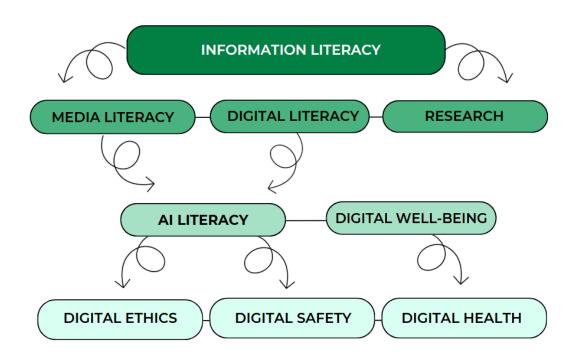
This is why teaching information literacy is so important. Students need these skills to think critically, form healthy relationships, and understand the world around them.

And students know this. In a recent survey, 94% of teens said schools *should* teach media and information literacy. But only 39% said they've actually been taught these skills<sup>2</sup>.

The rise of generative AI (like ChatGPT and other tools) makes this even more urgent. AI changes how we access and create information while adding new challenges in figuring out what's true and trustworthy. This affects not only students, but also teachers, staff, and families.

The graphic below highlights the key connections between information literacy and other essential areas that support student learning and well-being and influence student success.

Figure 1. What is Information Literacy?



American Library Association (2025). Information Literacy. <a href="https://literacy.ala.org/information-literacy/">https://literacy.ala.org/information-literacy/</a>

<sup>&</sup>lt;sup>2</sup> News Literacy Project (2024): News Literacy in America: A survey of teen information attitudes, habits and skills. <a href="https://newslit.org/wp-content/uploads/2024/10/NLP-Teen-Survey-Report-2024.pdf">https://newslit.org/wp-content/uploads/2024/10/NLP-Teen-Survey-Report-2024.pdf</a>

#### What We Mean When We Say...

This section defines key terms you'll see throughout the toolkit – like information literacy, media literacy, and digital literacy. These concepts are closely connected, and you may come across different definitions depending on the source. Here, we've chosen clear, educator-friendly definitions to help build a shared understanding. Use them as a starting point for your own learning, team discussions, or classroom planning.<sup>3</sup>

#### **Information Literacy**

#### The American Library Association defines information literacy as:

"A set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." <sup>4</sup>

In simpler terms, information literacy is the **ability to think critically about information** – knowing *when* you need it, *where* to find it, *how* to judge its quality, and *how* to use it in thoughtful, responsible ways.

#### For students, this means learning to:

- Ask questions and know what they're looking for
- Find trustworthy sources, online or offline
- Tell the difference between fact and opinion, or truth and misinformation
- Think about who created a piece of information and why
- Use information in ways that are ethical, respectful, and effective

Information literacy isn't limited to one subject or grade level; rather it's a **skill students need across all areas of learning and life**. As students are exposed to a growing mix of social media, search engines, news sources, and Al-generated content, these skills are more important than ever.

#### Being information literate helps students:

- Make informed decisions
- Form their own opinions
- Engage with the world responsibly
- Become thoughtful, active participants in their communities

<sup>&</sup>lt;sup>3</sup> Each type of literacy described below may be defined a little differently depending on the source or audience. The definitions in this toolkit are the ones we're using here, but you might see other versions elsewhere.

<sup>&</sup>lt;sup>4</sup> American Library Association (2025). Information Literacy. <a href="https://literacy.ala.org/information-literacy/">https://literacy.ala.org/information-literacy/</a>

#### Research

Research is a key part of information literacy, but it's also its own distinct skill set. At its core, research is a structured and often ongoing process of inquiry, where students learn to ask meaningful questions, gather and evaluate information, analyze sources, synthesize ideas, and draw conclusions based on evidence.

While information literacy helps students access and understand information, research teaches them how to go deeper, to explore a topic with purpose, follow a process, and build knowledge over time.

#### For students, learning the research process means they learn to:

- Ask focused, open-ended questions
- Plan how and where to search for quality sources
- Think critically about what they find
- Take notes and organize information in meaningful ways
- Use evidence to support their own thinking and ideas
- Reflect, revise, and recognize that research is rarely a straight line

Research isn't just a one-time assignment. It's a skill students develop over time. It requires curiosity, critical thinking, and the ability to work with both digital and non-digital sources.

**School librarians and library assistants** play a vital role in this work. As instructional leaders and curriculum partners, licensed school librarians and library assistants are uniquely equipped to guide students through the research process. **They provide age-appropriate instruction in areas like:** 

- Research strategies and methodologies
- Source evaluation and bias awareness
- Ethical use of information, including citation and attribution
- Note-taking, organizing ideas, and managing information

By centering librarians in your school's information literacy efforts, and aligning their work with standards like American Association of School Librarians (AASL), International Society for Technology in Education (ISTE), and Oregon Association of School Libraries (OASL), you're helping ensure that all students gain the skills they need to become thoughtful, independent researchers ready for success in school, careers, and civic life.

#### **Spotlight on Oregon's Content Standards**

Oregon's content standards call for students to begin developing research skills as early as Grade 3, with continued growth and practice throughout their K–12 education. See examples below:

- Social Sciences Standards 3.13, 5.28, 6.24
- Language Arts K.W.7, 1.W.7, 3.W.7, 4.W.7, 5.W.7, 6.W.7, 7.W.7, 7.W.7, 9-10.W.7, 11-12.W.7
- Science 3-5-ETS1-2
- Math 8.DR.A.1

#### **Media Literacy**

Media literacy is closely connected to information literacy, but with a more specific focus: it helps students understand, analyze, and create different types of media – everything from advertisements and news stories to TikToks and YouTube videos.

You can think of media literacy as applying information literacy skills to the world of media, including both professional content (like commercials or news) and user-generated content (like social media posts or student videos).

#### According to Media Literacy Now, a national advocacy group, media literacy is:

"The ability to: Decode media messages (including the systems in which they exist); Assess the influence of those messages on thoughts, feelings, and behaviors; and Create media thoughtfully and conscientiously." <sup>5</sup>

#### In simple terms, media literacy helps students:

- Understand how media is made and what it's trying to do
- Recognize bias, persuasion, stereotypes, and emotional appeals
- Think about how media messages affect how they feel and what they believe
- Create their own media responsibly with a purpose and audience in mind

These skills are essential as students spend more and more time online, consuming and sharing content. Whether they're watching a video, reading a meme, or posting on social media, students need tools to think critically and act responsibly.

#### Teaching media literacy gives students the power to:

- Be more thoughtful about what they watch and share
- Question the accuracy and intent behind media messages
- Express their own voices through creative, ethical media production

Just like with information literacy and research, media literacy is most powerful when it's taught across subjects and grade levels, giving students opportunities to engage with media in meaningful, age-appropriate ways.

#### **Digital Literacy**

Digital literacy builds on information literacy, focusing specifically on how students use, understand, and create content in digital spaces. It includes not only the ability to find and evaluate digital information, but also the technical skills needed to use devices, apps, platforms, and tools effectively and responsibly.

<sup>&</sup>lt;sup>5</sup> Media Literacy Now (2025). What is Media Literacy? <a href="https://medialiteracynow.org/challenge/what-is-media-literacy/">https://medialiteracynow.org/challenge/what-is-media-literacy/</a>

The American Library Association defines digital literacy as "...the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills." 6

In other words, digital literacy is more than just knowing how to use a device – it's about knowing how to use it well.

#### For students, digital literacy means they learn to:

- Navigate digital tools and platforms (like search engines, learning management systems, and social media apps)
- Judge the credibility and accuracy of online content
- Communicate and collaborate effectively in digital spaces
- Create digital products thoughtfully and ethically
- Stay safe, protect their privacy, and act with integrity online

Importantly, just using technology doesn't mean students are digitally literate. A recent international study found that between 2018 and 2023, a time of increased technology use during remote and hybrid learning, U.S. 8th graders actually showed a decline in digital literacy skills. This shows us that exposure to technology isn't enough. Students need direct instruction and guided practice.

