

INFORMATION LITERACY SKILLS CONTINUUM

Grades 6-12

The outline of these skills comes from *Information Power*, the manual developed by the American Association of School Librarians and the AECT. The list of individual skills is derived from “Getting to the Core,” Library Media Services, Jefferson County Public Schools (Kentucky), <http://lms.jefferson.k12.ky.us/gttc.html>. This document is available online at http://rhsweb.org/library/pdf/info_lit_continuum.pdf

Information literacy skills are needed and used in all content areas, although they are not singled out as a core subject. Students become information literate by acquiring information skills within content areas. Students who have developed information literacy skills are able to locate, retrieve, interpret and use information efficiently, effectively, and ethically.

GRADES 6-8

GRADES 9-12

INFORMATION LITERACY STANDARDS

1. The student who is information literate accesses information efficiently and effectively

A. Recognizes the need for information

- Independently states the topic, problem, or question and what is known about it.
- Independently uses encyclopedias and other reference sources for answering questions, for an overview of a topic, for background information, and as a starting point for research.

- Identifies types of information needed independently.

B. Recognizes that accurate and comprehensive information is the basis for intelligent decision making

- Explains how topics can be narrowed or broadened.
- Gathers and analyzes information related to primary sources (such as surveys and interviews).

- Develops appropriate criteria and use to evaluate information (e.g. copyright date, authority, source viewpoint, validity).

C. Formulates questions based on information needs

- Identifies purpose of assigned research.
- Prepares for an interview using effective yes-no, open-ended, and probing questions that relate to the topic and subtopics; arrange appointment, conducts interview, and record interview responses.
- Formulates questions to guide reading, listening, and viewing information.

- Independently applies a complex inquiry process and monitors effective use of the process.
- Seeks clarification from teachers and others through a variety of all communications media; e.g., in-person, e-mail, written, fax.
- Formulates questions that effectively elicit information.

D. Identifies a variety of potential sources of information

- Applies knowledge that the periodical section consists of magazines for pleasure reading and other materials that provide current information.
- Recognizes, uses, and interprets information in magazine and other indexes (electronic or print).
- Locates and defines the various parts of a newspaper.
- Uses specific reference resources such as gazetteers, biographical indexes and dictionaries, atlases, geographical dictionaries, specialized indexes, bibliographies, periodicals, literary criticism, handbooks, manuals, thesauruses, government documents, books of quotations, books or world records, etc.
- Uses and interprets graphic sources for information: maps, charts, pictures, diagrams, bar and picture graphs, tables, schedules, etc.
- Lists a variety of possible sources of information and develops criteria to prioritize those sources.
- Identifies and distinguishes the unique characteristics of a variety of resources (general reference, general collection resources, people, community resources, electronic resources) and determines and uses the most appropriate for a specific purpose.
- Uses primary sources, secondary sources, artifacts, and time lines to study and interpret history.
- Recognizes the parts of a URL including domain extensions such as .gov, .com, .org, and .edu.
- Uses Boolean search strategies to locate information.
- Uses the library's online catalog to search and do independent study assignments.
- Identifies people who are possible resources and conducts personal or electronic interviews.
- Identifies and uses reference aids such as the dictionary, atlas, almanac, encyclopedias, government documents, and electronic encyclopedias and databases.
- Identifies and use public libraries, university libraries, and community resources (e.g. zoo, planetarium, museums) to acquire information.
- Distinguishes the unique characteristics of various reference sources and determines the most appropriate source for a specific purpose.
- Develops and utilizes criteria to prioritize sources from a range of possibilities.
- Uses primary sources to experience history from the perspectives of people who lived it.
- Recognizes that information comes in a variety of formats; locates materials and operates the equipment necessary to retrieve the information.
- Identifies and uses information resources in such formats as CD-ROM, video, virtual reality, and print, including: general references, subject-specific references, general collection resources (both fiction and nonfiction), community resources, databases on local and global networks, and electronic communication.

