

WHY RESEARCH?

Research is at the heart of every academic curriculum, and it will show up in your classes in obvious and not so obvious ways. But that's not the only reason you should know how to research. Why is it so important to learn how to research?

1. **It concerns your economic future more than your current education.** The research you do now will prepare you for the day when your job depends on your ability to find answers for yourself or to evaluate the answers of others.
2. **Knowing how to research helps you understand what information you can trust.** You won't fall prey to unverified "facts" because you'll know the difference between unsupported assertions and verified sources.
3. **It is exciting to discover something you didn't know before!** OK—this may be idealistic, but research can be as fun as solving a mystery or a puzzle. You can experience the excitement of discovering something you didn't know and maybe no one else knows.

Mini-assignment—Researching research in the workplace

Professionals do research in the workplace because they need to answer a question in order to accomplish some goal.

The goal for this mini-assignment is to find out the answer to this question:

Is research really that important in the workplace?

Find five people you know with jobs that you might like to have—not your perfect job, but work that you can imagine doing. Ask them about research on their job. Don't just stop with those activities they call research. Ask about any tasks that require them to find out something they didn't know in order to accomplish some goal. How often are they asked to find out or look up information on their own? Share your results with your classmates.

CHOOSING A TOPIC: RESEARCH QUESTIONS

The success of your project will depend on your ability to discover or invent a good research question. By thinking about the topic, the questions you have about the topic, and the significance of your topic, you can develop a strong research paper.

You can help yourself think about your project by describing it in a three-step sentence that states your **TOPIC + QUESTION + SIGNIFICANCE** (or **TQS**):

TOPIC: I am working on the topic of _____,

QUESTION: because I want to find out _____,

SIGNIFICANCE: so that I can help others understand _____.

Don't worry if at first you can't think of something to put as the significance in the third step. As you develop your answer, you'll find ways to explain why your question is worth asking!

TQS sentence example:

I am working on the topic of the Apollo mission to the moon,

because I want to find out why it was deemed so important in the 1960s,

so that I can help my classmates understand the role of symbolic events in shaping national identity.

Note: The TQS formula is meant to prime your thinking. Use it to plan and test your question, but don't expect to put it in your paper in exactly this form.

CORE OF AN ARGUMENT = CLAIM + REASONS + EVIDENCE

When your teacher says that you must *make* an argument to support your answer, don't think of *having* an argument, in which everyone battles for their position and no one changes their minds. Instead, imagine an intense yet amiable conversation with people who want to find a good answer to your question as much or even more than you do. They don't want unsubstantiated opinions; they want claims you can support with reasons, and they want the evidence that makes you think your reasons are true. As in a conversation, they will also expect you to consider their points of view and to address any questions or concerns they might have. And they'll expect you to be forthcoming about any gaps in your argument or limitations in your evidence. In short, they want you to work *with* them to achieve the best available answer, not for all time but for now.

You can think of the parts of your argument as answers to different sorts of questions readers might ask. If you can imagine these questions, you can write your argument.

Claim: *What's the answer to your question?* Once you raise your research question, readers naturally want to know the answer. We call this answer your claim because it is a statement that you are claiming to be true. Papers can have many claims running through them. A paper's main claim is also called its *thesis*.

Although some people still believe that early education should focus only on reading, writing, and math, elementary schools should actually make teaching languages other than English a priority.^{claim}

Reasons: *Why should I believe that?* Unless your answer is obvious (in which case, the question was not worth asking), readers will not accept it at face value. They'll want to know why they should accept your claim as true.

Although . . . , elementary schools should actually make teaching languages other than English a priority^{claim} because we acquire languages best and most easily when we are young,^{reason 1} because those who begin second languages as adults rarely attain fluency,^{reason 2} and because language instruction fosters an awareness of cultures and societies beyond one's own.^{reason 3}

Evidence: *How do you know that?* Even when your reasons seem plausible, responsible readers won't accept them just on your say-so. They expect you to base each reason on data you've discovered through your research. These data are your evidence.