Think of it like driving a car. Learning how to operate a vehicle is different from understanding how to drive safely and follow traffic laws. Similarly, learning how to click, swipe, or type isn't the same as knowing how to behave responsibly online, think critically about digital content, or use digital tools in ethical and informed ways. Teaching digital literacy means helping students become smart, safe, and responsible digital citizens, able to use technology for learning, communication, and creativity in school and beyond.

#### **Digital Well-Being**

Digital well-being is closely connected to information and digital literacy. While it's a distinct concept, it overlaps with how students interact with technology, media, and information in their daily lives. It focuses on helping students develop a healthy, safe, and responsible relationship with the digital world

In 2024, the U.S. Department of Education introduced three key terms that together shape the definition of digital well-being:

- Digital health: Maintaining a balanced, healthy relationship with technology and screen time
- Digital safety: Protecting personal information and staying safe from online risks
- Digital ethics: Using technology in ways that are respectful, responsible, and fair<sup>8</sup>

<sup>&</sup>lt;sup>6</sup> American Library Association (2025). Digital Literacy. <a href="https://literacy.ala.org/digital-literacy/">https://literacy.ala.org/digital-literacy/</a>

Fraillon, J. (2023). An International Perspective on Digital Literacy. https://www.iea.nl/publications/icils-2023-international-report

<sup>&</sup>lt;sup>8</sup> Note: The USDE uses the term "citizenship" in place of ethics

#### Together, these concepts help students:

- Recognize when technology use supports, or harms, their well-being
- Manage screen time and tech habits in age-appropriate ways
- Understand online privacy and make safe choices in digital spaces
- Treat others with respect online and think before they post, share, or comment

In a world where students are online more than ever, supporting digital well-being is essential for mental health, social connection, and learning. And just like with information and digital literacy, these skills need to be taught, not assumed.

Educators, school counselors, and librarians all have a role to play in helping students build healthy digital habits and understand the impact technology can have on their thoughts, relationships, and emotional well-being.

#### **Al Literacy**

As artificial intelligence (AI) tools become more common in schools, homes, and workplaces, AI literacy has become an important new part of digital literacy and digital well-being and it also affects media literacy.

Al literacy includes the knowledge and skills that enable humans to critically understand, evaluate, and use Al systems and tools to safely and ethically participate in an increasingly digital world.<sup>9</sup>

Al literacy means helping students (and staff!) understand how to use Al tools, like chatbots and image generators, safely, ethically, and effectively. But it's more than just knowing how to operate these tools. It's about:

- Recognizing that AI outputs can be biased or inaccurate
- Understanding how AI creates and spreads synthetic media (like deepfakes or AI-generated text
- Thinking critically about the information these tools provide and how they shape what we believe and share

As AI becomes a bigger part of students' information world, it makes the environment more complex and sometimes uncertain. That's why developing AI literacy is essential to help students navigate this new landscape with confidence and care.

#### **Bringing It All Together: What Information Literacy Really Means**

All these related ideas including information literacy, digital literacy, media literacy, digital well-being, and Al literacy are connected by one big theme: how students interact with, understand, and respond to the many kinds of information they encounter every day.

<sup>&</sup>lt;sup>9</sup> Digital Promise. Al Literacy: A Framework to Understand, Evaluate, and Use Emerging Technology (2024). <a href="https://digitalpromise.org/2024/06/18/ai-literacy-a-framework-to-understand-evaluate-and-use-emerging-technology/">https://digitalpromise.org/2024/06/18/ai-literacy-a-framework-to-understand-evaluate-and-use-emerging-technology/</a>

### When we put these concepts together, we see that information literacy is really a set of important skills that help students:

- Know what information they need in different situations
- Find that information, even when the world of information is complicated and growing fast
- Judge whether the information is true, trustworthy, and meaningful by looking at both what's said and what's left unsaid, and thinking about who is sharing it and why
- Use and share information responsibly, clearly, and safely
- Understand how information affects their thoughts, feelings, and choices

The goal of information literacy is to give students the tools they need to learn, think, and act in ways that are ethical and positive, not just for themselves, but for their communities too.

### Student Well-Being and Information Literacy

Information literacy isn't just about skills, it also has a large impact on students' mental and emotional health. The information students see and how they understand and react to it shapes their thoughts, feelings, and behaviors.

Social media plays a big role in this. While social media can offer exciting opportunities, it also comes with risks. That's why it's so important for adults including teachers, librarians, counselors, and families to help students understand how the way they use social media affects their well-being.

When students use social media actively, by connecting with others, exploring new ideas, and expressing themselves, it can help them build friendships, find communities, and grow in positive ways.

But when students use social media passively, just scrolling through content without interacting, it can hurt their self-esteem and increase feelings of anxiety, depression, and loneliness.<sup>10</sup>

Helping students become aware of these differences and how information affects them is a key part of supporting their overall well-being and helping them make healthy choices online and offline.

### Spotlight on Fostering Student Learning, Well-Being, and Belonging: Guidance for School Cell Phone Policies

One way adolescents often access social media is through their cell phones and other mobile devices.

ODE recently published guidelines to help support school leaders in their policy and approach towards these devices in schools titled, <a href="Fostering Student Learning">Fostering Student Learning</a>, <a href="Well-Being">Well-Being</a>, <a href="And Belonging">and Belonging</a>: <a href="Guidance for School Cell Phone Policies">Guidance for School Cell Phone Policies</a>.

#### **How Algorithms Affect What Students See**

The content students see on social media isn't random, rather it's chosen by algorithms designed to keep them scrolling and engaged for as long as possible. These algorithms often show more of what grabs attention, which can include misleading information or content that encourages unhealthy habits.

Spending too much time on these platforms can pull students away from real-world social experiences and increase feelings of anxiety, especially when they have fewer in-person interactions.

This shows that information literacy isn't just about facts and skills. It also involves understanding how information affects our emotions and thoughts.

That's why human literacy, which involves knowing how information influences how we feel, think, and behave is a vital part of being information literate.

U.S. Surgeon General's Advisory (2023). Social Media and Youth Mental Health. <a href="https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf">https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf</a>

### Spotlight on <u>Oregon's Transformative Social Emotional Learning (TSEL) Framework and</u> Standards

TSEL is a way of creating schools where every student and adult feels included, respected, and supported so everyone can thrive. It's more than just teaching social and emotional skills; it's an ongoing process where adults and students learn together, explore the causes of unfairness, and work as a team to find solutions.

This approach honors each person's unique experiences with race, culture, class, and identity, making the school environment more human and welcoming.

TSEL isn't something separate from regular lessons. It's meant to be part of everything students learn and experience throughout the day.

By focusing on student well-being, belonging, equity, and justice, TSEL helps schools understand how the bigger world and the learning environment affect students' behavior and how they see themselves and others.

TSEL encourages learning experiences that help students build their:

- **Identity** (understanding who they are)
- Agency (feeling empowered to make choices)
- **Belonging** (feeling connected to others)
- Collaborative Problem-Solving (working together to solve problems)
- Curiosity (being eager to explore and learn)

#### **Building Bridges: Practical Steps for Every Classroom**

Information literacy isn't something that lives in just one part of the school day. It's an essential skill that connects to everything students learn. This section, Building Bridges: Practical Steps for Every Classroom, offers hands-on ideas and strategies for weaving information literacy into different subjects and key school themes – from civics and science to health and career learning. By integrating these skills into every content area, schools can help students develop stronger thinking habits, make smarter choices, and grow into confident learners and active citizens. Use these examples as a starting point to tailor information literacy instruction to fit your school's unique needs and goals.