E. Develops and uses successful strategies for locating information

- States that the library catalog (card/online) is an index to the LMC collection.
- Applies knowledge of the ten classes of the Dewey Decimal System and understands their arrangement.
- Determines place value of whole numbers and decimals.
- Locates library materials by Dewey Decimal classification and other book spine information.
- Assists others in locating needed information.
- Identifies and uses reference aids (print and electronic) such as the unabridged dictionary,
- Locates materials in a variety of libraries, familiar and unfamiliar.
- Uses the online catalog to search and do independent study assignments.
- Understands how to use equivalence relations and order relations (less than, greater than, equal to) to solve problems using real numbers.
- Uses increasingly complex organizational features of print and electronic resources.
- Uses subject headings, guide words, cross references and key words to locate information.
- Utilizes page format and layout (graphics and

specialized dictionaries, atlas, almanac, encyclopedias, periodical indexes electronic databases.

- Uses maps, globes, photographs, models, and satellite images as representations of Earth with different characteristics and uses.
- Uses a variety of strategies to list subject headings and key words (general reference sources, brainstorming, discussion).
- Uses electronic search strategies, e.g., Boolean operators (and, or, not), wildcards, and truncation for finding information.
- Scans to find key information.
- Skims to get the general meaning of a passage.

organizational aids such as bullets, bold face type, italics and indentation) to interpret information.

- Constructs effective searches using appropriate subject headings and key words (e.g. electronic index searches, Boolean searches, online searches).

2. The student who is information literate evaluates information critically and competently

A. Determines accuracy, relevance and comprehensiveness

- Distinguishes between and uses primary and secondary sources.
- Evaluates and selects information resources that are understandable, available, relevant, current, valid and authoritative.
- Selects and evaluates information resources for objectivity.
- Identifies and applies published criteria for excellence of resources.
- Develops criteria with assistance to evaluate information for usefulness, e.g. copyright date, authority, fact vs. opinion.

- Uses three or more search engines to compare and contrast information obtained on a single subject.
- Evaluates resources for relevance, accuracy, availability, timeliness, cost, authority, and ease of use.
- Applies an understanding of the difference between primary and secondary resources.

B. Distinguishes among fact, point of view and opinion

- Distinguishes among fact, nonfact, opinion, and propaganda.
- Identifies commonly used persuasive techniques [e.g., expert opinion, statistics, testimonial, bandwagon].
- Describes literary elements (e.g., characterization, setting, plot, theme, point of view) in a passage.
- Distinguishes between informative and persuasive passages.
- Identifies an author's opinion about a subject.
- Distinguishes between fact and opinion.
- Identifies the argument and supporting evidence.
- Describes advertising techniques and detects the use of propaganda and over-generalization.

- Formulates opinions in response to a reading passage.
- Identifies author or character point of view.
- Identifies advertising techniques; detects the use of propaganda and over-generalization.
- Compares and contrasts differing points of view in two or more passages.
- Analyzes and evaluates the use of persuasion within a passage.
- Identifies purposes of persuasion.
- Identifies an author's position based on evidence in a passage.
- Recognizes the power of media to influence.
- Recognizes propaganda and the presence of bias or prejudice.
- Evaluates critically how selected information integrates to complete a task.
- Evaluates resources for differing points of view and absence of bias or prejudice.

C. Identifies inaccurate and misleading information

- Evaluates sources of information for contributor's/producer's motive, point of view, bias, authority, and intended audience.
- Identifies information resources that show prejudice or stereotyping.
- Identifies positive and negative aspects of advertising strategies (e.g., providing accurate or misleading information, gimmicks).
- Shows how data gathering, bias issues, faulty data analysis, and misleading representations affect interpretations and conclusions about data (e.g. changing the scale on a graph, polling only a specific group of people, using limited or extremely small sample size).
- Identifies bias and/or misinformation.
- Identifies a variety of persuasive and propaganda techniques and explain how each is used.
- Describes and gives examples of various sampling techniques and biases in data collection.

D. Selects information appropriate to the problem or question at hand

- Accesses information within print resources (e.g. illustrations, title page, book jacket text, charts, graphs, table of contents, index, information boxes and sidebars, captions, headings, and subheadings).
- Determines the reference source most appropriate for a specific purpose.
- Interprets information to formulate ideas that address the questions or problem, e.g., compare, contrast, infer, deduce, summarize, generalize.
- Develops and uses criteria to analyze the quality and quantity of information.
- Revises search strategies and locates additional information as needed.
- Identifies essential information needed to accomplish a task.
- Determines if a resource can be obtained within the defined timeline of the task.

