

Technology Literacy - Essential Skills

Adapted from the Alabama Technology Course of Study and ISTE-NET-S Essential Technology Literacy Skills by Grade Level

9th Grade

Required Business Course

Information Literacy - Essential Skills

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.”

(American Library Association. *Presidential Committee on Information Literacy, Final Report.*)

| | | |
|----------------------|---------------------------|---|
| 9th Grade | 1. Accessing Information | <p>The student who is information literate accesses information efficiently and effectively.</p> <ul style="list-style-type: none"> A. Articulates an information need and formulates questions for research. B. Develops a purpose or thesis statement. C. Seeks diverse perspectives during information gathering. D. Recognizes primary and secondary sources. E. Recognizes blogs, Twitter, online interviews, and other venues as being primary sources of information. |
| | 2. Evaluating Information | <p>The student who is information literate evaluates information critically and accurately.</p> <ul style="list-style-type: none"> A. Reads, views, listens to information critically. B. Uses paraphrasing, highlighting, plotting or other extraction techniques to identify and record relevant information. C. Applies evaluative criteria to determine the relative value of the information: relevancy, suitability, authority, objectivity, currency. D. Analyzes different points of view on the same topic. |
| | 3. Using Information | <p>The student who is information literate uses information ethically and creatively.</p> <ul style="list-style-type: none"> A. Analyzes information and identifies topics, subtopics and relationships B. Organizes information in a logical sequence. C. Selects an appropriate format and successfully communicates ideas. D. Properly uses and credits copyrighted materials either under Fair Use or Creative Commons when incorporating the original work of others into end products. |

Technology Literacy - Essential Skills

Adapted from the Alabama Technology Course of Study and ISTE-NET-S Essential Technology Literacy Skills by Grade Level

10th Grade

Required Business Course

Information Literacy - Essential Skills

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.”
(American Library Association. *Presidential Committee on Information Literacy, Final Report.*)

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|-----------------------|---------------------------|---|
| 10th Grade | 1. Accessing Information | <p>The student who is information literate accesses information efficiently and effectively.</p> <ul style="list-style-type: none"> A. Articulates an information need and formulates questions for research. B. Develops a purpose or thesis statement. C. Seeks diverse perspectives during information gathering. D. Recognizes primary and secondary sources. E. Recognizes blogs, Twitter, online interviews, and other venues as being primary sources of information. |
| | 2. Evaluating Information | <p>The student who is information literate evaluates information critically and accurately.</p> <ul style="list-style-type: none"> A. Reads, views, listens to information critically. B. Uses paraphrasing, highlighting, plotting or other extraction techniques to identify and record relevant information. C. Applies evaluative criteria to determine the relative value of the information: relevancy, suitability, authority, objectivity, currency. D. Analyzes different points of view on the same topic. |
| | 3. Using Information | <p>The student who is information literate uses information ethically and creatively.</p> <ul style="list-style-type: none"> A. Analyzes information and identifies topics, subtopics and relationships B. Organizes information in a logical sequence. C. Selects an appropriate format and successfully communicates ideas. D. Properly uses and credits copyrighted materials either under Fair Use or Creative Commons when incorporating the original work of others into end products. |

Technology Literacy - Essential Skills

Adapted from the Alabama Technology Course of Study and ISTE-NET-S Essential Technology Literacy Skills by Grade Level

11th Grade

Required Business Course

Information Literacy - Essential Skills

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.”
(American Library Association. *Presidential Committee on Information Literacy, Final Report.*)