#### Supporting the Whole Student: The Role of Information Literacy in Well-Being

Information literacy isn't only about academics. It plays a critical role in students' mental, emotional, and social well-being. Every day, students are influenced by the information they consume and the ways they interact with it, especially online. Helping them make sense of that information, respond thoughtfully, and protect their personal and emotional safety is essential to their development and to creating a safe, supportive school environment.

When students are taught how to critically evaluate content, understand emotional responses, and make safe, informed choices, they build resilience. They learn how to manage digital pressures, maintain healthy

relationships, and care for their mental and emotional health.

By weaving information literacy into efforts to support student well-being, educators can help students feel more confident, connected, and in control of their learning and their lives.

#### **Bridge Builders: Key Actions to Support the Whole Student**

- Create opportunities for students to see themselves, their cultural strengths, and lived experiences
  reflected in multiple forms of media and technology by promoting creative, dynamic applications of
  digital learning across subject areas.
- Encourage self-awareness, empathy, and perspective taking among students by incorporating project-based learning with media and technology.
- Humanize students' information literacy development by creating conditions for them to discuss feelings and emotions connected with their use of media and technology.
- Facilitate learning experiences that develop information literacy while teaching students how to be socially aware and socially responsible in the school setting.
- Use <u>digital tools that reflect the interests and experiences of students</u> to build safe, relevant, and supportive learning environments.
- Proactively build relationships with and support student mental health and well being.
- Ensure that students and their families are aware of the mental health supports available in their school and larger community, and connect students and families with these resources as needed.

#### Civics, Social Cohesion, and Democracy

Helping students spot misinformation and understand the complexities of our diverse democracy are key skills for being informed, engaged citizens. For our democracy to work well, people need to have the knowledge and skills to follow and evaluate the important issues that elected leaders discuss and decide on.

A healthy democracy also depends on social cohesion which is defined as a shared sense of trust and common purpose. <sup>11</sup> This doesn't mean everyone agrees on everything, but that people can come together around facts and work toward improving life for everyone.

Schools play a crucial role in building this foundation. By teaching students how to find reliable information, think critically about sources, and understand complicated issues, schools prepare them to join meaningful civic conversations and recognize shared truths, even when people have different opinions.

Today, however, social media and technology challenge these goals. Instead of connecting people, many platforms contribute to dividing us by spreading misinformation and biased content. Algorithms and AI tools can amplify messages that appeal to our natural instincts to favor those in our own social groups over others, making it harder for students to see the bigger picture and work together across differences.<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> OECD Definition of Social Cohesion: https://www.socialcohesion.info/concepts/concept/oecd

<sup>&</sup>lt;sup>12</sup> Bruneau, E. G., Cikara, M., & Saxe, R. (2017). Parochial Empathy Predicts Reduced Altruism and the Endorsement of Passive Harm. Social psychological and personality science, 8(8), 934–942. <a href="https://doi.org/10.1177/1948550617693064">https://doi.org/10.1177/1948550617693064</a>

Teaching information literacy in civics helps students navigate this complex landscape, empowering them to be thoughtful, respectful, and active participants in democracy.

#### Bridge Builders: Key Actions to Support Civics, Social Cohesion, and Democracy

- Expose students to high-quality civic resources to strengthen student skills
- Provide students with an opportunity to identify misinformation
- Engage students in frequent conversations about current events connected to the curriculum

#### Science, Personal, and Community Health

Information literacy is especially important in science and health because the information students encounter can directly affect their well-being and the health of their communities. In today's world, misinformation spreads quickly and can lead to serious misunderstandings about science and health topics.

Everyone, no matter their background or education, can be misled. That's why it's not enough to just share accurate facts rather schools need to build trust, encourage critical thinking, and teach students how to check information carefully. 13,14

By developing both science and health literacy, students gain the knowledge and skills to make smart decisions about their own health and their community's health. They learn to explore data, ask questions, and think critically about what they hear and see.

Research shows that strong science and health literacy helps young people handle many challenges they might face online and in life, such as negative body image, substance use, relationship violence, environmental safety, nutrition, and staying physically active.<sup>15</sup>

Building these skills gives students the tools to protect themselves and support others, making them more resilient in a world full of complex health information.

#### Bridge Builders: Key Actions to Support Science, Personal, and Community Health

- Collaborate with local and community-centered organizations to access credible scientific sources, understand complex scientific topics, and apply best practices in science, health, and medical reporting. Source: <u>Understand how misinformation spreads</u>
- Integrate critical thinking and information evaluation skills into science and health curricula by teaching students how to systematically assess scientific claims, identify misinformation, and understand the significance of well-defined questions in evaluating online science content. Source: Ask a series of well-defined to evaluate scientific claim

<sup>&</sup>lt;sup>13</sup> National Academies (2023). Nobel Prize Summit: Truth, Trust, and Hope. <a href="https://nap.nationalacademies.org/catalog/27247/2023-nobel-prize-summit-truth-trust-and-hope-proceedings-of">https://nap.nationalacademies.org/catalog/27247/2023-nobel-prize-summit-truth-trust-and-hope-proceedings-of</a>

<sup>14</sup> Committee on Science Literacy and Public Perception of Science (2016). Science Literacy and Health Literacy: Rationales, Definitions, and Measurement. Available from. https://www.ncbi.nlm.nih.gov/books/NBK396086/

National Academies (2024). Social Media and Adolescent Health. <a href="https://www.google.com/url?q=https://nap.nationalacademies.org/catalog/27396/social-media-and-adolescent-health.sa=D&source=docs&ust=1733165140284066&usg=AOvVaw3fpNgN4HGr41KyKgl34J37</a>

Implement structured media literacy exercises in science and health classrooms by training students
to apply a standardized set of questions to evaluate scientific claims and recognize misinformation,
while also using controlled exposure to false information with clear corrections to strengthen their
ability to resist misinformation. Source: <u>Teach students how to find trustworthy information in
science classrooms</u>

#### **Content Area Learning**

Information literacy supports and enhances learning in every subject area. Whether students are in a math class, science lab, social studies discussion, or language arts project, the ability to find, evaluate, and use information is a powerful tool for deeper learning and engagement.

When students build information literacy skills, they are better able to:

- Ask good questions and guide their own research
- Locate trustworthy sources and data
- Think critically about what they find
- Apply what they've learned to solve problems creatively
- Communicate their ideas clearly and collaborate with others

These skills help students not only succeed within a single subject but also connect ideas across disciplines, strengthening their ability to work on interdisciplinary projects, analyze real-world problems, and advocate for meaningful change.<sup>16</sup>

Information literacy also encourages the development of key habits of mind like curiosity, persistence, and thoughtful skepticism. These habits support students throughout school and prepare them to thrive as lifelong learners, no matter what path they choose.

#### **Bridge Builders: Key Actions to Support Content Area Learning**

Encourage students to reflect on the information literacy techniques they are using and how those contribute to constructing new knowledge.

Help students make connections between information literacy, content area learning, and current or local events in order to make learning experiences more relevant for students.

Utilize resources, for example XQ's "A Guide for Interdisciplinary Teaching and Learning" or Edutopia's "More Than a Buzzword: Making Interdisciplinary Learning a Reality" to begin exploring how to support interdisciplinary learning experiences.

#### School Safety & Digital Literacy

As students spend more time online, digital literacy becomes a key part of keeping them safe, both in and out of school. The way students consume and interact with online information, especially on social media, can

<sup>&</sup>lt;sup>16</sup>Novis-Deutsch, N., Cohen, E., Alexander, H., Rahamian, L., Gavish, U., Glick, O., ... Mann, A. (2024). Interdisciplinary learning in the humanities: Knowledge building and identity work. *Journal of the Learning Sciences*, 33(2), 284–322. <a href="https://doi.org/10.1080/10508406.2024.2346915">https://doi.org/10.1080/10508406.2024.2346915</a>

influence their behavior in real life. Sometimes, sensationalized content or dangerous online trends can pressure students into making risky or unsafe choices that they might not otherwise consider.