3. The student who is information literate uses information accurately and effectively

A. Organizes information for practical application

- Recognizes ways to organize material in order to clarify relationships among concepts.
- Creates a nonlinear outline, i.e., flowchart, matrix, diagram.
- Selects an appropriate organizational style such as chronological, topical, spatial order of importance, or argumentative position.
- Summarizes information from a passage.
- Uses simple organizational techniques to clarify and relate ideas.
- Organizes and integrates information, e.g. using sequencing, webbing, outlining.
- Identifies potential research process models.
- Reads, views and listens to sources, identifying main ideas, opinions and supporting facts.
- Uses effective note-taking strategies.
- Uses effective organizational techniques to clarify and relate ideas.
- Compiles bibliographic information.
- Paraphrases important parts of a passage.
- Formulates a topic sentence or thesis statement.
- Uses a variety of note-taking methods; e.g., notecards, photocopy and highlighting, cut-and-paste, downloading and uploading.
- Paraphrases rather than plagiarizes.
- Abstracts and summarizes.
- Establishes a clear purpose for a product.

B. Integrates new information into one's own knowledge

- Recalls and organizes previous knowledge of subject and build on that knowledge bases.
- Uses interactive listening to enhance the connection between new information and

- Draws inferences and supports them with text evidence.
- Recalls and records previous knowledge of subject and builds on that knowledge base.

C. Applies information in critical thinking and problem solving

- Creates a first draft, gathers feedback, and edits.
- Determines significant concepts and details gained through reading, listening, and viewing.
- Verifies information attained through interviews.
- Uses graphs (e.g., bar, line, circle), and plots (e.g., line, stem-and-leaf, box-and-whiskers, scatter). Organizes, represents, analyzes, and interprets sets of data.
- Constructs and interprets displays of data (e.g., table, circle graph, line plot, stem-and-leaf plot, box-and-whiskers plots)
- Makes predictions and draws conclusions from statistical data and probability experiments.
- Shows how different representations of data (e.g. tables, graphs, diagrams, plots) are related.

D. Produces and communicates information and ideas in appropriate formats

- Selects a product format that fits the assignment.
- Uses a variety of production technologies for sharing information (e.g. word processing, photographing, audio recording, drawing illustrations, creating multimedia computer presentations).
- Describes, supports an opinion, and/or persuades and audience using a variety of media formats (print, graphical, audio, video, multimedia).

personal knowledge base.

- Interprets increasingly complex information to formulate ideas that address the question or problem.
- Draws inferences and supports them with text evidence.

- Produces media in various formats (print, graphical, audio, video, multimedia, web-based) appropriate to audience and purpose.
- Describes, supports and opinion, and/or persuades and audience using a variety of media formats.
- Organizes, displays, and interprets statistical models (tables, graphs) of bivariate data.
- Builds a reasonable timeline for completion of tasks.
- Uses word-processing programs to organize and present textual information.
- Uses electronic spreadsheets to organize and present numerical information and graphs.
- Uses facilities and equipment responsibly for production and presentation.

INDEPENDENT LEARNING STANDARDS

4. The student who is an independent learner is information literate and pursues information related to personal interests

A. Seeks information related to various dimensions of personal well-being, such as career interests, community involvement, health matters, and recreational pursuits

- Understands how jobs and career opportunities (e.g., manufacturing, business/industry, food

- Locates and uses postsecondary education and career resources.

services, natural resources, entertainment) vary within and among communities and global regions based, in part, on available resources.

- Identifies resources (e.g., Internet, government publications, newspapers, magazines, counselors) and experiences (e.g., shadowing, mentoring) available for locating job and career information.
- Identifies various postsecondary options available (e.g., technical or vocational schools, 2-year college, 4-year college, apprenticeship, military service).
- Identifies the skills necessary for jobs associated with theater (playwright, director, actor, actress, designers - scenery, props, lighting, sounds, costume, make-up)

- Understands how job and career opportunities vary at the state, national, and international levels based on demand for goods and services and available resources.
- Understands how the job market changes as a result of scientific advancements and the increased use of technology (e.g., robotics replacing workers).
- Understands that short- and long-term career goals should be based on an individual's personality, values, interests, aptitudes, abilities, and postsecondary opportunities.
- Identifies basic academic skills (e.g., communication, research, math, science) and preparation levels (e.g., past work experience and training, leadership, certification) required or useful for various jobs and careers.
- Evaluates the advantages and disadvantages of jobs and careers in various occupational areas (e.g., preparation, salary, benefits, demands of job, location, work environment).
- Considers various postsecondary options (e.g., technical or vocational schools, 2-year colleges, 4-year colleges, apprenticeships, military service) when selecting or preparing for employment or a career path.
- Identifies skills and training necessary for a variety of careers related to music.
- Identifies skills and training necessary for a variety of careers in visual arts.