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|-----------------------|---------------------------|--|
| 11th Grade | 1. Accessing Information | <p>The student who is information literate accesses information efficiently and effectively.</p> <ul style="list-style-type: none"> A. Independently selects keywords, synonyms, and related terms appropriate to investigate a research based question. B. Constructs appropriate questions for research and refines the search strategy if necessary. C. Assesses the quantity, quality, and relevance of the search results to determine whether alternative information retrieval systems or investigative methods should be utilized. D. Retrieves digital and print information using a variety of methods. |
| | 2. Evaluating Information | <p>The student who is information literate evaluates information critically and accurately.</p> <ul style="list-style-type: none"> A. Evaluates gathered information to determine whether it contradicts or verifies thesis statement. B. Seeks expert opinions through a variety of mechanisms (interviews, emails, listservs) C. Synthesizes information from multiple sources to create new meanings. |
| | 3. Using Information | <p>The student who is information literate uses information ethically and creatively.</p> <ul style="list-style-type: none"> A. Independently manipulates digital text, images, and data; transferring them from original locations and formats into new context. B. Uses a range of technology to create a product or performance. C. Communicates clearly and effectively with a style that supports the purpose and the intended audience. D. Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own. E. Demonstrates an understanding of intellectual property, copyright, and Fair Use of copyrighted material. |

Technology Literacy - Essential Skills

Adapted from the Alabama Technology Course of Study and ISTE-NET-S Essential Technology Literacy Skills by Grade Level

12th Grade

Required Business Course

Information Literacy - Essential Skills

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.”
(American Library Association. *Presidential Committee on Information Literacy, Final Report.*)

| | | |
|-----------------------|---------------------------|--|
| 12th Grade | 1. Accessing Information | <p>The student who is information literate accesses information efficiently and effectively.</p> <ul style="list-style-type: none"> A. Independently selects keywords, synonyms, and related terms appropriate to investigate a research based question. B. Constructs appropriate questions for research and refines the search strategy if necessary. C. Assesses the quantity, quality, and relevance of the search results to determine whether alternative information retrieval systems or investigative methods should be utilized. D. Retrieves digital and print information using a variety of methods. |
| | 2. Evaluating Information | <p>The student who is information literate evaluates information critically and accurately.</p> <ul style="list-style-type: none"> A. Evaluates gathered information to determine whether it contradicts or verifies thesis statement. B. Seeks expert opinions through a variety of mechanisms (interviews, emails, listservs) C. Synthesizes information from multiple sources to create new meanings. |
| | 3. Using Information | <p>The student who is information literate uses information ethically and creatively.</p> <ul style="list-style-type: none"> A. Independently manipulates digital text, images, and data; transferring them from original locations and formats into new context. B. Uses a range of technology to create a product or performance. C. Communicates clearly and effectively with a style that supports the purpose and the intended audience. D. Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own. E. Demonstrates an understanding of intellectual property, copyright, and Fair Use of copyrighted material. |

21st Century Essential Skills

The Integrating Authentic, Meaningful 21st Century Skills (*i•am21*) initiative began in 2008. The *i•am21* committee reviewed national frameworks and research before establishing the following as essential skills for the 21st Century student.

| Global and Cultural Awareness | |
|---|---|
| Skills | Rationale |
| <ul style="list-style-type: none"> • Use 21st Century skills to explore national and global issues • Explore how understanding other cultures can assist the U.S. in interacting, competing, and partnering with other countries in the global economy • Learn from and work collaboratively with individuals representing diverse cultures, races, religions and backgrounds in a spirit of mutual respect and open dialogue • Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors | <p>"Technology is obliterating geographic boundaries and time zones; collaborating and communication across these boundaries is now commonplace. In this environment, people need a deeper understanding of the thinking, motivations and actions of different cultures, countries, and regions." ~ <i>Partnership for the 21st Century</i></p> <p>"We live in multicultural societies, teach in multicultural settings, and our students often interact with those who come from a different place in terms of gender, rural or urban environments, nationalistically, linguistically, racially, and religiously. Awareness of and sensitivity to culturally determined norms promotes understanding." ~ <i>AT&T</i></p> <p>"The world is rapidly becoming wired and the resulting globalization of commerce and trade has increased the need for cultural literacy. In such a global economy, with the U.S. concerned about interactions, partnerships and competition from around the world, there is a greater necessity for knowing, understanding and appreciating other cultures, including cultural formations established as norms in a technological society, such as virtual realities." ~ <i>The Metiri Group</i></p> |