To support safe schools, students need help developing self-awareness and decision-making skills. These include metacognition (thinking about their own thinking) and executive functioning (planning and regulating their behavior). When students learn to pause, reflect, and make thoughtful choices online, it helps protect their own well-being and contributes to a safer school environment.

A major concern is cyberbullying, where harmful messages, rumors, or embarrassing images can spread quickly and cause lasting emotional damage. Students should know how to block, report, and avoid interacting with harmful content. Schools should also encourage safe ways to report concerns, such as through the <u>Safe</u> <u>Oregon tipline</u>, so students feel supported and heard.

The internet also comes with serious safety risks, such as sexual exploitation and trafficking. There are people online who may try to build false trust in order to manipulate or exploit youth for the purpose of their own personal or financial gain. This is why it's essential for students to:

- Be cautious with anyone they meet online
- Avoid sharing personal information like their school, city, birthday, or photos/videos
- Talk to a trusted adult if anything online makes them feel uncomfortable
- Understand that even small details shared publicly can be misused

Students should also know that help is available. For example, if a graphic or inappropriate image of them has been shared online, they, or a trusted adult, can contact <u>Take It Down</u> to have it removed anonymously and safely. By building strong digital literacy and awareness, schools help students stay safe, make smart choices, and use technology in positive, responsible ways.

#### **Bridge Builders: Key Actions to Support School Safety & Digital Literacy**

- Establish Clear Reporting Mechanisms for Online Harassment and threats of violence: Promote
   <u>Safe Oregon Tip Line</u> and educate students on how to block, report, and respond to cyberbullying,
   ensuring they know how to safely report concerns both online and in person. Share information
   about services like <u>Take It Down</u> to support students in safely and anonymously removing graphic or
   explicit content from the internet.
- Foster trusted adult relationships for support: In alignment with the TSEL framework, encourage students to identify and connect with trusted adults in the school community whom they can approach if they feel uncomfortable or threatened online.
- Educate on the risks of online exploitation: Utilize class sessions or advisory periods to conduct
  workshops or sessions to inform students about the dangers of sharing personal information online,
  the signs of online grooming or exploitation, and strategies to stay safe in digital environments.
  Utilize and integrate state standards that address the prevention of bullying, cyberbullying,
  harassment, intimidation, and physical and sexual violence; specifically aligned standards at each

grade level can be found within ODE's "School Safety and Prevention Standards Crosswalk" which can be found here.

#### **Career Connected Learning**

Information literacy is more than an academic skill, it's a critical part of career readiness. In today's world, students need to know how to find, understand, and share information effectively in order to succeed in any job or career path.

Digital literacy, including digital safety, ethics, and communication skills, is especially important. These abilities help students work well in digital environments, protect sensitive information, and contribute positively to team dynamics. Whether students are entering healthcare, construction, technology, business, or any other field, their ability to use digital tools responsibly and safely will shape their future success.

This is especially true when it comes to artificial intelligence (AI). Many students are already using AI-powered tools, for schoolwork, creativity, or just out of curiosity. As these technologies continue to grow, students will need both the technical skills to use AI and the critical thinking to understand its impact.

Helping students develop a healthy, informed relationship with AI means teaching them:

- How to evaluate Al-generated content
- How AI influences the information they see and share
- When and how it's appropriate to use AI tools
- How AI may affect decision-making in the workplace

Students who demonstrate strong information and AI literacy will be better prepared for careers in a rapidly changing world. They'll not only be able to complete tasks effectively, they'll also help create safer, more thoughtful, and more innovative workplaces.

#### **Bridge Builders: Key Actions to Support Career Connected Learning**

- Collaborate with Librarians/District Media Specialists: Establish strong partnerships with school librarians to develop lesson plans and activities that integrate information literacy skills into careerfocused curriculum.
- **Teach Industry-Specific Databases:** Introduce students to specialized databases and information sources relevant to their career interests, such as professional journals, industry reports, and company websites.
- Critical Source Evaluation: Emphasize the importance of evaluating information credibility, including
  considering author expertise, publication date, bias, and source reliability within the context of
  specific industries.
- Real-World Case Studies: Incorporate real-world scenarios and case studies that require students to research, analyze, and present solutions using information literacy skills relevant to their chosen career.
- Project-Based Learning: Design projects where students must research industry trends, market
  analysis, or competitive landscapes, applying their findings to create proposals, presentations, or
  prototypes.

# **Bringing It All Together: Supporting Student Well-Being Through Information Literacy**

Information literacy is far more than a set of skills for evaluating facts. It is deeply connected to students' mental, emotional, and social well-being. The ways students interact with information, especially through social media and digital platforms, shape their self-image, relationships, and overall health. Educators, families, and school staff play a vital role in helping students understand how information and technology impact their feelings, behaviors, and choices.

By fostering active and thoughtful engagement with information, we empower students to build resilience, make healthy decisions online and offline, and develop a strong sense of identity and belonging. Integrating frameworks like Oregon's Transformative Social Emotional Learning (TSEL) and practical strategies across subjects helps create supportive environments where students feel seen, respected, and capable of navigating complex digital landscapes.

When schools connect information literacy with well-being, safety, civic engagement, health, and career readiness, they prepare students not only to succeed academically but to thrive as confident, thoughtful, and responsible individuals. Together, these efforts build bridges between knowledge and human experience, ensuring students are equipped to meet today's challenges with awareness, empathy, and critical insight.

# Building a Culture of Information Literacy

Teaching information literacy is most effective when schools work together with families, students, and the broader community. These partnerships help ensure that information literacy instruction is not only relevant and meaningful but also supported across learning environments – in classrooms, at home, and in the community.

Community members bring valuable lived experiences and perspectives that can deepen the impact of this work. When families and caregivers understand how information literacy helps students make informed choices, think critically, and stay safe online, they are more likely to support and reinforce those skills at home. Inviting families to share their insights and engage in conversations about how information is used and shared in everyday life also helps make instruction more culturally responsive and grounded in students' realities.

However, some families or community members may have questions or concerns. They may wonder if teaching information literacy means pushing a particular viewpoint or challenging long-held beliefs. It's important to clarify that the goal of information literacy is not to tell students *what* to think, but to teach them *how* to think critically, evaluate sources, and form evidence-based conclusions. These are foundational skills for navigating today's complex information landscape and are essential for healthy civic engagement and lifelong learning.

To build understanding and trust, schools can:

- Emphasize that instruction focuses on skills, not opinions
- Highlight the importance of fact-based reasoning and using diverse, verifiable sources
- Model respectful dialogue and show that ambiguity and disagreement are part of thoughtful civic discussion
- Utilize and share resources like <u>ODE's Open Educational Resource on Addressing Controversial Topics</u> in <u>Social Science Classrooms</u> to support educators and explain instructional approaches
- Connect information literacy to student well-being, safety, and future success, topics families care deeply about

#### **Practical Ways to Involve Your Community**

To create a culture of shared ownership and engagement around information literacy, schools can:

- Include short features about information literacy in **school newsletters** or on the school website
- Host after-school events or workshops where families can experience a sample activity and learn what students are doing in class
- Embed information literacy language into syllabi, learning targets, and classroom communications
- Invite caregivers and community partners into student-led projects or showcases that explore how

- information shapes real-world issues
- Provide families with curated tools or tip sheets for **supporting digital and information literacy at home**

By making information literacy visible, approachable, and connected to students' lives, schools can turn what might seem like a complex topic into an opportunity for shared growth. When families, educators, and students work together, they help each other become more informed, thoughtful, and empowered participants in today's information-rich world.

