Chapter II: Writing a scientific report

1- Preparing your research

Principle : Going from the general to the particular

Scientific research in Life and Nature Sciences follows a structured progression from a **general understanding of a subject toward a precise scientific question**. This approach is essential for clearly defining the research problem and identifying its key dimensions.

It involves:

- Analyzing the subject in its global context,
- Reformulating it into a concise scientific statement,
- Identifying core concepts,
- Determining relevant keywords and their synonyms.

This stage ensures a **clear delimitation of the research field** and facilitates access to relevant scientific literature.

2. - Identifying the subject Use the QQQOCP (3QOCP) method:

This is a mnemonic for retaining a set of simple questions that will be used to identify, clarify and expand on a topic:

Use the QQQOCP (3QOCP) method:

Who? = Who are the actors, the people involved?

What? = What aspects are of interest for my work?

When? = What is the period in question?

Where? = Is the subject limited to a specific geographical area?

How? = What approaches or points of view should be considered? (historical, sociological, economic, political, etc.).

Why? = What is the importance of the subject in the current context?

Our subject: Sport and women

Let's apply the different stages of documentary research on this subject

A. **First ask yourself the questions emanating from the subject.**

Use the "who, when, what, where, how, why?" method. » to be sure of don't forget any research leads.

Who ? Women as athletes or as supporters?

What ? Are we targeting a particular sporting area? Or are we interested in all of the sports?

When ? The integration of women in sport from a historical point of view?

How ? From the point of view of sporting diversity? From the point of view of sexism to which women face?

For what ? Why are there still difficulties integrating women in certain sports disciplines?

B. Then delimit the subject

- Identify the essential terms contained in the subject (the key words), underline them.

Women and **sport**

-Associate them to define the main idea emanating from the subject

Ex: here the relationships between **women and sport**, which excludes the exclusive relationship between men and sport OR issues of sexism outside of sport.

3. Formulation of the Research Topic

3.1. Scientific Formulation

The research topic should be expressed as a **clear, concise sentence**, preferably in question form and using precise scientific terminology.

Example:

How do environmental factors influence physiological stress responses in plant ecosystems?

A well-formulated topic ensures:

- A precise research objective,
- Strong alignment with scientific literature,
- Efficient orientation of the research process.

3.2. Key Concepts and Terminology

Each term in the research question must be analyzed to identify:

- Core keywords,
- Synonyms,
- Multilingual equivalents (especially English for scientific databases).

This step is essential for improving the **efficiency and accuracy of literature searches** and ensuring scientific rigor.

4. Evaluation of Scientific Information

In SNV research, assessing the reliability of sources is essential to ensure scientific validity.

4.1. Author and Source Credibility

Verification includes:

- Author expertise,
- Scientific publications in the field,
- Institutional or journal reputation.
- visibility in literature

4.2. Content Relevance

Evaluation is based on:

- Title relevance,
- Abstract clarity,
- Keywords consistency,
- Structure (introduction, methods, conclusion).

4.3. Objectivity of Information

Scientific data must:

- Be evidence-based,
- Be reproducible,
- Be consistent with other published studies.

4.4. Publication Date

Priority is given to recent sources, especially in rapidly evolving fields such as ecology, environmental science, and biotechnology.