Although . . . , elementary schools should actually make teaching languages other than English a priority^{claim} because . . .^{reasons} Studies of childhood language acquisition show that . . .^{evidence for reason 1}

PLAN YOUR RESEARCH AROUND THE QUESTIONS OF ARGUMENT

Every argument must answer the three questions that define the core of an argument (claim, reasons, evidence), but cooperative arguments must answer a fourth (acknowledgment and response).

c o r e	1. What's the answer to your research question?	Claim or Thesis
	2. Why should I believe that?	Reasons
	3. How do you know that reason is true?	Evidence
	4. But have you considered this view (or this evidence, complication, objection, etc.)?	Acknowledgment & Response

Create a plan to search for and read sources so that you have good answers to each of these questions.

- Claim:** If you begin without a plausible claim that answers your research question, start by reading general articles about your topic in order to get ideas for possible answers.
- Reasons:** Once you have a claim that can serve as a hypothesis, make a list of the reasons why you think that claim is true. If you think of too few plausible reasons, do some more general reading. If you still can't find any, look for another claim.
- Evidence:** Once you have a list of reasons, search for specific data that might serve as evidence to support each one. Depending on the kind of reason, that evidence might be statistics, quotations, observations, or any other facts. If you cannot find evidence for a reason, then you have to replace that reason. If you find evidence that goes against a reason, keep the evidence. You may need to acknowledge it in your paper.
- Acknowledgment & Response:** As you read for claims, reasons, and evidence, keep a record of anything that might complicate or contradict your argument. You will need to acknowledge and respond to it, through rebuttal, counterclaim, reflection, or concession—if you think it might also occur to your readers.

HOW TO PLAN YOUR TIME

You can't write a decent research paper if you begin the night or even the week before it's due. This is confirmed not only by thousands of students but by studies of successful and unsuccessful writers. This research shows that the most successful writers tend to share certain habits:

1. **They start drafting as early as possible**, before they think they have all the evidence they might need.
2. **They write in regular short periods** rather than in marathon bursts that dull their thinking and kill their interest.
3. **They set a goal** to produce a small number of pages every time they write, even if those pages are not very good.
4. **They report their progress** to someone else if possible, or on a chart if not.
5. **They anticipate that everything will take longer** than they think it should.

To be like these successful writers, follow these steps:

1. Set interim goals with specific deadlines, starting backward from the paper's due date.
2. Give yourself at least one session to proofread and set aside enough time for a final revision.
3. Budget the time you'll need for finding and reading sources.
4. Plan for a day or two to find and test your research question.
5. Keep a calendar and track your progress as you go.

FINDING A RESEARCH QUESTION

Research is looping, messy, and unpredictable. You can manage it with a plan, as long as you are prepared to depart from it. The first step in that plan is one you cannot put off: to find a good research question. As you look for the question that will ground your project, keep in mind the following points:

1. **Value surprise and disagreement.** Look for ideas, claims, facts, or anything that makes you think, *Wow, I didn't know that!* or *How can that be true?* Not only will those matters hold your attention longer, but they will make it easier to get the attention of your readers.
2. **Make your topic manageable.** Think about your topic in the context of something you know or care about and that is also likely to matter to others.
3. **Watch out for Wikipedia.** When you need information quickly, Wikipedia can be a godsend. It covers almost every topic you can think of, and studies show that it is generally reliable. But it is usually incomplete, and it does have errors, sometimes outrageous ones. Feel free to use Wikipedia for ideas or citations to pursue. But unless your instructor says it is okay, do not use it for information you must cite.
4. **Question your topic.** A topic is only as good as the questions it raises. So make a list of all the questions that you can imagine asking about your topic, then choose the most interesting among them.
5. **Bounce ideas off friends.** Ask your friends for their ideas about your topic. They may have ideas that are interesting but in your view wrong, that are in your view right but not properly developed, or that just plain surprise you. If so, plug their ideas into the appropriate formula and you have a candidate for a worthy research question.
6. **Evaluate your questions.** Finally, evaluate your questions and scrap those unlikely to yield interesting answers.

Here are some signs of a question you can't use:

1. You can answer the question too easily.
2. No one can plausibly *disprove* the answer, because it seems self-evident or obvious.
3. You can't find factual evidence to support the answer.
4. You would find so many sources that you cannot look at most of them.

