

Conclusions and Experimental Evaluation

After analyzing the data collected during an experiment, you will have the information needed to make a conclusion and evaluate the procedure.

A conclusion is a statement that summarizes the results of an experiment.

For example, after analyzing data from measuring the height of plants in different amounts of sunlight, you might conclude that “the plants with less light grew taller than plants with more light.”

What if your hypothesis stated that plants exposed to more light will grow taller than plants exposed to less light?

Does this mean the experiment was a failure?

Not at all!

A conclusion to an experiment almost always prompts more questions. This is science!

You will want to review the design of the experiment for any flaws first.

Maybe more than one variable was being tested,

or more trials were needed.

If any weaknesses are identified, you will want to revise the experiment and try it again.

If you feel confident about your design and results, it's time to share it with others.

All potential discoveries, large and small, must be evaluated by other scientists for accuracy before becoming part of the world's scientific knowledge.

This ensures that what we know about the world around us is built on facts!
