

Abstracts

An abstract is a summary of a research paper, proposal, or presentation. Abstracts allow:

- papers to be indexed in library systems and online databases
- other researchers to decide whether papers contain information relevant to their own studies, without reading the entire work.

Abstracts require condensing an entire paper into a few hundred words; as a result, they're generally considered the hardest task in academic writing. Writing the abstract last, when it's clear what aspects of the paper are really important, makes this process easier. This approach also ensures that the abstract accurately reflects the content of the finished paper.

Abstracts:

- appear at the beginning of a paper, before the introduction
- are concise, packing large amounts of information into a small number of words
- are clear, making them accessible to readers from other academic disciplines
- follow the same outline as the body of report, presenting information in the same order
- use the same verb tenses as the body of report (e.g. past tense for methods, present tense for generally accepted truths)
- do not cite tables, figures, or sections of the report
- do not include references to cited literature

There are two types of abstracts, descriptive and informative. Verify which style should be used for a particular assignment.

Descriptive Abstracts

A descriptive abstract introduces the content of a report without going into specific detail. Similar to the “teaser” paragraphs on the backs of novels, these abstracts provide a general description without “giving away the ending.” Descriptive abstracts:

- resemble an outline, rather than a full summary
- include information on the purpose and scope of the report
- do *not* include results, conclusions, or recommendations
- are usually less than 100 words

Descriptive aspects are most often used for literature reviews, rather than reports of original research.

Examples appear on page 2.

Examples of descriptive abstracts:

Using DNA from insects trapped in amber, billionaire John Hammond has brought dinosaurs back to life. During a preview of his new Jurassic Park, however, security systems are disrupted and the living exhibits escape. Paleontologist Alan Grant, lost in the park with Hammond's grandkids, must find a way to outrun the hungry dinos—before the reptiles drive the humans to extinction.

Concrete was first used as a building material in the days of the Roman empire. This report describes advances in concrete technology and outlines the fundamental role of concrete in the construction of several modern mega-projects.

Informative Abstracts

Informative abstracts provide a complete summary of the contents of the paper, including essential results and conclusions. Rather than teasing the reader, they reveal everything needed to determine whether reading the entire report will be worthwhile. Informative abstracts:

- include 1-2 sentences for each section of the report, highlighting major ideas, results, and conclusions
- place the work in the context of the field
- provide specific details, such as numerical data or statistical significance
- are approximately 10% of the report's length, to a maximum of around 250 words

Informative abstracts are most often used for original research papers.

Examples:

Using DNA from insects trapped in amber, billionaire John Hammond has brought dinosaurs back to life. During a preview of his new Jurassic Park, however, security systems are disrupted and the living exhibits escape. Paleontologist Alan Grant and Hammond's grandkids are trapped in the park, but manage to evade the hungry predators and make it back to the command centre, where they help the staff and other visitors restore the Park's systems. After several near misses, the surviving humans escape the park, having learned that extinction really should be permanent.

Concrete has a long history as a building material, but modern engineering mega-projects demand unprecedented strength and durability. To meet the 100-year lifespan required for the Confederation Bridge project, flat-sided gravel was replaced with custom-cast six-sided stones. This increased surface area, strengthening bonds between cement and aggregate. Addition of fly ash further increased strength, while silica fume decreased permeability, reducing the destructive effects of corrosive seawater. The blend showed an exceptional resistance to freeze-thaw cycles during laboratory testing, suggesting the Bridge will endure for decades without the need for significant repairs.