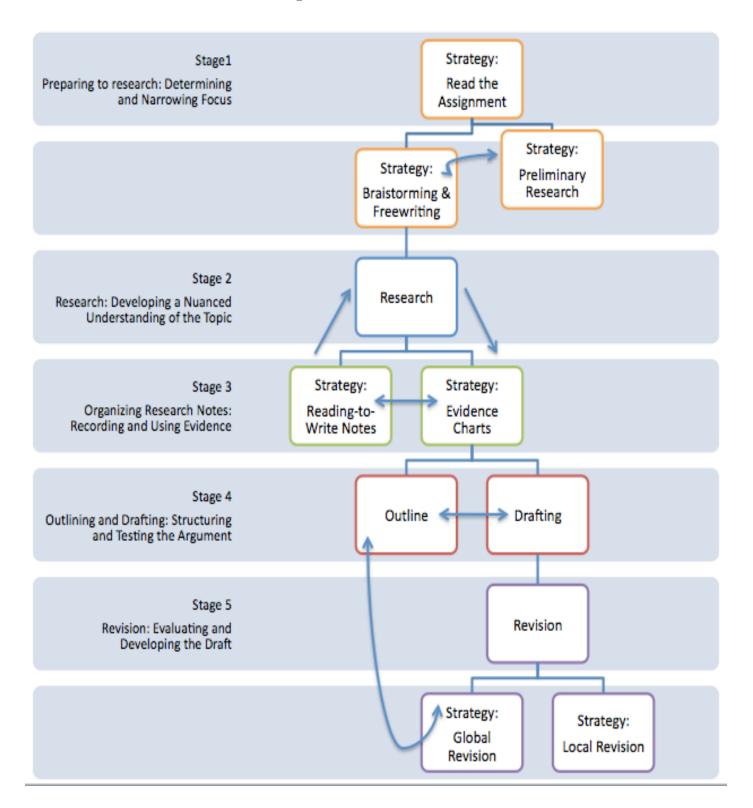
Stages of the Research Process



Breaking it Down

Dividing up the stages of the research and writing processes might seem logical and instinctive to you, but many first-year students will be writing their first research papers in Lake Forest College. In our experience, most students believe they can go straight from skimming through the assignment, to research, to drafting, to printing, all in one night if necessary. Because of this, and because of the crucial role of research papers in an academic setting, you will need to ensure that students are aware of all the steps required to effectively complete a research paper.

Stage 1 Preparing to Research: Determining and Narrowing Focus

Goals:

In Stage 1, the idea is to get students to spend time thinking about the requirements of the assignment and to evaluate how those will help determine the breadth and scope of their topic. Forcing them to take time to think and develop their topic will show them that a great deal of focus and critical thinking is necessary before moving on to more structured research.

Strategies:

- Reading the assignment: whenever possible, teach your students the importance of reading the assignment sheet carefully, underlining key terms and clarifying questions before moving forward. In our class, we took ten minutes whenever students received an assignment to practice this process and make sure students were clear on the requirements and goals.
- Orient them to the topic. Discuss "first steps" to all research topics. What comes first in the process? Consider using sites like Wikipedia, search engines like Google, or popular press search engines, such as LexisNexis. to help students generate research goals and get a general idea of the "conversation" about the topic. This is a good opportunity to discuss the difference between these resources and scholarly resources.
- Brainstorming & Freewriting: After doing preliminary research, students should sit down and brainstorm or freewrite ideas to develop and specify the topic they are to research. Writing Center tutors are available to guide students through the brainstorming/freewriting process or direct students to the Writing Center student resources page for ideas.

Products:

By the end of Stage 1, students should have a narrow topic or research question with a clear focal point that will guide their research and reading.

Stage 2 Research: Developing a Nuanced Understanding of the Topic

Goals:

In leading students through Stage 2, your main goal is to acquaint them with effective research methods and strategies to help them read analytically in order to develop a more or less detailed understanding of the topic.

Strategies:

• Search Terms & Databases: again, trying different search terms and databases to find the most accurate information might seem common sense, but many first-year students use the first five or ten results of the first search they carry out. Moreover, they might not yet be familiar with search strategies (i.e. Boolean searches) that can help them maximize their research capabilities.

Resources:

Contact your library liaison to set up a session in which he or she will teach your class how to navigate different databases and search engines. A list of library liaisons can be found at https://www.lakeforest.edu/library/about/liaisons.php

• Reading Analytically: first-year students may not have yet learned how to read a text analytically, searching for ideas and connections rather than just for content. Reading for content will most likely cause students to paraphrase or cite the contents of the reading without thinking about how it connects with their own argument or topic.

Resources:

Writing Analytically, by David Rossenwasser and Jill Stephen (available in the Writing Center). Chapters 1-3 detail the basics of analysis, counterproductive practices, and methods to reach a more nuanced analysis.

Find more resources under the "Reading Analytically to Write Analytically" section of the Faculty webpage.

• Citation: teaching and learning in-text citation is a new skill for most college students. Take time during your course to practice the basics and encourage your students to take time to configure their citations properly.

Resources:

A Pocket Style Manual, by Diana Hacker (available in the Writing Center). Contains basics and details of citation for MLA, APA and Chicago Style.

See student resources page of the Writing Center website.