#### **Deepening Engagement: A Framework for Partnering with Your Community**

Engaging families and community members in information literacy instruction is not a one-size-fits-all process. Some schools and districts are just starting this journey, while others are already building and sustaining strong partnerships. Using Oregon's Community Engagement Toolkit as a guide, educators can reflect on and grow their efforts by thinking about community engagement along a continuum, from simply sharing information to creating shared decision-making.

#### LEVELS OF COMMUNITY ENGAGEMENT



		Community	Engagement Goals		
No effort is made to involve families or the community in conversations about information literacy.  Goal: Move toward more inclusive practices by increasing awareness and outreach.	The school shares information with families or the broader community – for example, through newsletters, websites, or curriculum updates.	The school asks for feedback from families and community members – perhaps through surveys, listening sessions, or Q&A events.	Families and community members actively participate in planning or shaping instructional experiences.	Community members and educators work together to co-create and deliver information literacy experiences.	Community voices are so deeply embedded in the work that schools can anticipate needs and act accordingly — based on strong relationships, shared values, and consistent dialogue.

Example Engagement Methods				
Share how information literacy connects to student safety, learning, and future careers.  Provide definitions and practical examples families can relate to.	Invite families to share their experiences and concerns about media, technology, or student well-being.  Use their input to shape communication or resources.	Host events where caregivers try student learning activities or co-develop digital literacy expectations.  Include parent and student voices in conversations about curriculum and school policy.	Partner with local libraries, tribal leaders, cultural organizations, or media professionals to design engaging, real-world projects.  Co-host workshops or community forums around topics like online safety or Al use.	School culture reflects the belief that community knowledge is essential.  Students and families are empowered to advocate for the continued evolution of information literacy instruction.

No matter where your school is now, small steps can build toward stronger, more meaningful partnerships. The goal is not perfection, it's progress. With intention and openness, schools can deepen trust, strengthen learning, and ensure that every student's experience with information literacy is supported by a community that's informed, involved, and invested.

#### **Resource Spotlight to Engage Families**

- Common Sense Media Family Engagement Resources
- Boston Children's Digital Wellness Lab Family Guide to Media Literacy & Social-Emotional Learning
- CDC Foundation Spread the Word: A How-To Guide for Sharing Resources to Support Media Literacy and Safer School Environments
- Family Online Safety Institute Good Digital Parenting Resources
- News Literacy Project Resources for everyone
- Media Literacy Now Advocacy Toolkit for Parents & Individuals
- Learning Technology Center Building Balance between Online Connections and the Offline World

# Bringing It All Together: Cultivating a Collaborative Culture for Lifelong Information Literacy

Building a strong culture of information literacy requires intentional collaboration between schools, families, students, and the wider community. When everyone works together, information literacy instruction becomes more relevant, meaningful, and supported, not just within the classroom, but throughout students' daily lives. This shared ownership deepens students' understanding and helps them develop critical thinking skills that are essential for navigating a complex and ever-changing information landscape.

Families and community members bring invaluable perspectives and lived experiences that enrich learning and make it culturally responsive. Engaging them openly fosters trust and clarifies that information literacy is about empowering students to think independently and evaluate information thoughtfully, not promoting any particular viewpoint. Through ongoing communication, respectful dialogue, and opportunities for participation, schools can strengthen relationships that support students' well-being, safety, and success.

Importantly, building this culture is a journey, not a destination. Whether your school is just beginning to reach out or already has established partnerships, small, consistent steps can lead to meaningful progress. By embracing a continuum of engagement, from sharing information to co-creating learning experiences, schools can create environments where community voices are valued, and students are supported as confident, informed, and ethical users of information.

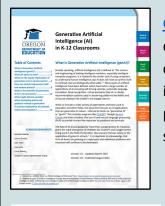
Together, educators, families, and communities can build bridges that transform information literacy into a lived practice, one that equips students to thrive as thoughtful learners, responsible digital citizens, and active participants in their communities and beyond.

# Artificial Intelligence and Information Literacy

As generative artificial intelligence tools become more common in everyday life, and in schools, educators face urgent and complex challenges. These tools, which can generate text, images, video, and even voice content, are changing how students interact with information and how information shapes their thinking and behavior.

#### Learn More: Supporting AI in K-12 Classrooms

For additional guidance, explore these resources from the Oregon Department of Education. Together, these tools support educators in developing thoughtful, safe, and equitable approaches to integrating Al into teaching and learning.



Generative Artificial Intelligence in K–12 Classrooms: This resource explores key questions surrounding the use of generative AI in K–12 education, including its definition, current relevance, and potential classroom applications. It addresses important topics such as equity, privacy, and the development of thoughtful district policies. The guide also considers the implications of emerging technologies like synthetic media and deepfakes in educational settings.



#### Developing Policy and Protocols for the Use of Generative AI in K-12 Classrooms:

This document provides a framework and resources to help school districts develop policies that support the safe, ethical, and effective use of generative AI in education. It highlights how genAI can enhance both student learning and staff workflows, while emphasizing the importance of thoughtful guidance to mitigate risks. The resource is designed to complement the Oregon Department of Education's Generative Artificial Intelligence in K–12 Classrooms guidance.

#### Navigating the Promises and Pitfalls of GenAI in the Classroom

The National Association for Media Literacy Education observes that Al's influence on public opinion, decision-making, and civic life is "profound and still unfolding." As generative AI (genAI) becomes increasingly integrated into daily life, students without the skills to engage with it thoughtfully and ethically are more susceptible to misinformation, manipulation, and harm. While genAI offers promising opportunities for education, it also introduces significant challenges, ranging from biased and inaccurate content to impacts on student well-being and complex ethical concerns. Recognizing and addressing these risks is essential for ensuring the safe, responsible, and informed use of AI in K–12 settings.

This section highlights key considerations for educators as they incorporate information literacy instruction in an Al-driven world.

#### Bias in Al Outputs

GenAl tools learn from large sets of online data, which means they often reflect the biases found in that data. This can lead to outputs that reinforce harmful stereotypes related to race, gender, sexuality, or other identities.<sup>17</sup> These biases not only misrepresent reality but can also cause harm, both to the students exposed to them and to individuals who may become targets of discriminatory attitudes or behaviors. Bias isn't just limited to tools like ChatGPT, it also affects algorithms used in housing, employment, and surveillance.

#### Inaccuracy and Fabricated Information

Because genAl tools are designed to predict words, not to verify facts, they often produce information that sounds believable but is false. They may even cite completely made-up sources or statistics.

#### Synthetic Media and Disinformation

Al tools can now create convincing fake photos, videos, and audio, commonly referred to as synthetic media or deepfakes. While these tools can be used creatively, they also make it easier to spread disinformation, impersonate others, or create harmful and inappropriate content.

Schools have already seen troubling cases of students using AI to generate inappropriate or explicit deepfakes of peers, which can result in legal consequences and serious emotional harm. On a broader scale, deepfakes can damage public trust, making it harder for people to know what's real and what's not.

#### Anthropomorphization and Virtual Relationships

Because genAI tools mimic human conversation, students may begin to see them as thinking, feeling beings. This is called anthropomorphization, treating AI like a person. When this happens, students may trust AI too much, stop questioning its accuracy, or become emotionally attached to virtual companions, including AI "friends" or "therapists." This can lead to increased isolation, anxiety, and dependence on AI in place of human relationships.

#### Cognitive Offloading and Critical Thinking

Some students may begin relying on AI tools to do their thinking for them. This is called cognitive offloading, and it can lead to reduced problem-solving and critical thinking skills. Over time, it may also lead to academic dishonesty, such as having AI complete assignments intended to be done independently.

