

Logic in writing

- Writing has different purposes.
 - To tell a story; to describe something; to entertain
- The purpose of much academic (school) or professional (job) writing is to explain an idea, or to persuade someone to believe something.
- Logic can help a writer explain or persuade.

Review: Types of sentences

- *Questions* ask for information.
 - What is the capital of Guatemala?
- *Greetings* mark a relationship between people.
 - Good afternoon.
- *Exclamations* or emotional expressions tell how a writer/speaker feels.
 - Oh my God! That's great!

Types of sentences

- *Statements* give information. Some statements are good support for writing.
 - Statements of *fact* are the best support.
 - Facts can explain the things you know (explanatory writing).
 - Facts can convince people of your arguments (persuasive writing).

Facts versus opinions

- Facts are objective statements of truth. They are outside the individual, and remain true no matter who says them.
 - Water boils at 100°C.
 - Approximately 127,450,000 people live in Japan.
- Opinions are subjective statements. They are based on one person's beliefs or feelings.
 - Maccha ice cream is delicious.
 - Students should not be required to take English classes.

Facts versus opinions

- It is *sometimes* OK to express opinions in academic papers.
- But, topics need to be supported *mostly with facts*.
- Supporting facts should be as specific as possible.

What do we do with these facts?

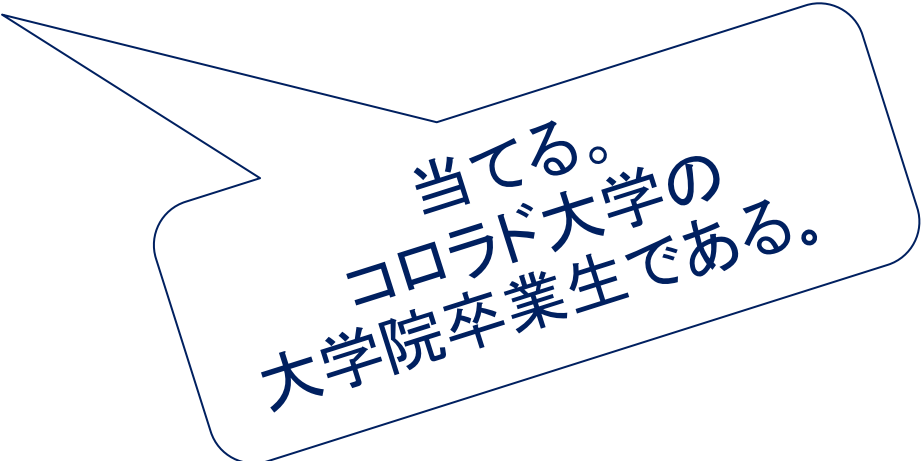
Support your topic sentence
with facts and logical arguments.

Logical argument

- Implication: Sometimes one idea implies the truth of another idea.
 - If the river is narrow, we can cross easily.
- In that case, showing the first idea is true will suggest that the second idea must be true.
 - The small river near my house is only two meters wide. Therefore, we can cross it easily.

Logical argument

- Two ideas can be added together to support a conclusion.
 1. Professor Nilep is a Mei-Dai professor.
 2. All Mei-Dai professors attended graduate school.
 3. Therefore, Professor Nilep must have attended graduate school.



当てる。
コロラド大学の
大学院卒業生である。

Logical argument

- Two ideas can be added together to support a conclusion.
 1. Organic food does not use pesticides (農薬).
 2. Using pesticides can damage the environment.
 3. Therefore, organic food is less likely to damage the environment.

Facts and logic

- If the evidence is true and the logic is good, then we can believe the conclusion.
- Therefore, true statements (facts) plus a valid (logical) argument will support your point.

Logic in writing

- Develop a logical argument to support your main idea.
 - What facts do you know?
 - What logical ideas connect those facts to your main idea (e.g. your topic sentence)?
- Write a paragraph that tells the facts and is organized to show the logical argument.

Logic in writing: Example

- MY IDEA: Companies should make sure their workers take vacation time every year.
- Workers who are relaxed are more productive.
- Companies that are more productive make more money from the same investment.
- People who take vacations are more relaxed.

I read this in the *New York Times*.

I learned this in economics class.

I think this is true. I relax on vacation.

Logic in writing: Example

- Logical argument 1:
 1. People who take vacations are more relaxed.
 2. People who are more relaxed are more productive.
 3. Therefore, people who take vacations are more productive.

Logic in writing: Example

- Logical argument 2:
 1. People who take vacations are more productive.
 2. More productive workers make the company more money.
 3. Therefore, people who take vacations make the company more money.

Logic in writing: Example

Companies should make sure their workers take a vacation every year. Time away from work can help people relax. According to the *New York Times*, workers are more productive and make fewer mistakes when they are relaxed. Employees who are more relaxed and therefore more productive can help the company earn more profit from less investment, and vacations can help with this. So if companies want to be successful, they should encourage their workers to take time away from work every year to relax and enjoy a vacation.

Logic in writing

- Facts and logic can help readers understand an idea that you want to explain.
- Using factual support and logical argument, you can persuade readers that your idea is correct.
- Explaining and persuading are common goals of both academic and professional writing.
 - Support your topic with facts.
 - Organize your writing and explain the logic in a way that your readers can understand.