The crucial point is to find a question that *you* really want to answer. Too many students, even advanced ones, think that education means memorizing the right answers to questions someone else has asked and answered. It is not. Among your most important goals for your education should be to learn to ask your own questions and find your own answers.

ACADEMIC LANGUAGE OF RESEARCH—ASSIGNMENTS

Don't let the academic language of research intimidate you. Here are some commonly used words in research assignments that basically mean the same thing:

explore X

critique X

discuss X

investigate X

analyze X

compare X with Y

explain X

discuss X in light of Y

But these phrases describe only the first step in the research process. An assignment to *discuss X* really means something more like this:

Find an issue in X that raises a question about a specific aspect of X, whose answer will help us understand some larger theme, feature, or quality of X.

ACADEMIC LANGUAGE OF RESEARCH— HOW TO POSITION YOUR IDEA

You may need to find your topic and question in relation to something you read, either because your teacher assigned a text or because you have found a writer or a work that interests you. In that case, look for surprises, puzzles, or disagreements. Or you can also look for ways to make the text itself your guide.

Here are some common sentence stems that can help get your ideas in writing, particularly in the preliminary stages of your project:

1. **Kind:** “Smith claims that _____ belongs in category A, but I will show that it really belongs in category B.”

Smith claims that fringe religious groups are “cults” because of their strange beliefs, but I will show that those beliefs are no different in kind from standard religions.

2. **Part-Whole:** “Smith claims that [*whole*] always has [*part*] as one of its defining features/ components/qualities, but I will show that [*part*] is not essential.”

Smith claims that competition is the essence of sport, but I will show that, even by her standards, competition is only incidental to the way most people actually play sports.

3. **Change:** “Smith claims that _____ is changing in a certain way, but I will show that it is really the same as it was.”

Smith claims that social media will kill off mainstream media, but I will show that mainstream media will find ways to survive because people still want what only they can offer.

4. **Cause and Effect:** “Smith claims that _____ causes _____, but I will show that it really causes _____.”

Smith claims that persistent poverty causes crime, but I will show that it really causes despair, which sometimes leads to crime and sometimes does not.

TELL AND RETELL YOUR ELEVATOR STORY

As soon as you have a working answer and a few reasons, create an elevator story.

Imagine that you step in an elevator and find your teacher, who asks, “So, how’s the paper going? What do you expect to say?” You have only a couple of floors to sum up where you are. Early on, you can use this plan:

1. I am working on the problem of [state your question].
2. I think I can show that [state your hypothesis] because [state your reasons].
3. My best evidence is [summarize your evidence].

If you have a writing group, have everyone tell their elevator story at the start of every meeting. If not, tell yours to anyone who will listen—a friend, a parent, even your dog will do. As you learn more and your argument develops, refine your elevator story and tell it again. The more often you encapsulate your argument in an elevator story, the sooner your paper will come together.

FINDING RELEVANT AND RELIABLE SOURCES

You will probably find more sources than you can use, and you should always evaluate their relevance and reliability.

To find out if a source is relevant, skim the key parts of the text for names or terms related to your question or its answers. The key parts of a text are usually any section or chapter titled “introduction” or “conclusion,” any subheadings or chapter titles, and the first paragraph or two after each after subheading or chapter title.

Also, your evidence will not be persuasive if it comes from a source your readers don’t trust. You can’t judge a source until you read it, but there are signs of reliability. **To find out if a source is reliable**, consider whether you found it in a library’s collections or whether it seems like a work of high enough quality to be in a library.

Evaluating Online Sources

Look for the following signs of a reliable online source:

1. The site is sponsored by a **reputable organization**. Some sites supported by individuals are reliable; most are not.
2. It is related to a **reliable publisher or professional journal**.
3. It is **not an advocacy site**. It is not sponsored by an organization with a political or commercial agenda, and it avoids one-sided advocacy on a contested social issue.
4. It **does not make wild claims**, attack other researchers, or use abusive language.
5. It **does not make errors** of spelling, punctuation, or grammar.
6. It **says who is responsible** for maintaining the site and **when it was updated**. Trust a site only if careful readers would trust those who maintain it.
7. It is **not too glossy**. When a site has more graphics than words, its designers may care more about drawing you in than about presenting reliable information.