B. Designs, develops, and evaluates information products and solutions related to personal interests

- (No skills listed)

- (No skills listed)

5. The student who is an independent learner is information literate and appreciates literature and other creative expressions of information

A. Is a competent and self-motivated reader

- Selects and reads a variety of books and materials, both literary and informational, available in the library media center.
- Explores and compares different types of literature to enrich and expand the reading experience.
- Identifies and lists a variety of evaluative criteria to use when selecting reading materials (e.g. interest, readability, relevance).
- Listens to or reads quality literature, including award and honor books (Newbery, Coretta Scott King, Laura Ingalls Wilder), classics, and "notable" books.

- Checks out and reads a variety of multicultural and multiethnic materials available in libraries and bookstores.
- Demonstrates understanding of various literary works through the use of comprehension and sequencing.
- Demonstrates a balance of reading by selecting a variety of works and by selecting materials from a wide variety of sources.
- Develops and articulates personal criteria for selecting resources for information needs and enjoyment.
- Relates literature to curricula; e.g., folk takes

- Participates in read-aloud, storytelling, booktalking, silent and voluntary reading experiences.

B. Derives meaning from information presented creatively in a variety of formats

- Knows, and derives meaning from, literary forms, genres and themes, e.g., classics, adventure, historical fiction, folklore, biographies, humor, fantasy, science fiction, realistic fiction, plays, story collections and mysteries.
- Explains how sidebars, time lines, line drawings, diagrams, and symbols enhance understanding of the text.
- Lists and describes the audience appeal of a variety of media, e.g., television, books, newspaper, bumper stickers, radio, computer, clothing with messages.
- Recognizes that media productions influence perceptions of reality.
- Analyzes and appreciates the various ways visual image makers (illustrators, film makers, cartoonists) represent ideas in different ways.

C. Develops creative products in a variety of formats

- Participates in listening and speaking activities.
- Uses graphics to enhance writing and research projects, e.g., sidebars, timelines, line drawings, diagrams, symbols.

and mythology to explanations of scientific phenomena, biography to mathematics, natural history writing to science.

- Interprets an author's decisions regarding content.
- Interprets, critiques, or evaluates fiction and nonfiction in various genres.

- Selects most effective presentation form based on audience and purpose.
- Selects and uses composition process appropriate to presentation form.
- Makes a clear, well-supported presentation that addresses the question or problem.
- Identifies characteristics and advantages of various media formats (print, graphical, audio, video, multimedia, web-based) for a specific task and produces and presents findings in the most appropriate format.
- Selects a product format based on personal learning style, assignment constraints, and/or nature of information to be presented.
- Uses electronic presentation programs or other techniques to organize and present pictorial and graphical information.
- Tells stories and gives booktalks in all forms; e.g., skits, mime, puppet shows, games.

6. The student who is an independent learner is information literate and strives for excellence in information seeking and knowledge generation

A. Assesses the quality of the process and products of personal information seeking

- Uses objective criteria to assess product

- Analyzes the effectiveness of various search

effectiveness.

- Uses personal criteria such as quality of product and level of personal effort to evaluate the product.
- Assesses reaction from the audience (e.g. peers, teachers, parents, judges).
- Identifies strengths and sets goals for improvement.

B. Devises strategies for revising, improving, and updating self-generated knowledge

- Reflects on, records and discusses the final product (e.g. what was done well and why, what should be improved in future products).

strategies to locate print and nonprint information and generates criteria useful in evaluating the quality of information.

- Applies criteria for quality and craftsmanship based on existing models and personal criteria.
- Compares product with criteria from the original task definition.
- Solicits and reflects upon peer reviews and teacher comments about an information product.
- Reads and responds to written evaluation from peers and teachers.