| Information Literacy | |
|---|---|
| Skills | Rationale |
| <ul style="list-style-type: none"> • Access information efficiently and effectively • Evaluate information critically and competently • Use information accurately, ethically, and creatively • Understand both how and why media messages are constructed, and for what purposes | <p>"Learning skills are increasingly important in workplaces and community life. They enable students to acquire new knowledge and skills, connect new information to existing knowledge, analyze, develop habits of learning and to work with others to use information." ~ <i>Partnership for the 21st Century</i></p> <p>Today's environment "requires individuals to be able to identify and react to changing conditions independently--self-directed learners who are able to analyze new conditions as they arise, identify the new skills that will be required to deal with these conditions and independently chart a course that responds to these changes." ~ <i>The Metiri Group</i></p> |

| Technology Literacy | |
|--|---|
| Skills | Rationale |
| <ul style="list-style-type: none"> Master and apply technology concepts, terminology, skills, and habits in accordance with the AL Technology Course of Study, and ISTE's National Education Technology Standards(NETS) Use technology as a tool to research, organize, evaluate and communicate information Use digital technologies (computers, PDAs, media players, GPS, etc.), communication/networking tools appropriately to access, manage, integrate, evaluate and create information to successfully function in a knowledge economy | <p>The definition of literacy in the 21st Century has changed.</p> <p>According to the Educational Testing Service, literacy in the 21st Century means students have "the ability to use digital technology, communications tools, and/or networks appropriately to solve information problems in order to function in an information society." This includes "the ability to use technology as a tool to research, organize, evaluate, and communicate information. . ."</p> <p>~ <i>Educational Testing Service</i></p> <p>"Students need to develop competencies in enacting learning skills via the application of 21st Century learning tools."</p> <p>~ <i>Partnership for the 21st Century</i></p> |

| Communication and Collaboration | |
|---|--|
| Skills | Rationale |
| <ul style="list-style-type: none"> Understand and utilize a variety of 21st Century asynchronous and synchronous communication and collaboration tools, such as person-to-person email interactions, group interactions in virtual learning spaces (wikis, blogs, online courses), and interactive audio or video conferencing Understand and utilize the most appropriate media creation tools, characteristics and conventions to communicate ideas | <p>"The rapid pace of today's society and its communications networks have caused -and enabled- a shift in the level of decision-making down to the worker closer to the client or product. At the same time the complexity of today's world requires a high degree of specialization by decision makers-hence the need for teaming of specialists to accomplish complex tasks in ways that are efficient, effective and timely."</p> <p>~ <i>The Metiri Group</i></p> |

| Ethics, Actions, and Accountability | |
|--|--|
| Skills | Rationale |
| <ul style="list-style-type: none"> Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information technologies and media Understand the uses, risks, dynamics, and impacts of social networks Advocate and practice safe, legal, and responsible use of information and technology | <p>"New technologies bring about the need to interpret old values in new ways, but also may call for the creation of new codes of conduct when new actions are made possible with the use of technology."</p> <p>~ <i>Doug Johnson</i></p> <p>21st Century literacy ". . . also requires students to understand the "ethical [and] legal issues surrounding the access and use of information."</p> <p>~ <i>Educational Testing Service</i></p> |

Creativity and Innovation

| Skills | Rationale |
|---|--|
| <ul style="list-style-type: none">• Develop visualization skills to be able to decipher, interpret, detect patterns, and communicate using imagery• Utilize multiple media and technologies, and know how to judge their effectiveness and impact• Use a wide range of idea creation techniques• Leverage social and cultural differences to create new ideas and increase both innovation and quality of work• Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize creative efforts | <p>"In addition, today's knowledge workers are expected to rapidly adjust and adapt to changing environments. Without creativity and risk-taking there would be few quantum leaps in discoveries, inventions, and learning." ~ <i>The Metiri Group</i></p> |