Finally, remember that biased or partisan sites often mimic the features of more reliable ones. If you’re not sure about a site, do a new search on some of its key terms and compare the sites you find with the original one. You can always ask a librarian for help.

WRITE AS YOU READ

Writing forces you to think hard, so don't wait to nail down a budding idea before you write it out. Experienced researchers know that the more they write, the sooner and better they understand their project.

There is good evidence that successful researchers set a fixed time to write every day—from fifteen minutes to more than an hour. They might write only a paragraph, but they write *something*, not to start a first draft of their paper, but to sort out their ideas and maybe discover new ones.

If you write something that seems promising, be sure to keep a copy of it. You will probably revise it for your final draft, maybe even discard it. But no matter how sketchy or rough this early writing might be, it will help you draft more easily later.

Caution

Don't expect too much of your early writings. If you're new to a topic, much of your early writing may be just summary and paraphrase. If you see too few of your own ideas, don't feel discouraged at your lack of original thinking. Summarizing and paraphrasing are how we all gain control over new ideas and learn new ways of thinking. Rehashing what we want to understand is a typical, probably even necessary, stage in just about everyone's learning curve.

HOW ARGUMENTS GROW FROM QUESTIONS

The word *argument* has negative associations these days because it evokes images of people shouting at one another. In this kind of argument, the goal is to win, to bludgeon or intimidate one's opponent into assent or silence. But a research argument isn't like that. It is more like a conversation with a community of receptive but skeptical peers. Such readers won't necessarily oppose your claims (although they might), but they also won't accept them until they see good reasons based on reliable evidence and until you respond to their questions and reservations.

When you make (not *have*) an argument in a face-to-face conversation, you cooperate with your listeners. You state your reasons and evidence not as a lecturer would to a silent audience but as you would engage friends sitting around a table: you offer a claim and reasons to believe it; they probe for details, raise objections, or offer their points of view; you respond, perhaps with questions of your own; they ask more questions. At its best, it's an amiable but thoughtful back-and-forth that develops and tests the best case that you and they can make *together*.

In writing, even when done collaboratively, that kind of cooperation is harder. You must not only answer your imagined readers' questions but *ask them on their behalf*—as often and as sharply as real readers will. Your aim isn't to think up clever rhetorical strategies that will persuade readers to accept your claim regardless of how good it is. It is to test your claim and especially its support, so that you offer your readers the best case you can make. In a good research paper, readers hear traces of that imagined conversation.

When you make a research argument, you must lay out your reasons and evidence so that your readers can consider them; then you must imagine both their questions and your answers. Remembering how arguments work in everyday conversations will help you.

As you build your argument, make sure you can answer these five questions:

1. **Claim:** What do you want me to believe? What is your point?
2. **Reason:** Why do you say that? Why should I agree?
3. **Evidence:** How do you know? Can you back it up?
4. **Acknowledgment and Response:** But what about . . . ?
5. **Warrant:** How does that follow? Can you explain your reasoning?

ACADEMIC LANGUAGE OF RESEARCH— ACKNOWLEDGING

When you acknowledge an anticipated question or objection, you can give it more or less weight. You can mention and dismiss it, summarize it quickly, or address it at length. Do not dismiss a position that your readers take seriously; do not address at length one for which you have no good response.

Use the following language and sentence stems to help you acknowledge anticipated questions or objections.

