

# INTRODUCTION

Lect. #1 &2

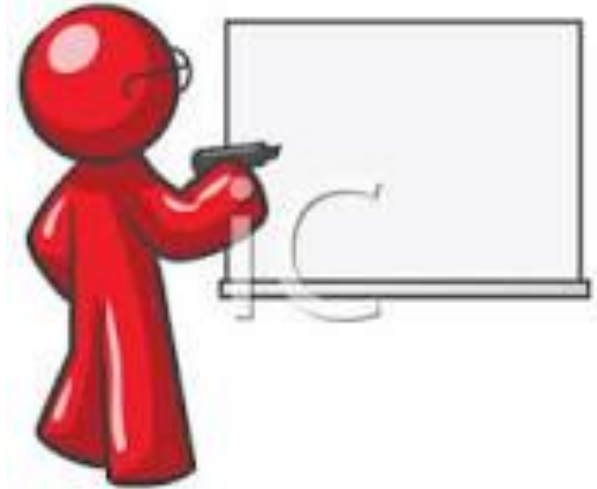
## Research Methodology



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# Outline...

- Why are we interested in research?
- What is research?
  - What is Knowledge?
  - What is Epistemology?
- Why is research a valued source of knowledge?
- What is research methodology?




# WHY RESEARCH



**“The greatest enemy  
of knowledge is not  
ignorance, it is  
the illusion of  
knowledge.”**

**--Stephen Hawking**

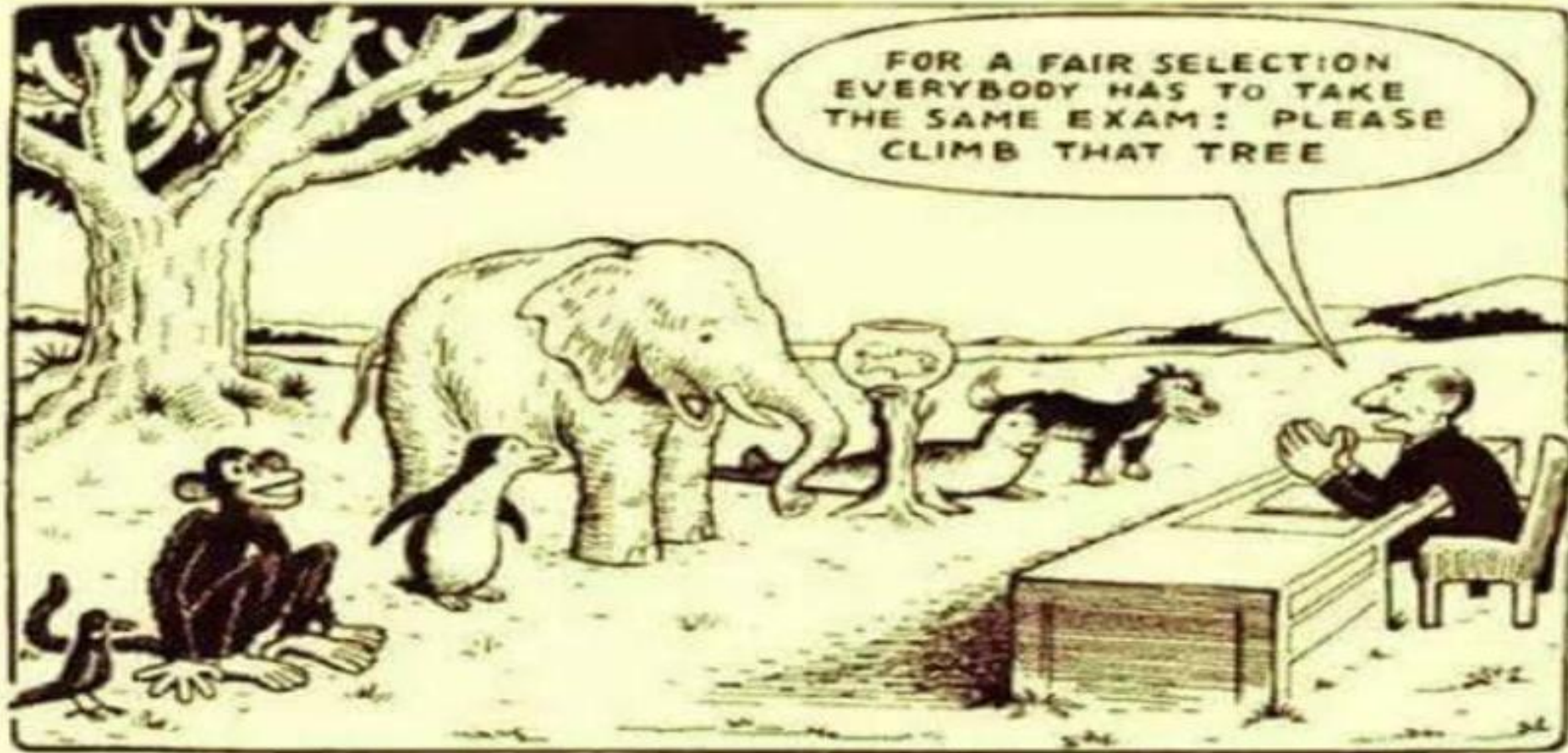




“The problem  
with the world  
is that the  
intelligent people  
are full of doubts  
while the stupid ones  
are full of confidence.”

~ Charles Bukowski





# Our Education System

*"Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid."*

*- Albert Einstein*

# WHO IS Responsible???



**RESPONSIBILITY**

*It's an overrated virtue. Passing blame is the circle of life.*

# WHAT IS RESEARCH





# Research...

- A search to explore knowledge
- A thorough attempts to find out something.....
- To examine something....
- To test, experiment
- Systematic investigation to establish facts....
