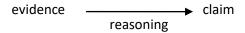
# RESEARCH IN BUSINESS Module 4: Defending Your Research

## Conclusion

Once you have presented the results of your research, you will finally draw conclusions and present your final main points for the audience. A strong, persuasive conclusion employs logic and is well organized—serving to drive home the message. This module will discuss how to craft a strong conclusion.

In the conclusion, you will argue what the results mean for the purpose of the research and the purpose of the audience. An explanation is not the same as an argument. In an argument you make a claim and then provide evidence and reasoning to support your claim. The diagram below provides a simplistic depiction of how three elements—the evidence, the reasoning, and the claim—fit together.



The results and discussion sections are where you described and interpreted the results. In the conclusion, you will bring those results in as evidence and then lay out a reasoned argument that supports a claim. The next few sections answer the following questions:

What are the parts of an argument?
What makes a good argument?
What makes a bad argument?
How do you organize an argument logically?

# **Parts of an Argument**

Before discussing what makes an argument good or bad, we should define the parts of an argument.

#### Claims

Your claims are the main points of the research that you want your readers to walk away with. Although seemingly counterintuitive, identifying your claims first makes it easier to determine which evidence to present, and to define supporting arguments. Here are some questions you can ask yourself:

What do the results show? What do these results mean for this context? What do I want readers to understand?

When defining your claims, consider the research problem as well the broader goals of your audience. A compelling claim will answer the research problem and speak to the goals and concerns of the audience.

## **Evidence**

Evidence can mean your research results, writ large. For the purpose of the conclusion as defined here, evidence is the specific observations from the results that you will use to base the arguments supporting your claims. Understandably, the concepts of evidence and results and their uses overlap. In business writing, the following types of evidence (and results) are most common and most valid:

- Statistics (including numerical data and graphics)
- Examples
- Expert testimony

Theories and "common-sense" arguments can also be used as evidence for an argument.

# Reasoning

Once you have your claims and your evidence, you have to set up your arguments using reasoning. Reasoning is essentially a rhetorical strategy that connects the evidence and claims together. Many types of reasoning strategies are out there, depending on the type of evidence, the claim to be made, and how the evidence connects.

# **Good Arguments**

A good argument is persuasive and compelling. Arguments can be compelling for many reasons, including the following ways:

- Shows clear relationship between a claim and its evidence.
- Contains valid evidence.
- Offers clear reasoning: no logical errors; connections between ideas explained; logical organization.
- Appeals to audience in some regard.
- Shows awareness of audience and audience goals.
- Ties back to the research problem.
- Is professional and objective.
- Considers multiple points and perspectives; is well thought out.

#### **Objectivity**

Markel (p. 194) encourages a "professional persona" when presenting an argument. Professionalism in this case means arguing with cooperativeness, moderation, fair-mindedness, and modesty. To this list you should also add objectivity. The goal of your research is to address a problem, not prove that you are right. Unbiased, straightforward language that allows for discussion of the ideas you present will be much more effective than language that is aggressive, opinionated, ideological, or exaggerated.

# **Bad Arguments**

Bad arguments are not compelling for several reasons: they do not appeal to the audience's goals; they are not clearly explained; or they show errors in logic. The following list gives logical errors and fallacies to avoid.

lack of reason argument against the speaker (ad hominem) sweeping generalizations/inadequate sampling argument from ignorance argument from authority false cause or post hoc reasoning circular argument biased or suppressed evidence bandwagon (ad populum) argument opinion instead of fact oversimplification

loaded arguments

either-or argument

#### **Evaluating Arguments**

You should evaluate your arguments; your reader certainly will. Examine the data and the reasoning to ascertain

- that you have enough evidence;
- that the evidence is valid and accurate;
- that evidence and reasoning are objective;
- that no other causes or correlations can be ascribed to the data; and
- that no logical errors exist in your reasoning.

# **Organizing an Argument**

Organizing your argument in a clear and logical order is crucial to creating a persuasive conclusion. Consider the following questions to help you organize your thoughts before writing:

Will my audience find it easy or difficult to accept my claim? How did I go about reasoning this argument? What are the main points that I want to emphasize? What are my strongest and weakest points? How much detail do I want to include? Do I want to use counterarguments to defend my claim?

Running through those questions should hopefully begin to generate clearer ideas of how your various thoughts fit together. There is no one way to organize an argument. Nonetheless, some common patterns are available.

## **Deduction and Induction**

Deduction is one of the most common patterns used in Western writing. In a deductive argument, the claim is first presented, followed by the evidence and then the reasoning.

Deductive:  $claim \rightarrow evidence \rightarrow reasoning$ 

Induction is common in non-Western cultures and can also be a useful pattern when the audience is expected to oppose the claim at first view. In an inductive argument, the evidence is presented first, followed by reasoning, and then concluded with the claim. Thus examples and observations lead to a probable conclusion.

Inductive: evidence  $\rightarrow$  reasoning  $\rightarrow$  claim

### Analogy

An analogy compares the case of interest with another, similar case and argues that what was true for the other case is likely to be true for the current case. The strength of an analogy depends on how similar the cases are with respect to significant features. If the case to which you are comparing your situation differs in some aspects fundamental to the issue at hand, then your argument will be weak.

Analogous arguments can be organized in two ways: examining each case by looking at specific, shared points, or by examining each point by looking at each case. The following table illustrates the two methods.

Case 1	Point 1
Point 1	Case 1
Point 2	Case 2
Case2	Point 2
Point 1	Case 1
Point 2	Case 2

#### **Toulmin Method**

The Toulmin Method is a possible way of organizing an argument and includes counterarguments to support your claim further. The method contains the following parts:

Claim	Main argument you want to make
Data/Evidence	The information and facts to support your claim
Warrant/Bridge	Explanation of how data supports your claim
Backing/Foundation	Additional support for the claim
Counterclaim	A claim that contradicts your claim
Rebuttal	Evidence that invalidates the counterclaim

This pattern can easily be used with more than one piece of data/evidence with accompanying warrant or bridge. Each piece of evidence could be an individual paragraph; several paragraphs of evidence and warrants could then be followed by one or more counterclaims.

# Resources

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