



HOW TO R.E.A.D. SCIENTIFIC LITERATURE

This handout describes specific strategies for how to approach reading scientific literature for use in research papers.

Reading scientific literature can seem like a daunting prospect for someone unfamiliar with this genre of writing. There are, however, similarities and trends amongst scientific literature that can be used to simplify the act of reading and incorporating literature in to research.

REVIEW THE ABSTRACT

Read the abstract to determine the usefulness of a piece of scientific writing for your particular research study. The abstract is a brief overview of each section of the paper, usually devoting about 1-3 sentences each for the Introduction, Methods, Results, and Discussion. The abstract will present the most important findings of the study, so you can decide whether to read the rest of the article based on the results summarized in the abstract. The abstract also allows for a quick understanding of the study before you delve into the details.

ESTABLISH THE VARIABLES

The Methods section of a scientific article should contain a brief description of the variables being measured. Before you attempt to read the Results or Discussion sections of a paper, make sure you know exactly what is being manipulated and measured in the study.

ANALYZE GRAPHS AND TABLES

Graphs and tables are used as visual representations of important data. Often, the most significant data in a study are shown via graphs or tables, because they are eye-catching and easily display trends in data. Once you understand the trends in data, you are ready to analyze their interpretations in the Discussion section.

DRAW PARALLELS BETWEEN RESULTS AND DISCUSSION

Scientific articles draw parallels between the Results and Discussion sections. When reading scientific literature, note the results the authors choose to highlight. These results are typically discussed in the same order in the Discussion section as they are presented in the Results section. This strategy of analyzing the Results and Discussion sections is especially helpful when one study contains many experiments or is an overview of several studies in one field.