

Lesson 1

Introduction to Research

CS 411
Thesis 1





Research is a careful, critical, disciplined inquiry, varying in technique and method according to the nature and conditions of the problem identified, directed toward the clarification or resolution of a problem.

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Good



Research is simply the systematic search for pertinent information on a specific topic or problem. After a careful, systematic search for pertinent information or data on a specific topic or problem, and after the research worker has analyzed and interpreted the data, he eventually faces another essential task - that of preparing the research report.

- *Aquino*



Research is the process of gathering data or information to solve a particular or specific problem in a scientific manner.

- *Manuel &
Medel*



Research is a systematic study or investigation of something for the purpose of answering questions posed by the researcher.

- *Sanchez*



Research in its broadest sense is an attempt to gain solutions to problems. More precisely, it is the collection of data in a rigorously controlled situation for the purpose of prediction or explanation.

- *Treece &
Treece*



Formulated in a more comprehensive form, **research** may be defined as a purposive, systematic and scientific process of gathering, analyzing, classifying, organizing, presenting, and interpreting data for the solution of a problem, for prediction, for invention, for the discovery of truth, or for the expansion or verification of existing knowledge, all for the preservation and improvement of the quality of human life.



Research is a systematic process of investigating problems, answering questions, and generating new knowledge.

In **Computer Science (BSCS)** and **Information Technology (BSIT)**, research helps identify technological issues, evaluate solutions, improve systems, and contribute to innovation.



Purposes of Research:

The main or principal purpose and goal of research is the preservation and improvement of the quality of human life.

Purposes of Research:



“The purpose of research is to serve man, and the goal of research is good life”

- *Good and Scates*

“To satisfy man’s craving for more understanding, to improve his judgment, to add to his power, to reduce the burden of work, to relieve suffering, and to increase satisfactions in multitudinous ways”

- *Good and Scates*

Specific Purposes of Research:



1. To discover new facts about known phenomena.
2. To find answers to problems which are only partially solved by existing methods and information.
3. Improve existing techniques and develop new instruments or products.
4. To discover previously unrecognized substances or elements.
5. Discover pathways of action of known substances and elements.
6. To order related, valid generalizations into systematized science.

Specific Purposes of Research:



7. To provide basis for decision-making in business, industry, education, government, and in other undertakings.
8. To satisfy the researcher's curiosity.
9. To find answers to queries by means of scientific methods.
10. To acquire a better and deeper understanding about one phenomenon.
11. To expand or verify existing knowledge.
12. To improve educational practices for raising the quality of school products.

Specific Purposes of Research:

- 13. To promote health and prolong life.
- 14. To provide man with more of his basic needs.
- 15. To make work, travel, and communication faster, easier, and more comfortable.



Characteristics of Good Research:



1. Research is systematic
2. Research is controlled
3. Research is empirical
4. Research is analytical
5. Research is objective, unbiased, and logical

Characteristics of Good Research:



6. Research employs hypothesis
7. Research employs quantitative or statistical methods
8. Research is original work
9. Research is done by an expert
10. Research is accurate investigation, observation and description

Characteristics of Good Research:

- 11. Research is patient and unhurried activity
- 12. Research requires an effort-making capacity
- 13. Research requires courage