#### Ethics of AI Training and Copyright

<sup>&</sup>lt;sup>17</sup>Fang, X., Che, S., Mao, M. *et al.* (2024) Bias of Al-generated content: an examination of news produced by large language models. *Sci Rep* (14)5224. https://doi.org/10.1038/s41598-024-55686-2

Many genAl tools have been trained on copyrighted materials pulled from the internet without the original authors' permission. This raises ethical concerns about how Al outputs are generated and whether users are unintentionally reproducing someone else's protected work.

#### What Educators Can Do

- Open conversations about the ethics of AI development and copyright. Encourage students to consider how their own creative work should be treated and to respect the work of others.
- Model how to use AI tools as support, not replacement. Create opportunities for students to reflect, analyze, and write in their own voice before turning to technology.
- Guide students in understanding what AI is and isn't. Reinforce that AI tools don't have emotions, intentions, or consciousness, and are not substitutes for real relationships or support.
- Use real-world examples to show students how synthetic media is created and discuss its ethical and social consequences. Help them build skepticism and digital awareness.
- Teach students to always double-check AI outputs against credible, human-reviewed sources. Make fact-checking a routine part of research and writing.
- Help students recognize bias, question the sources of Al-generated content, and explore how bias in data leads to biased outcomes in society.

# Bringing It All Together: Navigating the Al Era with Critical Literacy and Ethical Awareness

As AI technologies continue to evolve and become deeply integrated into everyday life, educators face the critical task of adapting their information literacy instruction to keep pace. Preparing students for an AI-driven world means more than teaching them how to use these tools, it requires equipping them with the critical thinking skills and ethical awareness necessary to navigate complex digital environments thoughtfully and responsibly.

By guiding students to understand both the promising potential and the significant pitfalls of generative AI, educators help them recognize bias, question the accuracy of AI-generated information, and appreciate the broader social and ethical implications of AI use. This foundation supports resilience, digital citizenship, and a lifelong commitment to informed, responsible decision-making.

Building a culture of information literacy in the AI era involves encouraging students to verify AI outputs through credible, human-reviewed sources and to view AI tools as supports, not replacements, for their own creativity and reasoning. Open conversations about the ethics of AI development, copyright, and digital citizenship empower students to become thoughtful users and creators.

Ultimately, with these skills and understandings, students are better positioned to harness the benefits of AI while minimizing risks. They will be prepared to participate fully and safely in an increasingly technology-mediated society, engaging as informed, ethical citizens who can navigate the challenges and opportunities of the AI era.

# Classroom Strategies for Teaching Information Literacy Across K-12

Though not an exhaustive list, the strategies below represent **high-impact approaches** to developing information literacy skills in students. They can be adapted across grade levels and content areas, with appropriate scaffolding to meet developmental and academic standards. Given the rapid emergence of generative AI (genAI), each strategy also includes notes on how to integrate genAI literacy within your instructional practice.

#### **Support Metacognition**

#### Help students think about their own thinking.

Metacognition, reflecting on how we think, learn, and react, lays a foundation for ethical and intentional engagement with information. Students who can name how information (including media) affects their thoughts and emotions are better equipped to make healthy behavioral choices, both online and offline.

#### **Instructional Strategies to Support Metacognition**

- Use exit slips, journals, or quick reflections where students consider: How did this information make me feel? Why?
- Ask students to track their media consumption for a day and reflect on its impact.
- Facilitate class discussions that normalize mixed feelings about content and encourage thoughtful reactions.

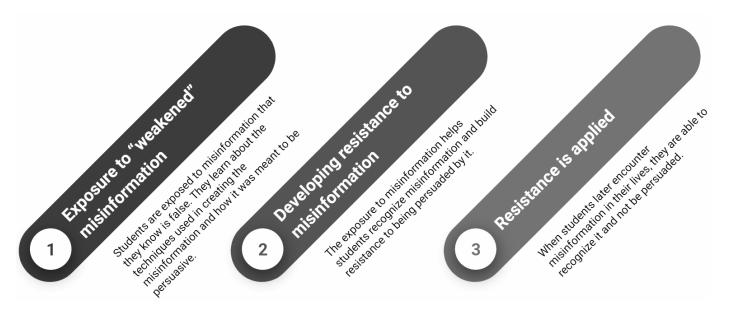
#### In the context of Artificial Intelligence

- Teach students that AI tools do not think or feel like humans. This helps reduce over-trusting or "humanizing" AI.
- Create opportunities for students to reflect on how interacting with AI tools, especially "virtual companions," affects their thoughts, feelings, and relationships.
- Explain that AI can produce biased or harmful content. Connect this to digital wellbeing and ethical responsibility.

#### **Use Inoculation Theory to Build Resistance to Misinformation**

#### Prepare students to recognize and resist manipulation.

Much like a vaccine builds immunity, **inoculation theory** prepares students to identify and resist misinformation by exposing them to weakened forms of misleading information, along with tools to recognize and counter it. The Figure below captures how the inoculation is achieved by explicitly teaching students that misinformation exists, exposing them to specific forms of misinformation, and explaining how they attempt to use different emotional and cognitive levers to persuade people to think and feel a certain way, thus preparing them to recognize and resist misinformation when they are exposed to it (also known as "prebunking"). 18



#### **Instructional Strategies to Build Resistance to Misinformation**

- Introduce examples of common misinformation "tricks" (e.g., emotional appeals, false dilemmas, fake authority).
- Teach "prebunking" by helping students understand how mis- and disinformation is designed to manipulate.
- Use case studies and real-world examples for practice identifying misinformation.

#### In the context of Artificial Intelligence

- Explicitly teach students how synthetic media (deepfakes, AI-generated images, etc.) is created and why it's dangerous.
- Highlight the role of visuals and audio in spreading misinformation.
- Use discussion prompts around ethics: What are the consequences of sharing fake content? What responsibilities do we have when using AI?

<sup>18</sup> Roozenbeek, J., Van der Linden, S., Nygren, T. (2020). Prebunking interventions based on "inoculation" theory can reduce susceptibility to misinformation across cultures. *Harvard Kennedy School*. <a href="https://doi.org/10.37016//mr-2020-008">https://doi.org/10.37016//mr-2020-008</a>

#### **Seek Out Diverse Perspectives**

#### Help students break out of algorithmic bubbles.

Social media and search algorithms tend to show users more of what they already agree with. This can limit students' exposure to other perspectives and ideas. Teaching students to **intentionally seek out diverse viewpoints** supports critical thinking, empathy, and democratic participation.

#### **Instructional Strategies to Support Students in Seeking Out Diverse Perspectives**

- Assign "perspective swaps" where students explore an issue from multiple angles.
- Use current events or historical controversies as a springboard for seeking different voices.
- Teach how algorithms work and why they might distort perception.

#### In the context of Artificial Intelligence

- Discuss how AI systems are trained on dominant perspectives and may amplify bias.
- Encourage students to ask: Whose voices are missing? What perspectives are being amplified or silenced?
- Challenge students to find and compare AI outputs to the work of human creators with differing backgrounds or lived experiences.

#### **Cross-Reference with Reality & Check for Logic**

#### **Build habits of healthy skepticism.**

Information that contradicts what we already know, or makes dramatic claims, deserves deeper scrutiny. Encourage students to test new information against existing knowledge and ask themselves if it makes logical sense.

### Instructional Strategies to Support Students in Cross-Referencing with Reality & Checking for Logic

- Use the "if this is true, what else would also have to be true?" question as a recurring classroom tool.
- Encourage students to verify surprising or emotional claims with trusted, fact-checked sources.
- Create classroom norms that reward critical questioning.

#### In the context of Artificial Intelligence

- Prompt students to cross-check AI-generated responses for factual accuracy and logical coherence.
- Ask: Does this AI output make sense? Does it align with what I've learned before?
- Help students apply these skills across media types: text, audio, image, and video.

#### **Teach Lateral Reading**

#### **Encourage students to verify information by checking multiple sources.**

Lateral reading involves stepping away from a single text to evaluate its credibility by checking other sources. This practice is essential in a world where mis- and disinformation are common, and trust in sources is easily manipulated.

