Research for Every Project
Tools and Techniques for Making Informed Choices in A&S Projects

Every art or science project requires decisions. Research prepares you to make informed choices that support your desires for the project. Just like your project, your research path will be guided by your goals and tempered by real-world limitations.

Goals
- Why are you making this?
- What do you want to get out of this project?
- How important are historical practices for this project?

Limiters
- Time available
- Skill
- Cost
- Safety

The Research Loop

Most projects start with one broad question, but you'll need answers to many specific questions to inform your choices during the project.

The Research Loop is a framework for finding and using sources from multiple disciplines to get the answers you need, even if you're not sure where to start.

Treating research as a loop allows you to start with simple questions & answers then go deeper as needed to further your project. Your goals and limiters will determine how many times you'll go through the loop.

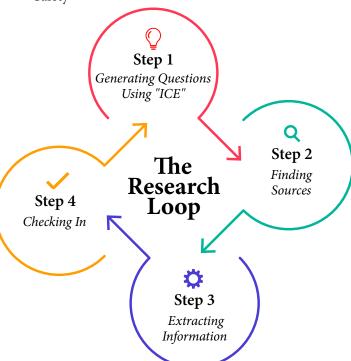## Step 1: Generating Questions Using "ICE"

Research is driven by questions. Turning one broad question into a successful project requires asking varied questions that provide information to build your understanding. These questions may also reveal cross-disciplinary avenues to investigate.

ICE is a tool for brainstorming diverse questions. The three letters stand for three categories of questions:
- *I*dentity - Describes what you want to create.
- *C*ontext - Describes how it related to the world.
- *E*xecution - Describes how it was created.

The Research Loop

Step 1
Generating Questions Using "ICE"

Step 2
Finding Sources

Step 3
Extracting Information

Step 4
Checking In

Start with a few questions. Add more with each pass through the loop.

Identity
- What is this project?
- When is it from?
- Where is it from?
- Is there a technical or scholarly name for it?
- Is there a historical name for it?

Context
- Who was the historical user/consumer?
  - What was the status of this person?
  - Were they a particular occupation?
  - Were they a particular gender?
- Why was this used / consumed?
  - What function did it serve?
  - What was its cultural significance?
  - Were there particular times, places, events, etc where this was used?
- How expensive was this?
  - What contributed to its cost?
- Who made this and what was their relation to the user / consumer?
- Who might be researching this today?

Execution
- How was this made / performed?
- What techniques were used?
- What materials were used?
- What tools and equipment were used?
- What safety procedures are needed?
- How is this made / performed modernly?
  - What differences exist? Why?

🔍 Step 2: Finding Sources

Start with easy to locate and read content for background knowledge. Look for hints of where to find deeper sources.

Different types of sources provide complimentary information. Try to locate as many types as you can.

Types of Deeper Sources
Historical / "Primary" Sources
- Physical / Archeological
- Pictorial
- Documentary

"Secondary" Sources
- Scholarly analysis & summarization

Where to Find Deeper Sources
Historical Sources
- Museums: visiting, online collections, publications
- Domain-specific databases & collections
- Digitized historical documents: scans, transcriptions

Academic Research
- Google Scholar, SemanticScholar
- JSTOR, ProQuest, Project Muse
- ResearchGate, Academia.edu
- Find scholars interested in your topic(s)

Techniques for Finding Sources
Google Search Tricks
- Add time, place, scholarly terms
- Force exact search terms
- Exclude common, unrelated words
- Snippets in Google Books
- Reverse Image Search / Google Lens

Once you've found one relevant source, its bibliography can be a springboard to finding more information. Look up the sources and their authors. Use SemanticScholar "Citations" to find newer, related works.

Answering some ICE questions will require looking in seemingly unrelated sources. You might need to investigate:
- Materials or Ingredients
- Tools and Equipment
- Economic data: trade documents, household accounts
- Legal documents: wills, court cases

University and local public libraries can provide access to printed and digital sources you can't get at home.

Reach out to people you know for details of their experiences in related projects and pointers to helpful sources. They may be able to refer you to experts they know.

⚙ Step 3: Extracting Information

Once you have sources, you need to extract information from them. Extracting that information efficiently will help you make the most of your research time.

First, evaluate the sources you found. Use a quick filter to eliminate sources that will not be useful for this project. Is it CRAAP?
- *C*urrency - The content is not outdated.
- R*elevance* - The content answers questions related to this project.
- A*uthority* - The author is an expert in this topic or has relevant experience.
- A*ccuracy* - The content is supported by evidence and citations.
- P*urpose* - The work is objective and impartial or its slant/bias doesn't hinder its use with your project.

Historical sources need to be evaluated, too: What can this source tell you? What *can't* this source tell you?

It's important to maintain a healthy level of skepticism. Rather than waiting for a perfect source, think about how you can assemble knowledge from multiple, overlapping sources.

Even after filtering, you may have a lot of material to go through. You don't have to read every word! Hunt your sources for the answers to your questions. Skim with purpose: use titles, headings, and captions as sign posts. Read abstracts, introductions, and conclusions first. Prioritize digging into sources where skimming indicates useful answers are present.

You can use sources in languages that you can't read, but extracting the information will be harder. Use the skimming techniques to limit what you need to translate. Google Translate can help but isn't perfect, especially with technical terms. For complex translations, support the information you find with sources in languages you do read.

✔ Step 4: Checking In

Think about your goals & limiters. Do you have sufficient answers to proceed with this project?

Links to resources in this handout and more at:
https://sherwoodhillmanor.com/wp/research-resources