# Quick study guide 15 Writing a report

## Before writing, prepare thoroughly by following these steps:

### Establish the purpose

A report:

* can be based on practical work, a review of literature or an industrial or business situation
* is always written with the intention of achieving an objective

First steps:

* establish the topic, scope and aim of your investigation (what you want to learn)
* clarify the objective/s of your report (eg. *to* *inform, convince, advise [who] of [what]*)

This forms the focus for the type of information you need to include and how you will gather it.

### Analyse your audience

A report:

* is always written for a "client", who can be within the organisation (eg. your supervisor), or outside the organisation (eg. a company, government body or industrial group)
* must bridge the gap between the readers' background knowledge and their needs

First steps: identify your audience, their background knowledge and what they need or want to learn. This will help you to determine:

* the type and amount of background information to include
* content to include, and appropriate depth and breadth of treatment
* linguistic style, choice of vocabulary, degree of detail, tone and emphasis

### Investigate existing knowledge

This is likely to involve a literature review and perhaps interviews with key people.

* Prepare your reading list, making sure to find out if you need information from sources other than books and articles.
* Collect your information, making sure it is directly relevant to your topic and objectives.
* Consider interviewing or talking to people who are involved. Avoid "hearsay"; the content of a report must be reliable and verifiable, ie. backed up by citations.

**Obtain new evidence**

This will involve one or more of the following:

* conducting experiments
* collecting and analysing data
* visiting a site
* performing calculations
* creating or modifying a design
* conducting interviews
* testing an application

**Analyse data to formulate conclusions and recommendations**

* Think back to your objectives and consider what your readers want or need to learn from the report.
* Summarise your key findings and analyse their significance in relation to the objectives. This may involve identifying key causes and effects, recommending a course of action, comparing your results with expectations, or explaining how a design fulfils the design brief.
* Recognise errors and limitations in your study. Suggest possible reasons, solutions and/or further work where you can.

## Writing the report:

### Organise the information

* State clearly in the Introduction what the report is about: topic, scope and objectives. The report should be organised to clearly communicate the background to the project, the objective, how you went about the investigation, and the outcome.
* Present information in a logical order. In describing a mechanism, this could mean moving from the general (eg. function and formation of the machine) to the particular (eg. the details of the construction).
* A good report will analyse and evaluate as well as merely describe. The ability to draw logical conclusions from the data, identify limitations and suggest reasons, solutions or appropriate action, separates the good or excellent report from the average.
* State the conclusions clearly and, where appropriate, give the reader information to help him/her make decisions.
* Acknowledge any limitations in your method or results and make recommendations for improvements or further study.

### Establish the tone and style

* A report should present information as objectively and impersonally as possible. Do not let bias or preconceptions colour your writing. Avoid emotive language.
* If you are stating your own ideas, make this clear (eg. "This indicates that…"; “A possible solution would be to…”).
* A report is a reflection of you as a professional. Good reports reflect favourably on the author. Strive for clarity, precision and accuracy.
* If you are trying to convey technical information to a non-technical reader, avoid profession-specific jargon and pay special attention to detail.

**Write and review the drafts**

* Plan each section in point form, and organise the sections into their logical order.
* Present your data clearly and concisely, in visual format (figures or tables) where possible.
* Draft the report, writing the points from your plan into sentences.
* Make sure your discussion flows logically from the evidence.
* Write the final draft, eliminating any repetition and rewording any sentences/sections which are too long, or where meaning is unclear or ambiguous.
* Read what you have written, preferably aloud. If anything is unclear to you it will be unclear to the reader.

**Acknowledge sources of information**

* Cite the sources of all background information, theory, data, and images as you write.
* Use the referencing style recommended by your faculty, school, department or lecturer.