1. You can downplay an alternative by summarizing it in a short phrase introduced with *despite*, *regardless of*, or *notwithstanding*. You can also use *although*, *while*, and *even though*:
[Despite / Regardless of / Notwithstanding] the governor's claims that she wants to cut taxes_{acknowledgment} the public believes that . . . *response*
[Although / While / Even though] the governor claims that she wants to cut taxes_{acknowledgment} the public believes that . . . *response*
2. You can signal an alternative with *seem* or *appear*, or with a qualifying adverb, such as *plausibly*, *reasonably*, *understandably*, *surprisingly*, *foolishly*, or even *certainly*.
 In his letters, Mozart expresses what **[seems / appears]** to be depression_{acknowledgment} But those who observed him . . . *response*
 Liberals **[plausibly / reasonably / foolishly / etc.]** argue that the arts ought to be supported by taxes_{acknowledgment} But we all know . . . *response*
3. You can acknowledge an alternative without naming its source. This gives it just a little weight.
 It is easy to **[think / imagine / say / claim / argue]** that taxes should . . .
 There is **[another / alternative / possible / standard]** **[explanation / argument / possibility]** . . .
 Some evidence **[might / can / could / would / does]** **[suggest / indicate / lead some to think]** that we should . . .
4. You can acknowledge an alternative by attributing it to a more or less specific source. This construction gives it more weight.
 There are **[some / many / few]** who **[might / could / would]** **[say / think / claim / charge / object]** that climate change is not . . .
[Most / Many / Some / A few] administrators **[say / think / claim / charge / object]** that researchers . . .
 Jones **[says / thinks / claims / charges / objects]** that students . . .
5. You can acknowledge an alternative in your own voice or with concessive adverbs such as *admittedly*, *granted*, *to be sure*, and so on. This construction concedes that the alternative has some validity, but by changing the words, you can qualify how much validity you acknowledge.
 I **[understand / know / realize / appreciate]** that conservatives believe in . . .
 It is **[true / possible / likely / certain / must be admitted]** that no good evidence proves that coffee causes cancer . . .
[Granted / Admittedly / True / To be sure / Certainly / Of course], Sánchez stated . . .
 We **[could / can / might / would]** **[say / argue / claim / think]** that spending on the arts supports subversive . . .
 We have to **[consider / raise]** the **[question / possibility / probability]** that further study **[could / might / will]** show crime has not . . .
 We cannot **[overlook / ignore / dismiss / reject]** the fact that the Cubs are . . .

ACADEMIC LANGUAGE OF RESEARCH— RESPONDING

Readers use the words of your acknowledgment to judge how seriously you take an objection or alternative. But they will base that judgment even more on the nature of your response. If your readers think an alternative is a serious one, they expect you to respond to it in some detail, including reasons and evidence to support that response. Do not simply dismiss or attack a position that your readers believe strongly; if you cannot make a convincing argument against it, simply show how it differs from yours and explain why you believe as you do.

Use the following language and sentence stems to help you respond to anticipated questions or objections.

1. You can state that you don't entirely understand:
But I do not quite understand . . . / I find it difficult to see how . . . / It is not clear to me that . . .
2. Or you can state that there are unsettled issues:
But there are other issues . . . / There remains the problem of . . .
3. You can respond more bluntly by claiming the acknowledged position is irrelevant or unreliable:
But as insightful as that point may be, it [ignores / is irrelevant to] the issue at hand.
But the evidence is [unreliable / shaky / thin / not the best available].
But the argument is [untenable / wrong / weak / confused / simplistic].
But that view [overlooks / ignores / misses] key factors.
But that position is based on [unreliable / faulty / weak / confused] [reasoning / evidence].

PLANNING YOUR DRAFT

In constructing your argument, you may not have to put your reasons in any particular order. But when you plan a draft, you must impose *some* order on them. The best order is the one that best meets your readers' needs. When you're not sure how to order your reasons, consider the following principles:

1. You can organize your paper according to its subject matter:

- **Chronological.** This is the simplest: earlier-to-later or cause-to-effect.
- **Part by part.** If you break your topic into its constituent parts, you can deal with each in turn, but you must still order those parts in some way that helps readers understand them: by their functional relationships, hierarchy, similarities and differences, and so on.

2. You can also organize your paper to facilitate your readers' understanding:

- **Short to long, simple to complex.** Most readers prefer to deal with simpler issues before they work through more complex ones.
- **More familiar to less familiar.** Most readers prefer to read what they know about before they read what's new.
- **Most acceptable to most contestable.** Most readers move more easily from what they agree with to what they don't.
- **Less important to more important (or vice versa).** Most readers prefer to read more important reasons first, but those reasons may have more impact when they come last.
- **Earlier understanding as a basis for later understanding.** Readers may have to understand some events, principles, definitions, and so on before they understand another thing.

To test an order, create one paragraph that includes just your reasons in the order you want to test. If that paragraph reads like a convincing elevator story, then you have found a usable order.

