

Research Toolkit



Informal and Advanced Research

Building a habit of locating, evaluating, and using credible sources

Suggested Time: 15-30 minutes per practice session

Rationale/Research Base

Research is easier than ever before in history, because so much information is available to digital researchers. It is also harder than ever before to evaluate the credibility of the sources students are likely to encounter given our new tools.

Optimal Application Notes:

Provide resources for developing research questions based on topics of study, evaluating credible sources, taking notes for a variety of purposes, and documenting sources effectively.

Before:

- Choose the toolkit focus based on the needs and what your students already know, understand, and are able to do.
- Introduce the skill that is the target of the activity until you have had an introduction for each skill over the course of the first four research opportunities.
- Provide a model with your own thinking. (e.g. What strategies can readers use to increase reading speed? Model informal research and refine the question based on initial web search.)

During:

- As students are trying out each skill remind them that they can pair with others to check their work.
- Visit groups to ensure students are engaged, on task, and clear up common misconceptions.
- As a class, ask students who feel comfortable to share models and provide guidance using those models to evolve practice. For example, ask students to share what their initial question was, the research that led them to evolve the question, and the new findings.

After:

- Have students reflect on what they learned (tell back) and what they might still need help with (question) and share with you in an exit ticket (a half sheet of paper.)
- Group those questions and address them in the next meeting.

Scaffolds & Supports:

- Provide informal 1:1 conferences during the research phase, focusing on students who may benefit from additional support.

Student Tasks:

- Review Question
- Brainstorm specific questions about topic at hand
- Conduct initial informal research
- Refine question to drive further inquiry
- Conduct research again and evaluate sources for credibility
- Capture initial learnings as summarized, paraphrased, or directly quote information
- Document research using MLA or APA style (see online guides for current guidelines)

Online ThinkCERCA Resources

- Essential Questions
- ThinkCERCA lessons



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• Suggested Scope and Sequence

- Begin students on the basic question of what ideas are worth researching? The answer is, any question that drives curiosity is worth researching.
- Have students practice generating questions by pairing up and generating questions about topics of interest before settling on one that is interesting enough to pursue.
- Have them use the **Inquiry-Driven Research** organizer to pursue questions of interest.
- Next, have students try their hand at a quick online search that will help them find out more about the topic and generate a more refined question to guide a narrow research focus.
- Once students are able to develop questions that are worthy of research and narrow enough to guide their research, they will need to learn to **Evaluate Sources for Credibility**. Preview the checklist and model a think-aloud about how you search for sources.
- Be sure to model the use of generative AI-based search engines, pointing out that sources like Perplexity that point back to the original source of information is helpful for research, but all generative AI-based searches must be verified against original sources. Use the Evaluating Sources checklist to evaluate credible sources.
- Once students are familiar with the process of defining a question and evaluating sources for credibility, they can use the guidelines in the **When to Summarize, Paraphrase, and/or Directly Quote Sources** tool as they determine which sources are most relevant to their working research questions.
- Finally, they should get in the habit of keeping a running bibliography, even if they later decide not to cite the source. Students can leverage many free online resources on APA and MLA style guides. Also, in many search engines, students can use the question, "How can I create a citation for this source? [add the link or other information found on the source]." Frequently, this will yield the citation they are seeking.
- Purdue University's Online Writing Lab is another very trustworthy free site that provides automated tools and reference explanations for citations: https://owl.purdue.edu/owl/research_and_citation.

Guidelines:

Informal Research and Advanced Research

Once you have decided on your topic and have a good idea for a key question, you will want to do some brief, informal research. Informal research involves searching the internet to learn more about the general area you are researching. You are trying to learn whether your initial idea for a research question is the one you want to continue with.

Example research topic and initial question: pet adoption. How can I adopt a cat?

Informal research: searching the Internet for general information, such as on personal blogs about adopted cats

After evaluating 2-3 sources on your topic, you may want to refine your initial research question. You will then move on to advanced research, looking for sources that are valid, credible, and reliable.

Example revised research question: What are the best steps to take in my state when adopting a rescue cat from a shelter?

Advanced research: looking at valid, credible, and reliable books, journals, and websites that can provide good information on your topic and address your research question

Steps to take:

1. Decide on a topic and an initial key question.
2. Record your topic and research question in the Inquiry-Driven Research organizer.
3. Search the Internet and read 2-3 sources that relate to your topic, to see if your research question is a good one.
4. Record your research learnings.
5. Refine your research question and record it.