Products:

By the end of Stage 2, students should have an annotated bibliography and a narrowed focus. They might also consider developing a working thesis statement or question to guide them through the next stage.

Stage 3 Organizing Research Notes: Recording and Using Evidence

Goals:

In our experience, most students tend to skip a step between reading their research articles and drafting their paper. Usually, they try and look up relevant quotes as they draft the paper. We want to keep this from happening because it is at this point that poor research practices have the most potential to affect the overall quality of the paper. Your job at this stage is to make sure students are taking time to appropriately select and record their evidence in order to facilitate the actual writing.

Strategies:

- Reading-to-Write Notes & Evidence Charts: taking effective notes while researching can save a lot of time when drafting. Teaching students how to effectively take notes can make a significant difference in their research experience. An important aspect to highlight is appropriate citation: remind students of the importance of recording where they retrieved their quotes. Failure to do so might result in instances of unintentional plagiarism.
 - Resources:

The Writing Center's Reading-to-Write Notes module. A combination of theory and exercises, the module takes the student through the process of reading, writing notes, and converting those notes into sections of their paper.

• Quotation/Paraphrasing/Summary: teach your student basic differences and strategies they can utilize to perfect each form of evidence usage.

Resources:

The "Paraphrase x3" method, from *Writing Analytically*, by David Rossenwasser and Jill Stephen (available in the Writing Center), p. 33.

For making summaries more analytical, see *Writing Analytically*, by David Rossenwasser and Jill Stephen (available in the Writing Center), pp. 96.

Products:

By the end of this stage, students should have physical notes that they can refer to while writing their paper. Ideally, the notes should be organized by ideas rather than authors, mostly paraphrased or summarized rather than quoted. In the Center, we refer to these as "reading to write notes."

Stage 4: Outlining and Drafting: Structuring and Testing the Argument

Goals:

To develop the paper in order to test for flaws in argument and assess whether further research is necessary. Your goal here is to teach students that the actual writing of the paper is only one necessary step in the whole process, rather than the main part or culmination of the project.

Strategies:

- Skeleton outline: while full outlines can sometimes be helpful, what we would like you to encourage is a basic delineation of argument. Students can use bullet points, flowcharts or other formats both to sketch a preliminary road map for their argument and to outline the existing argument to test for weak or underdeveloped sections.
- Structure of a research paper: most first-year students will be writing their first research papers when they enter LFC. Because research papers have their own kind of global and paragraph structural conventions, you should familiarize your students with different strategies they can use to make sure their final drafts conform to structural standards.

Resources:

Building a Better Paragraph; or, proving a point with "juicy" details, by Maura Smyth (available on the Faculty website). Outlines a basic structure for framing and developing argument within a paragraph.

• Use of evidence: after having taught your students how to paraphrase and quote appropriately, you should move on to teach them how to use evidence effectively. Most inexperienced writers will drop quotations without explaining or contextualising for the reader; you should make sure to explain that this would lead to problems developing argument.

Resources:

The Quote Sandwich, *They Say/I Say* pp. 41-5. Emphasizes the importance of framing quotations with an introductory and an explanatory/analytical sentence.

Product:

By the end of this stage, students will have produced a rough/early draft that will need revision.

Stage 5 Revision and Editing: Evaluating and Developing the Draft

Goals:

To check for global structural weaknesses throughout the paper in order to identify areas for development and to review the paper for sentence-level coherence and cohesion.

Revision Strategies:

• Backwards outlining: students can use backwards outlining to check for the overall flow and coherence of their argument. The idea is to create an outline (skeletal or full) of the argument as it exists in the draft by writing down the thesis statement, topic sentences, and main evidence or support utilized to forward the argument. The student will then have a global picture of the argument that can help them easily identify flaws.

For a handout on using the thesis statement and backwards outlining to check for argument and structure, check the "Building a Thesis Statement" document under Teaching Argument Structure.

• Peer-editing: students can help each other check on clarity of ideas. Think about holding a class workshop in which students read each other's papers in order to help their classmates develop their overall coherence.

For a sample peer-editing exercise, go to our section on Teaching Argument Structure.

Editing Strategies:

- The cut-and-paste method: this method can be particularly useful for testing the internal logic of individual paragraphs. Have students literally cut through individual sentences to identify the topic sentence, evidence frame, evidence, and concluding sentence. Then, edit each sentence individually to check for flow, style, and grammar.
- The paramedic method: a useful tool to improve wordy and vague constructions. The steps of the paramedic method are the following (adapted from the Purdue OWL):
 - Circle the prepositions (of, to, in, about, for, onto, into)
 - Draw a box around the "is" verb forms
 - o Find and underline verbs. If there are none, ask, "Where's the action?"
 - Change the "action" into a simple verb
 - Find and underline the agent of the verb (you may have to create one). Move the agent into the subject.
 - Eliminate any unnecessary slow wind-ups
 - Eliminate any redundancies.
- Grammar self-assessment: give your students a reference tool such as the "Thirteen Most Common College-Level Errors in Grammar and Punctuation" or the Hacker Style Manual and have them find recurrent grammatical or stylistic errors in their writing. Then, they should find and paraphrase definitions of the rule and correct samples from their own writing.

The "Thirteen Most Common College-Level Errors in Grammar and Punctuation" handout is available on the Teaching Students to Edit for Grammar and Style section of the website.