WORKING THROUGH WRITER'S BLOCK: GETTING UNSTUCK

If you can't seem to get started on a first draft or struggle to draft more than a few words, you may have writer's block. Some cases arise from anxieties about school and its pressures or other mental health issues; if that sounds like you, seek out a counselor. But most cases of chronic procrastination or writer's block have causes you can address:

- You may be stuck because you have no goals or you've set goals that are too high. If so, **set goals that are small and achievable**. Then create a routine that helps you achieve them.
- You may feel so intimidated by the size of project that you don't know where to begin. If so, **break the process into small achievable tasks**; then focus on doing one at a time.
- You may think that you have to make every sentence or paragraph perfect before you move on to the next one. You don't. Tell yourself you're not writing a final draft but only sketching out some ideas. If you write along the way, you'll **be less obsessed with making your draft perfect**.

Quick Tip: Getting Unstuck

If you have problems like these with most of your writing, talk to your teacher. Teachers have worked with every kind of procrastinator and blocked writer and can tailor their advice to your problem. Or you might ask your peers for advice. Sometimes they are our best readers and editors.

On the other hand, some cases of writer's block are opportunities to let your ideas simmer in your subconscious while they combine and recombine into something new and surprising. If you're stuck *and* have time (another reason to start early), do something else for a day or two. Then return to the task to see if you can get back on track.

WHEN TO QUOTE, PARAPHRASE, OR SUMMARIZE

You can present information from a source in the source's words or in your own. Which you choose depends on how you plan to use the information in your argument, but also on the kind of paper you are writing, since different fields use quotation, paraphrase, and summary in different proportions.

Summarize when details are irrelevant or a source isn't important enough to warrant the space.

Paraphrase when you can state what a source says more clearly or concisely than the source does, or when your argument depends on the details in a source but not on its specific words.

Quote for these purposes:

1. The quoted words themselves are your evidence, and you need to deal with them exactly as they appeared in the original.
2. The quoted words are strikingly original, well expressed, odd, or otherwise too useful to lose in paraphrase.
3. The passage states a view that you disagree with, and to be fair you want to state it exactly.
4. The passage is from an authority who backs up your view.
5. The passage expresses your key concepts so clearly that the quotation can frame the rest of your discussion.

ACADEMIC LANGUAGE OF RESEARCH— VERBS FOR INTRODUCING A QUOTATION OR PARAPHRASE

Here is a quick guide to some of the verbs to use for claims, facts, opinions, inferences, guesses, or any other kind of information in a source.

All-Purpose Verbs

These are **neutral**: Source *says* that . . . (also: *writes, adds, notes, comments*)

These indicate **how strongly the source feels** about the information: Source *emphasizes* that . . . (also: *affirms, asserts, explains, suggests, hints*)

These indicate that the information is **a problem for the source**: Source *admits* that . . . (also: *acknowledges, grants, allows*)

Verbs for Argued Claims

These are **neutral**: Source *claims* that . . . (also: *argues, reasons, contends, maintains, holds*)

These indicate that you find the claim **convincing**: Source *proves* that . . . (also: *shows, demonstrates, determines*)

Verbs for Opinions

These are **neutral**: Source *thinks* that . . . (also: *believes, assumes, insists, declares*)

These indicate that you find the opinion **weak** or **irresponsible**: Source *wants to think* that . . . (also: *wants to believe, just assumes, merely takes for granted*)

Verbs for Matters of Judgment

Source *judges* that . . . (also: *concludes, infers*)

THREE PRINCIPLES FOR CITING SOURCES

When you use any source in any way, readers expect you to follow three principles. You risk a charge of plagiarism if you ignore any one of them.

1. **You must cite the source for any words, ideas, or methods that are not your own.**

Writers can avoid paraphrasing too closely if they focus on remembering what they understand from the original, not its actual words. One way to do this is simply to put the original aside as you write the paraphrase. But a better way is to imagine that you are explaining the idea to someone who hasn't read the original.

2. **When you quote the exact words of a source, you must put those words in quotation marks or a block quotation, even if you cite the source in your own text.**

This would be plagiarism of the previous sentence:

According to Turabian, when you quote the exact words of a source, you must put those words in quotation marks or a block quotation, *even if you cite the source in your own text* (p. 111).