- To assess
- To analyze
- Scientific Research:- Attempt to find out in a systematically and Scientific manner

# Research Methodology?



- the general approach to inquiry in a given field
- the ways, one collects, organizes and analyzes data
- methods developed for acquiring trustworthy knowledge via reliable and valid procedures

# Research Defined and Described

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*“Research is the systematic approach to obtaining and confirming new and reliable knowledge”*



This is a general definition which applies to all disciplines

# What is knowledge

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- **Knowledge** is the familiarity with something, which include information  
facts  
descriptions  
skills  
that acquired through education or experience.



# Define knowledge.....

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□ **Knowledge** define as "justified true belief." i.e,  
The theoretical or practical understanding of a subject.

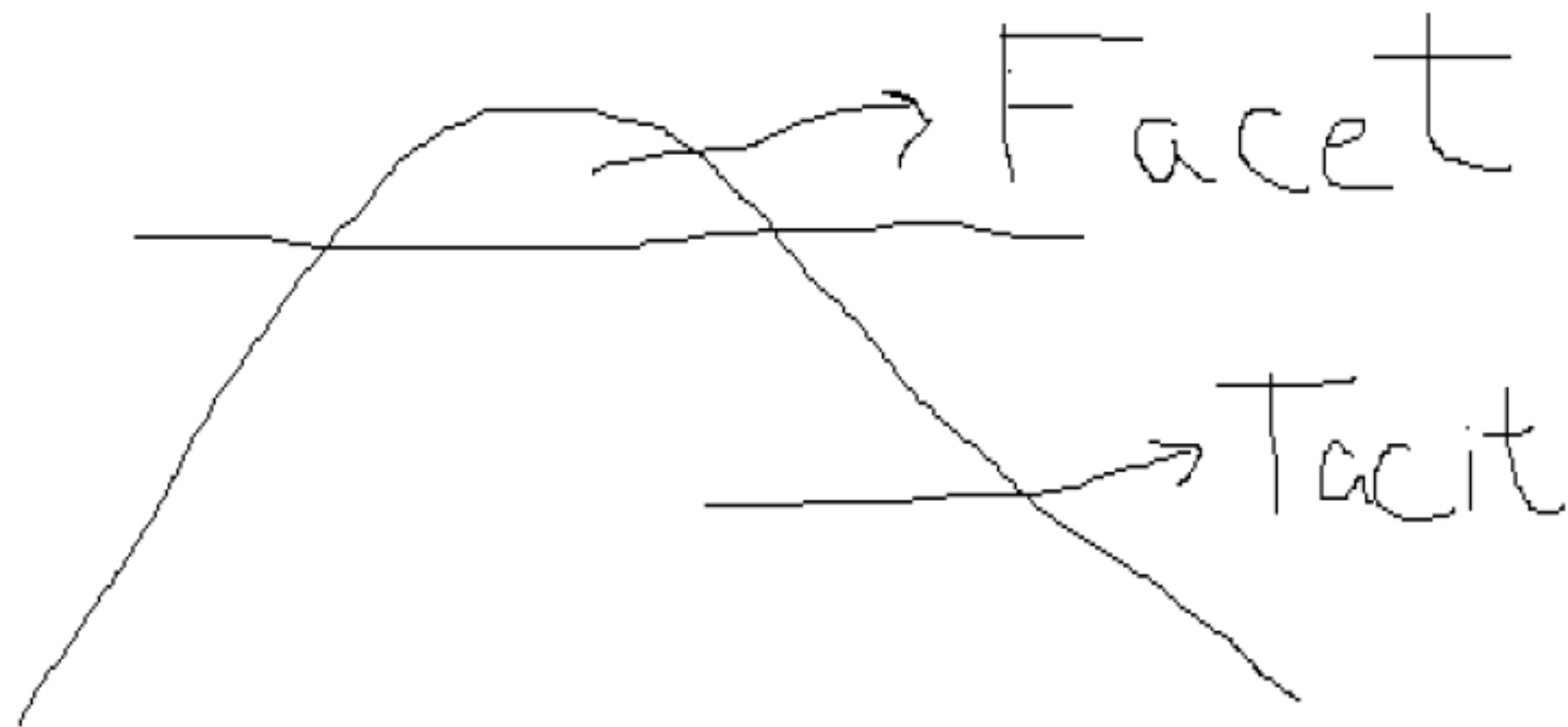
□ **Implicit knowledge:**  
(practical skill or expertise)