Inquiry-Driven Research

Instructions: Based on the essential question of the unit, develop a key question to begin brief, informal research on the topic. After evaluating 2-3 sources related to your specific topic, modify your question. Continue research to find the 3 most valid, credible, or reliable in terms of answering your new research question. Summarize, paraphrase, or directly quote sources.

Unit Essential Question:

My question:

Source 1 learnings:

Source 2 learnings:

My new question:

Guidelines:

Evaluating Sources for Credibility

As you do more advanced research, you will want to use the best sources available to answer your research question, so that your writing reflects good ideas and information. You will want to make sure your sources are **credible**, that is, believable and well founded.

Credible sources have known, knowledgeable authors who credit other sources. A credible source can be trusted to present information without bias. Credibility is important so that your readers are confident you are providing them with information that is accurate and trustworthy.

Example research question: What are the steps in my state for adopting a rescue cat from a shelter?

A credible source: The website of the American Humane Society, an organization founded in 1877 (americanhumane.org)

A source about which your readers might be more skeptical: a website of a pet food company

Steps to take:

1. Find books, periodicals, and reliable websites that directly address your revised research question.
2. Evaluate the sources for authority, purpose, accuracy, currency, and relevance using the checklist provided here to assess the merit of the source. Then use the record Credible Sources.

Evaluating Sources for Credibility

Instructions: Determine the best sources for your inquiry.

Authority

- *Note the name of the author, group, publisher, or editor not an anonymous entity*
- *Did the source go through a review process (e.g., peer review, editorial review) by experts?*
- *Does the work appear to be well-written or designed, mostly free of errors, easily navigated and web site is functional)?*
- *Has the source been influential (e.g., republished, shared, reviewed, or discussed by others)?*

Purpose

- *Is there a mission statement or an explanation for the site or the publication?*
- *If the source is meant to advertise or to sell a product, be sure that the organization is credible?*
- *Is it designed for public service, government information distribution, educational purposes?*

Accuracy, Currency, Relevance

- *Is there a bibliography, footnotes, or links to other works?*
- *Is the author's or publisher's contact information available?*
- *Does the source appear to be well-researched and factual, and can you follow the trail of information provided should you choose to do so?*
- *Is the information is sufficiently current (recent) for the topic?*

Credible Sources

Instructions: Briefly summarize the nature of three sources you have found to be credible. Provide the bibliographic information.. Cite all sources, including generative AI sources. Prioritize .gov and .edu sites as well as those written by credible sources such as leading organizations and nationally recognized experts. Seek out original sources to verify summaries provided by generative AI.

Source 1:

Source 2:

Source 3:

Guidelines:

Summarizing, Paraphrasing, and/or Quoting

When using information from your sources in your research-based writing, you have some options. You should decide whether to summarize, paraphrase, or quote depending on how you think the source will support the points you are making.

- **Summary:** a brief restatement of the main points, in your own words. A summary usually leaves out details.
- **Paraphrase:** a restatement in your own words that is about as long as the original. A paraphrase usually includes details.
- **Quotation:** a word-for-word repeat of what the original source said. A quote should be presented in quotation marks.

All your sources should be introduced effectively and your research should be documented properly, to avoid plagiarism.

Steps to take:

1. Find, analyze, and evaluate sources that address your research question, to be sure you are using the best ones in your own writing.
2. Decide whether you will summarize, paraphrase, or quote your sources based on the checklist that follow.
3. Be sure you know which documentation style your teacher prefers (MLA, APA, etc..)
4. In your writing, introduce your sources effectively and document them correctly to avoid plagiarism.

When to Summarize, Paraphrase, and/or Directly Quote Sources

Instructions: Determine the best option for your writing needs. Summary, paraphrase, and direct quotation are all acceptable ways to incorporate research into your work. Use MLA or APA style to document your research to avoid plagiarism. **Use digital tools for citation help.**

Summarize Sources:

- In order to make notes as you discover background about a topic you may use later for an overview
- In order to capture information about a topic from several sources
- In order to determine the main ideas of a single source
- When the wording matters less than the key ideas or information in the source.

Paraphrase Sources:

- In order to clarify information to weave it into your own writing more effectively
- In order to avoid overusing quotations
- In order to explain a point when exact wording isn't important but where summary alone doesn't capture key ideas fully and a closely rephrasing is important
- In order to explain the main points or report numerical data or statistics

Quote Sources Directly:

- In order to describe or respond to specifics in an author's text
- In order to highlight particularly eloquent or powerful phrases or passages
- In order to compare and contrast specific perspectives
- In order to lend credibility to your writing by citing key facts and information