

Written Scientific and Technical Communication



Structure of a Scientific Paper

- Title, Authors and Affiliations, Abstract, Keywords
- Introduction
- Materials and Methods
- Results and Discussion
- Conclusion
- References

Structure of a Scientific Paper

- Title, Authors and Affiliations, Abstract, Keywords
- Introduction
- Review of Literature
- Methods
- Results and Discussion
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- Title, Authors and Affiliations, Abstract, Keywords
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- Methods
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- Acknowledgments
- Conclusion
- References

Structure of a Scientific Paper: Introduction

- Context

Establish the importance of your work

- Need

Write about the opposition between actual and desired situations

- Task

Clarify your contribution as a scientist

- Object

Prepare readers for the structure of the paper

Structure of a Scientific Paper: Introduction

- Context

Anchor your context in time and space

- Need

Emphasize the contrast with words like however, but etc.

Structure of a Scientific Paper: Introduction

- Task

Ex.: During controlled experiments, we investigated the influence of the HMP boundary conditions on liver flows.

- Object

Ex.: This paper presents the flow effects induced by increasing the hepatic-artery pressure and by obstructing the vena cava inferior.

Structure of a Scientific Paper: Introduction

- Task

We applied, assessed, calculated,
compared, explored, implemented... etc.

- Object

The paper deals with, describes, presents,
reports, summarizes... etc.

Amount/Quantity/Number

- **Amount**: used with uncountable nouns
- **Quantity** (more formal): used with both countable and uncountable nouns
- **Number**: used with countable nouns

Allow/Enable

- Permit

Ex.: They **allowed** us to stay here.

- Admit

Ex.: We must **allow** that money causes problems in marriage.

- Allocate a certain amount

Ex.: Leaving a half inch of air space in the drum **allows** for expansion of the liquid on hot days.

Allow/Enable

1a: to provide with the means or opportunity

Ex.: training that **enables** people to earn a living

b: to make possible, practical, or easy

Ex.: a deal that would **enable** passage of a new law

c: to cause to operate

software that **enables** the keyboard

2: to give legal power, capacity, or sanction to

Ex.: a law **enabling** admission of a state

Despite/In spite of/Although

- Despite, in spite of + NOUN

Despite his laziness, in spite of his laziness

Despite the fact that he is lazy...

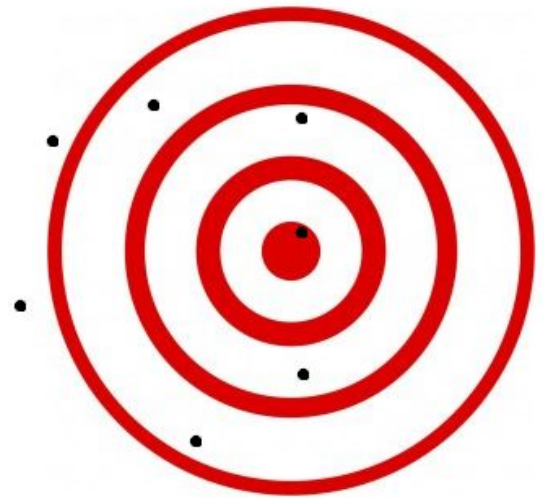
In spite of the fact that he is lazy...

- Although + CLAUSE

Although he is lazy...

Accuracy/Precision

- **Accuracy** is the degree to which a result agrees with the theoretical value.
- **Precision** indicates how well that result can be repeated.



Between/Among

used to describe one-to-one relationships

- two items, groups, or people

Ex.: The chair is between the window and the sofa.

- more than two items, groups, or people

Ex.: The negotiations between the cheerleaders, the dance squad, and the flag team were going well.

Between/**Among**

used to talk about things which are not clearly separated because they are part of a group or crowd or mass of objects

Ex.: The scandal caused a division **among** the fans.