□ **Explicit knowledge:**  
(theoretical understanding)



# What is Knowledge and Types of Knowledge



# Epistemology

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- Epistemology comes from the Greek words episteme (knowledge) and it is a branch of philosophy, that deals with the scope of our method to acquiring knowledge.
- It explains,  
How we think?  
How do we know?



# Meanings of Philosophy

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- The noun **philosophy** means the study of proper behavior, and the search for wisdom.
- The study of the fundamental nature of knowledge, reality, and existence, especially when considered as an academic discipline.



# Importance of Epistemology

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- It attempts to answer the basic question of what distinguishes

true knowledge  
from  
false knowledge.



# Why is research a valued source of knowledge?

## Common ways of knowing...

- personal experience/  
traditions/perceptions



- experts/authority



- scientific method



# Other Sources



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- The Library: Reading Books, Journals, Newspaper, Conference proceeding
- Participate in Seminars, workshops and Conference
- Use E-Library
  - E-books, E-Journals, Conference proceedings
- As a Consultant (Expert)



# Importance of E-Library



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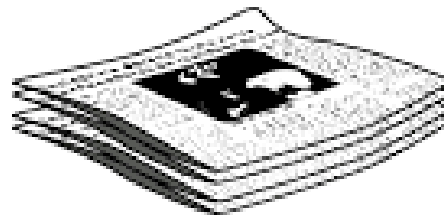
## Resources

□ Electronic (E)books

□ E-Journals

□ E-Magazines

□ E-Newspapers



# Importance of E-Library



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- Finding literature
  - ▣ Download secondary data
    - Web crawler
  - ▣ Collect primary data
    - Online experiment
    - Online survey



# Why must we understand research?

- need to produce and evaluate research in career
- help to make decisions
- assist in classes



# Research Methodology and Working Method

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- Methodology and Method are often (incorrectly) used interchangeably
- Method: The specific tools, techniques or procedures applied to achieve a given objective



# Research Methodology?



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# Research is not ... cont.

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## Accidental discovery :

1. Accidental discovery may occur in structured research process.
2. Usually takes the form of a phenomenon not previously noticed.
3. May lead to a structured research process to verify or understand the observation.

# Research is not ... cont.

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## Data Collection is not research

- However, Data collection is an intermediate step to gain reliable knowledge
- Collecting reliable data is part of the research process



# Research is not ... cont.

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Searching out published research results in libraries (or on the internet), or just reviewing of literature is not research



- However, this is an important early step of research to investigate the earlier work done in specified topic/product etc.