#### **Instructional Strategies to Support Lateral Reading**

- When researching, require students to find at least two additional sources that confirm or challenge the original.
- Use the following questions as a scaffold:
  - o Who is the source?
  - o What is their intent or bias?
  - O What are others saying about the same topic?
- Model lateral reading in real time with your class.

#### In the context of Artificial Intelligence

- Remind students to verify Al-generated content using human-authored, credible sources.
- Teach them to spot fake citations or errors common in AI outputs.
- Show students how to apply lateral reading to synthetic images, video, and audio as well as text.

# Bringing It All Together: Integrating Classroom Strategies for Information Literacy and Al Awareness

Teaching information literacy across K–12 is a dynamic and ongoing process that calls for a comprehensive, intentional approach, one that equips students with essential skills to critically engage with information in all its forms. The strategies outlined, supporting metacognition, inoculating against misinformation, seeking diverse perspectives, practicing healthy skepticism, and mastering lateral reading, form a powerful toolkit for helping students become thoughtful consumers and creators of information.

In today's rapidly evolving digital landscape, integrating generative AI literacy within these strategies is more important than ever. Educators must guide students to understand not only how AI tools function but also their potential biases, limitations, and ethical considerations. This layered understanding fosters digital resilience, empowering students to question AI-generated content critically, identify misinformation, and navigate synthetic media with care and responsibility.

By weaving these strategies into daily classroom practice, educators promote a culture of curiosity, reflection, and respect for diverse viewpoints. Students learn to recognize their own cognitive processes, engage respectfully with differing ideas, and cross-check information against credible sources. These habits strengthen critical thinking and support ethical decision-making, cornerstones of lifelong learning and active

civic participation.

Ultimately, the goal of these classroom strategies is to cultivate learners who are not only skilled at finding and evaluating information but also confident in applying these skills to real-world challenges. When students develop a nuanced awareness of how information is created, shared, and sometimes manipulated, including by emerging technologies like AI, they are better prepared to thrive in an information-rich society.

Bringing it all together means fostering a classroom environment where information literacy and AI awareness are seamlessly integrated, making these vital competencies accessible, relevant, and engaging for every student. This holistic approach ensures that students leave school not just informed, but empowered to navigate the complexities of the digital world with integrity, curiosity, and resilience.

# Weaving Information Literacy into Standards-Aligned Instruction

Supporting students in developing strong information literacy skills requires alignment with academic standards across all content areas. While Oregon does not currently have standalone information literacy standards, these essential skills are embedded throughout the state's adopted academic content standards. This section helps educators understand where and how information literacy connects with existing standards and offers guidance for integrating these skills into everyday teaching.

#### **Information Literacy Embedded Across Content Areas**

Information literacy is inherently interdisciplinary. The ability to locate, evaluate, synthesize, and ethically use information is fundamental not only in language arts and social studies but also in science, mathematics, the arts, and career-related subjects. Because of this, every classroom presents an opportunity for students to develop and refine information literacy skills.

#### Cross-Curricular Development:

Students benefit most when information literacy is taught consistently across multiple subjects. For example, analyzing sources in social studies complements scientific inquiry skills in science classes, while creative expression through the arts can deepen understanding and communication of complex information.

#### • The Role of the Arts:

Incorporating the arts into information literacy instruction can foster deeper engagement and allow students to express their understanding in diverse and meaningful ways. Artistic projects encourage critical thinking, interpretation, and reflection, core components of information literacy.

#### **Coordinating Across Educators and Courses**

Because information literacy appears in various content standards, delivering a cohesive learning experience requires intentional coordination:

#### Collaborative Planning:

Schools and districts are encouraged to bring together a diverse team of educators, including classroom teachers, librarians, counselors, and specialists, who engage with information literacy through their standards. Collaborative planning helps ensure consistent messaging and reduces redundancy or gaps in instruction.

#### Coherent Vision:

This team can work to create a shared vision and integrated curriculum map that highlights where information literacy skills are introduced, reinforced, and mastered throughout a student's academic journey.

#### **Spotlight on Information Literacy Standards Crosswalks**

While information literacy may not be a distinct standard, its integration throughout content areas means that it can, and should, be a foundational part of curriculum planning and instruction. By leveraging these crosswalks and fostering collaboration, schools can create a rich, systemic approach that ensures all students graduate with strong, transferable information literacy skills.

#### **Content Area Crosswalk**

This crosswalk outlines how information literacy skills are embedded within specific subject standards, such as English Language Arts, Science, Social Studies, Mathematics, and the Arts. This approach is helpful for educators focused on their discipline's specific expectations.

#### **Grade Level/Band Crosswalk**

This crosswalk organizes information literacy skills by grade level or grade band to provide a developmental perspective on how information literacy skills evolve as students progress. These are especially useful for interdisciplinary teams aiming to design vertically aligned instruction.<sup>19</sup>

# Bringing It All Together: Weaving Information Literacy into Standards-Aligned Instruction

Successfully supporting students in developing robust information literacy skills depends on intentionally integrating these skills into standards-aligned instruction across all content areas. Although Oregon does not currently have standalone information literacy standards, the critical competencies of locating, evaluating, synthesizing, and ethically using information are embedded throughout the state's academic content standards. Recognizing and leveraging these natural connections allows educators to embed information literacy meaningfully within their existing curricula.

Information literacy's interdisciplinary nature means that every classroom, whether in language arts, science, social studies, mathematics, or the arts, offers rich opportunities to cultivate these essential skills. When students encounter consistent and coordinated instruction across subjects, they develop a more comprehensive and transferable understanding of how to engage thoughtfully with information in diverse contexts. The arts, in particular, provide a unique avenue to deepen students' critical thinking and expressive abilities, making information literacy more engaging and personally meaningful.

Creating a cohesive and coherent learning experience requires intentional collaboration among educators. Bringing together teachers, librarians, counselors, and specialists to co-plan and align instruction helps ensure that students receive clear, reinforced messages about information literacy throughout their academic journey. Utilizing tools such as crosswalks, whether organized by content area or grade band, enables teams to design vertically aligned and interdisciplinary instruction that builds skills progressively and avoids instructional gaps.

<sup>&</sup>lt;sup>19</sup> (Note: School counseling and Transformative Social Emotional Learning [TSEL] standards are not included in the grade-level crosswalks, as they are not differentiated by grade.)

Moving forward, integrating information literacy across content standards is not simply an add-on but a foundational element of effective curriculum design. By weaving these skills into everyday teaching and fostering strong collaboration among educators, schools can create a systemic approach that prepares students to navigate information-rich environments confidently and ethically. This ensures every graduate possesses the critical competencies needed for academic success, career readiness, and engaged citizenship in an increasingly complex world.

Bringing it all together, the intentional alignment of information literacy with academic standards empowers educators to transform standards into lived learning experiences, making information literacy visible, relevant, and accessible to every student across disciplines and grade levels.

# Additional Resources to Support Information Literacy Instruction

To support educators in teaching information literacy, media literacy, digital literacy, and digital wellbeing, the Oregon Department of Education has curated a collection of helpful tools and references. These resources are organized into two main categories:

- General Resources Tools and materials that can be used across content areas and grade levels.
- **Content-Specific Resources** Resources tailored to particular subject areas, making it easier to integrate literacy instruction into specific disciplines.

These resources are intended to serve as a starting point for schools and districts seeking to strengthen instruction in these critical areas. They offer a range of strategies, lesson ideas, research, and frameworks to guide classroom practice and schoolwide planning.

**Note:** This is not an exhaustive list. While the Oregon Department of Education has selected these materials for their relevance and usefulness, the ideas and perspectives reflected in each resource belong to the original authors and may not reflect the views of ODE.

