

Research Process Skills Continuum

This library research process skills continuum supports a 21st century information seeking based approach. These information, media and technology based skills are designed to be cross curricular and specific to support information literacy. The research skills listed here are geared toward reading level appropriate resources and designed for information seeking strategies. Power points, brochures, posters, photostories, podcasts, research papers are examples of project based learning activities that may utilize the research process.

TLM (Teacher-Librarian Modeling) – Teacher-Librarian may model steps of the research process through whole group instruction. Students will be given opportunities to apply the skills.

I (Introduce) – While some of these skills may have been introduced at lower grade levels in some content areas, now teacher - librarian will formally introduce these research skills. Students will be rubric evaluated.

E (Expected) –The teacher - librarian expects all students to be aware of this skill. Some review is needed. Students should be able to implement this skill and be rubric evaluated.

M (Mastery) – All students have demonstrated skill mastery and be rubric evaluated.

Keep in Mind: The research focus LAL student objectives listed below (W.4.2.b, W.10.8, W.4.7, W.9.6, W.4.8, SL.9.2, W.7.2a, L.9.3, RI.7.2, L.9.3, RI. 7.2, SL.1.5, SL. 4.4, RI.11.7) are drawn from the Core Curriculum Content Standards and are sample research process skills. There are specific grade level appropriate focus LAL student objectives that will apply to specific grade level project.

| Research Focus LAL Objectives | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|-----|-----|---------|-----|---------|-----|-----|-----|-----|---|----|-----|----|
| Develop a topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic when writing. | TLM | TLM | TLM | TLM | I | I | I/E | I/E | I/E | E | E | E/M | M |
| Effectively gather relevant information from multiple authoritative print and digital sources; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. | | | | TLM | TLM | I | I | I/E | I/E | E | E | E/M | M |
| Conduct short research projects that build knowledge through investigation of different aspects of a topic. | TLM | TLM | TLM | TLM | I | I | I/E | I/E | I/E | E | E | E/M | M |
| Use technology, including the Internet, to produce, publish, and update individual or shared writing products. | | | TLM | TLM | I | I | I/E | I/E | I/E | E | E | E/M | M |
| Take notes and categorize information, and provide a list of sources. | | | TLM | I | I | I/E | I/E | I/E | I/E | E | E | E/M | M |
| Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source. | | | TLM | TLM | I | I | I/E | I/E | I/E | E | E | E/M | M |
| Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the organization of relevant content; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. | | | | TLM | I | I | I | I/E | I/E | E | E | E/M | M |
| Write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA Handbook, Turabian’s Manual for Writers) appropriate for the discipline and writing type. | | | | TLM | TLM | I | I/E | I/E | I/E | E | E | E/M | M |
| Provide an objective summary of the text. | | TLM | TLM | TLM | I | I | I | I/E | I/E | E | E | E/M | M |
| Clarify ideas, thoughts, and feelings by creating visual displays or drawings to add information and detail to a description. | TLM | TLM | TLM / I | I | I | I | I/E | I/E | I/E | E | E | E/M | M |
| Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes. | TLM | TLM | TLM / I | I | I | I | I/E | I/E | I/E | E | E | E/M | M |
| Evaluate multiple sources of information presented in different media or format. | | | | TLM | TLM / I | I | I | I/E | I/E | E | E | E/M | M |

Research Process Skills Stages

| Stage I: Task Definition | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Explore topic background (online or print reference) | | | | TLM | TLM | I | I | I/E | E | E/M | E/M | M | M |
| Choose and narrow at topic | | | | TLM | TLM | I | I | E | E | E/M | E/M | M | M |
| Develop research guiding questions | TLM | TLM | TLM | TLM | TLM | I | I | E | E/M | E/M | E/M | M | M |
| Develop working thesis | | | | | TLM | TLM | I | I/E | E | E | E/M | M | M |
| Identify audience and purpose for research product (persuade/inform) | | | | TLM | TLM | I | E | E/M | E/M | M | M | M | M |
| Organize | | TLM | TLM | I | I | I | I/E | E | E | E/M | M | M | M |
| Create preliminary outline | | | | | TLM | I | I | I/E | E | E/M | E/M | M | M |
| Text features (parts of informational text) | | TLM | TLM | I | I | I | I/E | I/E | E | E/M | M | M | M |
| Introduce variety of search methods | | | TLM | TLM | I | I | I | I/E | I/E | E | E/M | E/M | M |
| Stage 2: Information Exploration | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Locate resources | | | TLM | TLM | I | I | I/E | I/E | E | E | E/M | M | M |
| Evaluate sources for reliability: ABCs (authority, accuracy, bias, currency, coverage) | | | | TLM | TLM | I | I | I/E | E | E | E | E/M | M |
| Increase the variety and quality of resources | | | | | | | | I/E | I/E | I | E | E | E |
| Stage 3: Information Utilization | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Take notes | TLM | TLM | TLM | I | I | I | I/E | I/E | IE | E | E | E/M | M |
| Document where sources were obtained | | TLM | TLM | TLM | I | I | I/E | I/E | E | E | E | E/M | M |
| Determine, recognize and avoid plagiarism | | TLM | TLM | TLM | I | I/E | I/E | E | E | E | E | E/M | M |
| Evaluate your findings. Do you have enough info to prove your thesis? Did you cover your complete outline / organizer? | | | | | TLM | I | I | I/E | I/E | E | E | E | E |
| Summarize | | | | TLM | TLM | I | I | I/E | I/E | E | E/M | M | M |
| Stage 4: Production | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Create bibliography/works cited | | | | TLM | TLM | I | I | I/e | I/E | E | E | M | M |
| Format citations | | | | TLM | TLM | I | I | I/E | I/E | E | E | E/M | M |
| Quotations and parenthetical references | | | | | | | TLM | TLM | I | I/E | I/E | E | E/M |
| Create draft (paper, poster, display, photostory, ppt, etc.) | | TLM | TLM | I | I | I/E | E | E | E | E/M | E/M | M | M |
| Incorporate own ideas within research | | | | | TLM | TLM | I | I/E | I/E | E | E | M | M |
| Revise /Preliminary Reflection | | | TLM | I | I/E | I/E | E | E | E | E/M | E/M | M | M |
| Stage 5: Presentation/Communication | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Present final product | TLM | I | E | E | E | E | E | E/M | E/M | M | M | M | M |
| Stage 6: Evaluation | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Final reflection on product and process | TLM | TLM | TLM | I | I | I/E | I/E | I/E | E | E | E/M | M | M |