3. **When you paraphrase the words of a source, you must use your own sentences, not sentences so similar to the original that they are almost a quotation.**

This would be considered plagiarism of the previous sentence by many teachers:

According to Turabian, you risk being charged with plagiarism when you paraphrase a passage from a source not in your own words but in sentences so similar to it that you almost quote them, regardless of whether your own text cites the source (p. 111).

Some students think that they don't have to cite material found online. Not so. These principles apply to sources of any kind—printed, recorded, oral, *and* online. You risk a charge of plagiarism if you fail to cite *anything* you get from a source, *especially* if it's from a website, a database, or another online source. A source is a source.

THE DRAMATIC PATTERN OF INTRODUCTIONS AND FAIRY TALES

The typical introduction to a research paper draws some of its ability to motivate readers from the dramatic pattern it shares with fairy tales:

1. **Current Situation / *Once upon a time . . .***

The fairy tale defines a stable world that it will disrupt; the research paper defines a current way of thinking that it will show to be wrong, or at least inadequate.

2. **Research Question / *But then, the dragon . . .***

The fairy tale disrupts its world with a problem creature; the research paper disrupts the current way of thinking with a problem question.

3. **Significance of the Question / *And now the dragon's fire . . .***

The fairy tale puts its main character in danger; the research paper shows its readers what they will lose without an answer to its question.

4. **Answer / *And they lived happily ever after.***

In the fairy tale, a helper with special powers steps in to remove the danger, thereby saving the day; in the research paper, the writer with special knowledge (learned from research) steps in to answer the question, thereby saving the day.

WRITING AN INTRODUCTION

Some writers find it so hard to write the first sentence of a paper that they fall into clichés. Avoid these common ones:

1. **Do not repeat the language of your assignment.**
2. **Do not quote a dictionary definition:** *Webster's* defines risk as . . .
3. **Do not try to be grand:** For centuries, philosophers have debated the burning question of . . . (Good questions convey their own importance.)

Instead, try one of the following openers:

1. **A pithy quotation:**

“Honk if you love Jesus. Text while driving if you want to meet him.”

2. **A relevant anecdote:**

When Jenny S. glanced at the text message from her boss, she didn't expect to become the fiftieth distracted driving fatality in her state this year.

3. **A striking fact:**

The National Highway Traffic Safety Administration reports that in 2014, approximately seven percent of drivers on the road were using a cellphone at any given moment.

The National Safety Council reports that in 2014, over a quarter of all motor vehicle crashes involved either talking on a cellphone or texting.

4. **A combination of all three:**

One of the pleasures of Jenny S.'s morning commute was reading the words of wisdom offered on a sign on the side of a local church. Last Friday, that sign read, “Honk if you love Jesus. Text while driving if you want to meet him.”^{quotation} Tragically, when Jenny S. glanced at a text message from her boss that morning, she became her state's fiftieth distracted driving fatality.^{anecdote} Jenny S. is not alone. One recent study reports that approximately seven percent of drivers on the road at any given moment are using a cellphone; another reports over a quarter of all motor vehicle crashes involved some form of cellphone use.^{striking fact}

DRAFTING A CONCLUSION

You can build your conclusion around the elements of your introduction, only in reverse order.

1. **Restate your claim** early in your conclusion, but more fully than in your introduction:

For years, efforts by public-interest organizations to curtail cellphone use while driving have focused on informing people of the practice's dangers, but much evidence exists to show that cellphone use remains common on our roadways. My study, however, challenges the assumption that risky behaviors are primarily a matter of choice by showing that even when people are aware of the dangers of cellphone use, they may be unaware of actually using their cellphones in the moment. I conclude that cellphone use while driving might be better understood as a habitual activity that occurs below threshold of conscious attention.

2. After stating your claim, **remind readers its significance** or, better, state a new significance or a practical application:

If my conclusion is correct, it suggests that we might productively change the focus of our efforts to reduce the incidence of cellphone use by drivers. Rather than attempting to influence drivers' decisions through information campaigns or legal prohibitions, we ought to pursue technological solutions that make it difficult or impossible for drivers to engage unconsciously in this unsafe behavior.