#### **General Resources**

Topic	Intended Audience	Grade-Level/ Band	Resource
Information Literacy and Media Literacy	Educators	K-12	<ul> <li>Project Look Sharp - Ithaca College (K-12)</li> <li>Media Literacy Resources - The National Association for Media Literacy Education (K-12)</li> <li>Truth Decay - RAND Corporation</li> <li>Resource Library - Media Literacy Now (K-12)</li> <li>How to teach students critical thinking skills to combat misinformation online - American Psychological Association</li> </ul>

Topic	Intended Audience	Grade-Level/ Band	Resource
			<ul> <li>Teach Information Literacy &amp; Critical Thinking - UCLA College         Library</li> <li>Evaluating Information: Information Literacy - American Library         Association</li> <li>Educator resources - Center for Media Literacy</li> <li>Library and Media Education - Oregon Department of Education</li> <li>Media Literacy and Digital Citizenship OER collection - Washington         Office of Superintendent of Public Instruction (K-12)</li> </ul>
Information Literacy and Media Literacy	Educators	3-12	<ul> <li><u>Essential News &amp; Media Literacy Skills for Students</u> -</li> <li><u>Common Sense Education</u> (3-12)</li> </ul>
Information Literacy and Media Literacy	Educators	6-12	<ul> <li><u>Checkology</u> - <u>News Literacy Project</u> (6-12)</li> <li><u>Curriculum</u> - <u>Digital Inquiry Group (Stanford University)</u> (6-12)</li> <li><u>Hit Pause Media Literacy Curriculum - Poynter (6-12)</u></li> <li><u>Information Literacy</u> - <u>US Institute of Museum and Library Services</u> (6-12)</li> </ul>
Research	Educators	K-12	<ul> <li>OSLIS</li> <li>Empire State Information Fluency Continuum</li> <li>Big6</li> <li>The "Bad News Game" - TILT Studio</li> <li>Debunk Bot</li> <li>Above the Noise videos - KQED Learn</li> <li>FactCheck.org</li> <li>truemedia.org</li> <li>Observatory on Social Media - Indiana University</li> <li>Rumor Guard - News Literacy Project</li> </ul>
Digital Literacy, Digital Well-Being, AI Literacy	Educators	K-12	<ul> <li><u>Digital Citizenship</u> - <u>Common Sense Education</u> (K-12)</li> <li><u>Digital Citizenship</u> - <u>ISTE</u> (K-12)</li> </ul>

Topic	Intended Audience	Grade-Level/ Band	Resource
			<ul> <li><u>Digital Well-Being Lessons - Common Sense Education</u> (K-12)</li> <li><u>Cyber Citizenship Education Group - OER Commons</u> (K-12)</li> <li><u>Educator Resources - iKeepSafe</u> (K-12)</li> <li><u>Resources for developing student and staff AI literacy - Oregon Department of Education</u> (K-12)</li> </ul>
Digital Literacy, Digital Well-Being, AI Literacy	Educators	6-12	<u>Critical Digital Citizenship</u> - <u>Civics of Technology</u> (6-12)
Digital Literacy, Digital Well-Being, AI Literacy	Students, Families, and Educators	K-12	<ul> <li>An Authentic Approach to Discussions About Digital Well-Being - Common</li> <li>Teaching Digital Citizenship in Today's World - Common SenseSense Education</li> <li>Social Media and Adolescent Health - National Academies of Science</li> <li>Family resources - iKeepSafe</li> <li>Digital Wellness Resources - Media Literacy Now</li> <li>Resource Library - Media Literacy Now</li> <li>Digital Civics, Digital Citizenship, &amp; Internet Safety - Oregon Department of Education</li> <li>Digital Citizenship Resources Roundup - Edutopia</li> </ul>
Privacy and Safety	Educators	K-12	<ul> <li>Cybersecurity Considerations for K-12 Schools and School Districts - Readiness and Emergency Management for Schools Technical Assistance Center</li> <li>Data privacy - Common Sense Media</li> <li>Driving K-12 Innovation Toolkits - Consortium for School Network (CoSN).</li> <li>Oregon Student Data Privacy Alliance</li> <li>K-12 Cybersecurity Landscape Scan - SETDA</li> <li>Cybersecurity - Consortium for School Network (CoSN).</li> </ul>

#### **Content-Specific Resources**

Content Area	Resource
Language Arts	<ul> <li>NCTE - Media Education in English Language Arts</li> <li>Digital Media Literacy in English Language Arts</li> <li>Reading Media: Analyzing Logos, Ads, &amp; Film in the ELA classroom</li> <li>Newsela - Content-rich ELA Instruction</li> <li>CommonLit - Unlock the Potential of Every Child Through Reading</li> <li>ReadWriteThink - Information Literacy</li> <li>International Literacy Association - Digital Literacy Collection</li> </ul>
Social Science	<ul> <li>Facing History: Developing Media Literacy for Well-Being, Relationships and Democracy</li> <li>NCSS: Media Literacy</li> <li>iCivics: Civic Digital Literacy</li> <li>Book: Al in Social Studies Education</li> <li>Al For Education: Uncovering Deepfakes Classroom Guide and Discussion Questions</li> <li>Common Sense Education: Are deepfakes a threat to democracy? 6-12 Lesson plan</li> <li>Detecting Al Images: CNET or Northwestern Kellogg School (must provide consent)</li> <li>Info-luencer: Media Literacy and Civics</li> <li>Digital Media Literacy in Social Studies</li> </ul>
Science	<ul> <li>How we can use AI to increase access and equity in science education</li> <li>Understanding the Scientific Enterprise: The Nature of Science in the Next Generation Science         <u>Standards</u></li> <li>Connections to the Common Core State Standards for Literacy in Science and Technical Subjects</li> <li>Science and Engineering Practice 8: Obtaining, Evaluating, and Communicating Information</li> <li>Using Crosscutting Concepts To Prompt Student Responses Science (page 14? - Gathering,         Communicating, and Reasoning)</li> <li>Teaching NGSS Engineering Design Through Media</li> </ul>

Content Area	Resource
	<ul> <li>Media Literacy now: Before you hand over keys to the internet</li> <li>Stanford: Science Education in an Age of Misinformation</li> <li>NSTA: Digital Literacy</li> <li>National School Library Standards crosswalk with Next Generation Science Standards</li> <li>Exploring how Al Tools Can Support Teacher Learning with Formative Feedback on Discussions</li> </ul>
Health	<ul> <li>Health Literacy - SHAPE America</li> <li>Health Literacy - Centers for Disease Control</li> <li>Social Media and Youth Mental Health - US Surgeon General</li> </ul>
Higher Education and Career Path Skills	<ul> <li>Understanding Algorithms and Big Data in the Job Market</li> <li>My Next Move Interactive Career Research Tool</li> <li>Conveying Important Information Concisely In Public Speaking And Interviews</li> <li>Preparing a Digital Career Portfolio: A HS Career Seminar Lesson</li> </ul>
Mental health / TSEL	<ul> <li>American Psychological Association - Potential risks of content, features, and functions: The science of how social media affects youth</li> <li>Media Literacy and SEL through K-5 Book Boxes</li> <li>Oregon Department of Education - TSEL Framework and Standards</li> </ul>
Personal Financial Education	<ul> <li>Data Mining</li> <li>Five Tips to Protect Your Online and Financial Security - Continuing Education Video Series,         Episode 4</li> <li>Take Control of Your Personal Info to Help Prevent Identity Theft</li> <li>Cybersecurity-Online Identity Theft</li> <li>Deter. Detect. Defend. Avoid ID Theft.</li> <li>Impersonation and Identity Theft</li> <li>Identity Theft - Protecting Yourself</li> <li>Identity Theft: Preventing, Detecting, and Responding</li> <li>Podcast: Thinking Regularly About Protecting Identity From Online Thieves</li> </ul>