- Uses sources to acquire background information.
- Revises (narrows, focuses, defines, broadens) question or problem as needed.
- Develops criteria and self-assesses the product.
- Generates ideas for gathering further information: mind mapping, brainstorming, questioning, listing, preliminary outline.

Social Responsibility Standards

7. The student who contributes positively to the learning community and to society is information literate and recognizes the importance of information to democratic society

A. Seeks information from diverse sources, contexts, disciplines, and cultures

- Describes personal cultural heritage and environment.
- Relates cultural similarities and differences to personal heritage and environments.
- Collects and compares information about diverse cultures, environments, and peoples.

- Identifies bias and stereotypes.
- Describes how information and ideas are influenced by prior knowledge, personal experience and social, cultural, political, economic, and historical events.
- Analyzes and evaluates materials from a variety of cultures.

B. Respects the principle of equitable access to information

- Demonstrates knowledge of school library media center policies and procedures (e.g. rules, care of materials, requests for help, and “netiquette.”)
- Discusses the importance of libraries to provide a variety of materials in order to support informed citizens in a free society.

- Demonstrates knowledge of acceptable behavior and responsibility in the library media center.
- Shows respect and responsibility to self and others (e.g., constructive communication; fulfilling commitments; cooperation; demonstrating healthy ways to express needs, wants, feelings).
- Evaluates the importance of equitable access.
- Maintains the physical integrity of information resources and facilities.
- Follows policies and procedures for use of facilities, systems, and resources.

8. The student who contributes positively to the learning community and to society is information literate and practices ethical behavior in regard to information and information technology

A. Respects the principles of intellectual freedom

- Recognizes diversity of ideas and thoughts by exploring a variety of resources.

- (No skills listed)

B. Respects intellectual property rights

- Gives examples of works of print and nonprint media that are created by and belong to an author, illustrator, or company.
- Identifies symbols of copyright and trademarks.
- Incorporates in the research process: quoting, paraphrasing, footnoting, citing in-text references and crediting sources.
- Exhibits legal/ ethical behaviors when using information technology, and discuss consequences of misuse.
- Compiles and writes complete bibliography for both print and nonprint sources.
- Acknowledges ownership of ideas.

- Recognizes that different parts of a book offer information (cover, title page, spine, appendices, copyright, preface, bibliography, and footnotes).
- Applies fair use copyright guidelines.
- Organizes and presents more in-depth information with citations and endnotes or footnotes.
- Credits sources in all print, non-print, and electronic products using approved bibliographic format.

C. Uses information technology responsibly

- Uses a computer to store and retrieve information.
- Applies knowledge of computer search techniques (Boolean, hierarchical, analytical, and truncation) when accessing information from various electronic resources. Identifies bias and stereotypes.

- Evaluates websites for effective and useful information.
- Recognizes and practices safety procedures for virus protection.
- Recognizes the social and legal implications of viruses, hacking, offensive material, and vandalism.

9. The student who contributes positively to the learning community and to society is information literate and participates effectively in groups to pursue and generate information

A. Shares knowledge and information with others

- (No skills listed)

- (No skills listed)

B. Respects others' ideas and backgrounds and acknowledges their contributions

- Demonstrates personal rights and responsibilities (e.g., cooperation, communication, patience) when dealing with others (e.g., families, classmates, teams).
- Recognizes that social and cultural attitudes and backgrounds can influence responses to media.

- (No skills listed)

C. Collaborates with others, both in person and through technologies, to identify information problems and to seek their solutions

- (No skills listed)

- Recognizes ways in which telecommunications tools promote collaboration, research, publication, communication, and productivity.
- Understands changes in roles, responsibilities, and skills needed to effectively work in groups throughout life.

- Uses good work habits/ethics (e.g., cooperation, respect, time management, individual/team responsibilities, dependability) to impact the success of a group.
- Searches local and global networks for information; e.g. bulletin boards, mailing lists, newsgroups, and other discussion groups.

D. Collaborates with others, both in person and through technologies, to design, develop, and evaluate information products and solutions

- Describes elements of good products.
- Uses good individual work habits and work ethics (e.g., cooperation, respect, time, management, team/individual responsibilities) to impact the success of a group.
- Demonstrates both individual and team skills (e.g., identify goals, use listening skills, follow directions, communicate orally, ask questions about tasks, use problem-solving skills) to contribute to the successful completion of a task.

- (No skills listed)