

Classification of Research

By PURPOSE

- **Basic Research**

Develop and Refine Theory

- **Applied Research**

Problem Solution method

- **Action Research**

Practitioners attempt to study their problems

Basic Research

(Fundamental / Pure Research)

- It builds up broad generalizations, principles and theories of education.
- **Result:** discovery of useful concepts such as those of motivation, reinforcement, concept formation.
- **Example:** “Constructivism approach in mathematics teaching and assessment of mathematical understanding”
(Monoranjan Bhowmik, Vidyasagar Teachers’ Training College)

Characteristic.

- Educational theories and principles
- Use wide range of methods
- Highly specific hypothesis are developed
- Careful attention + error is reduced
- Complex analysis of data
- Generalization remain confined to books and research report

Applied Research (Functional Research)

- The Primary function of research in education is to improvements for education
- **Who used:** Teachers, educational planners, administrators, curriculum specialists.
- **Example:** “Educational innovations and pedagogical beliefs: The case of a professional development program for Indonesian teachers”
(Cher Ping Lim, Jo Tondeur, Henny Nastiti and Jeremy Pagram, The Honk Kong Institute of Education)

Action Research

- The process by which practitioners attempt to study their problems scientifically in order to guide, correct and evaluate their decisions and action.
- **Who used?**
Primary Purpose of basic research is the extension of knowledge whereas the purpose of applied research is the solution of an immediate practical problem.
- **Example:** "Teachers investigate their own work: An introduction to the methods of action research."
(Altrichter, H., Posch, P., & Somekh).

By STRATEGIES

- **Quantitative Method**
- **Qualitative Method**

Quantitative Method

- It is the systematic empirical investigation of observable Phenomena via, statistical, mathematical or computational techniques.
- **Objective of Quantitative Research:**
The objective of quantitative research is to develop and employ mathematical models, theories and hypotheses pertaining to natural phenomena.
- **Example: Quantitative Method**
Can instruction & Emotional Support in the first Grade classroom make a difference for children at risk of school failure?
(Bridget K. Hamre & Robert C. Plante: University of Virginia)

Qualitative Methods

- A kind of research in which we do not use statistical procedures.
- **Objective of Qualitative methods:**
It focuses on studying a single person and gathering data through the collection of stories that are used to construct a narrative about the individual's experience and the meaning he / she attributes to them.
- **Example: Qualitative Method**
Adequate schools and inadequate Education: the life history of a Sneaky Kids.
(Harry F. Wolcott: University of Oregon)

Difference between Quantitative Research & Qualitative Research

- Numerical data
- Hypothesis and research procedures started before beginning the study.
- Large
- Relies on statistical procedures
- Little interaction
- Control
- Statistical
- We live in a stable and predictable world that we can measure, understand, and generalized about.
- Survey Research
- Correlation Research
- Causal Comparative
- Experimental Research
- Single Subject Experimentation
- Non-Numerical data + Visual data
- Research problems and methods evolve as understanding of topic deeper.
- Small
- Relies on categorizing and organizing data into pattern.
- Extensive interaction
- Interest
- Narrative
- Meaning is situated in a particular perspective or context that is different for people and groups; therefore, the world has many meaning.
- Narrative Research
- Ethnographic
- Case study

thanks

- Have a nice day