3. Finally, **suggest other questions** that your results might raise. This gesture suggests how other researchers can continue the conversation. And it mirrors the opening context:

My research improves our understanding of the causes of cellphone use while driving and risky behavior generally, but my findings are nevertheless preliminary. This study focused exclusively on young adult drivers, and so it is possible that drivers of other ages may display different behaviors. Likewise, I did not consider the influence of gender. Moreover, my findings do not indicate which sorts of technological interventions might be most effective in curtailing the behavior, nor do they tell us how these interventions might be combined with other prevention efforts. Additional research is thus needed before we can know how to apply these results effectively at the level of policy.

WRITING YOUR TITLE

Your title is the first thing your readers read, but it should be the last thing you write. It should both announce your topic *and* communicate its important concepts. Compare these three titles:

1. **“Cellphone Use and Driving”**
2. **“Preventing Cellphone Use while Driving”**
3. **“Choice or Habit: Cellphone Use while Driving as an Unconscious Activity”**

The first title is accurate but too general to give much guidance about what is to come. The second is more specific, but doesn't go as far as it could in signaling the paper's contribution. The third is the most useful for readers because it gives them a clear and full sense of what will be in the paper.

REVISING YOUR DRAFT: SHAPE (ORGANIZATION), INTRODUCTION AND CONCLUSION, SENTENCE LEVEL

Some students think that once they have a draft, they're done. Thoughtful writers know better. They write a first draft to see whether they can make a case to support their answer. Then they revise their draft until they think they've presented that case in a way that meets the needs and expectations of their readers.

1. **Check your introduction, conclusion, and claim.** Your readers must see three things quickly: where your introduction ends, where your conclusion begins, and what sentences in your introduction and conclusion state your main claim.
2. **Make sure the body of your paper makes sense.** Readers will think your paper makes sense when they see the key terms that run through your whole paper, where each section ends and the next begins, how each section relates to the one before it, what role each section plays in the whole, what sentence in each section and subsection states its point, and what key terms run through each section.
3. **Check your paragraphs.** Each paragraph should be relevant to the point of its section. Make sure you have good paragraph structure, with an introductory sentence, a concluding sentence, and key concepts. Avoid strings of short paragraphs (fewer than five lines) or very long ones (more than half a page).
4. **Let your draft cool, then paraphrase it.** When you return to your draft, read it by sections, skimming it like you would skim a source. Then, based on what you have read, paraphrase it for someone who hasn't read it. Does the paraphrase hang together? Does it fairly sum up your argument?
5. **If your teacher comments on your draft, always revise it in light of that advice.** Otherwise, you will miss an opportunity to improve your paper. This includes comments about spelling and grammar as well as structure.

FIVE PRINCIPLES FOR CLEAR SENTENCES

To draft clear sentences or revise unclear ones, follow these five principles:

1. **Make subjects short and concrete**, ideally naming the character that performs the action expressed by the verb that follows.
2. **Avoid interrupting the subject and verb** with more than a word or two.
3. **Put key actions in verbs**, not in nouns.
4. **Put information familiar to readers at the beginning** of a sentence, new information at the end.
5. **Avoid long introductory phrases**: get to a short, familiar subject quickly.

Skim the first seven or eight words of every sentence you've written to make sure they meet these criteria.

ACCEPTING FEEDBACK

When you review your reader's comments, **focus on those that you can apply to your next project.**

1. Look for a pattern of errors in spelling, punctuation, and grammar. If you see one, you know what to work on.
2. If your reader says you made factual errors, check your notes: Did you take bad notes or misreport them? Were you misled by an unreliable source? Whatever you find, you know what to do in your next project.
3. If your reader reports only her judgments of your writing, look for what causes them. If she says your writing is choppy, dense, or awkward, check your sentences. If she says it's disorganized or wandering, check it against the guide to revising your draft. You won't always find what caused the complaints, but when you do you'll know what to work on next time.

Next, **talk with your readers.** Complete these tasks before you do so:

1. If your reader marked up spelling and grammar mistakes, correct those errors.
2. Jot down your responses after any substantive comments about your argument to show that you've read them closely.

If your reader is your teacher:

1. Don't complain about your grade. Be clear that you want to understand the comments so that you can do better next time.
2. Focus on those comments that address the most important issues, like your paper's argument and organization. Rehearse your questions so they seem amiable.
3. Don't ask, "What didn't you like?" but "Where did I go wrong and how would I fix it?"