

CLASSROOM RESEARCH

Classroom research is an act undertaken by teachers, to enhance their own or a colleague's teaching, to test the assumptions of educational theory in practice, or as a means of evaluating and implementing whole school priorities.

Benefits of Doing Research for Teachers

?

Benefits of Doing Research for Teachers

- ▣ to become more effective teachers
(new insights and a richer understanding)
- ▣ to better evaluate existing research
(critical readers)

Reasons why teachers may be hesitant or
unable to undertake research

?

Reasons why teachers may be hesitant or unable to undertake research

- ▣ no training to undertake reserach
- ▣ heavy load
- ▣ lack of support

Types of Research

- ▣ **Paradigm** is a set of assumptions, concepts, values, and practices were implemented in a study. The goal is to find a new knowledge.
- ▣ **Tradition** is an approach to researching the area generally recognized and generally sets employ research methods. There are two research traditions, namely qualitative and quantitative research.
- ▣ **Method** is a means to collect, analyze and interpret data using the procedure. There are several methods that can be used to deepen or learning beliefs attitudes and behaviors of teachers and

Basic vs. Applied Research

Difference Between Basic Research and Action Research		
Criteria	Basic Research	Action Research
Objectives	Develop and test educational theory and derive generalizations.	To find solutions to problems in a specific context.
Training	Intensive training is needed in Research Methodology.	Limited training is needed.
Selection of a problem	A wide range of methods are used to select a problem.	Participating teacher identify problems during the teaching-learning processes.
Hypothesis	Highly specific hypotheses are developed.	Specific statement of the problem serves as hypotheses.
Review of Literature	An exhaustive and thorough review of literature is required.	No such thorough review of literature is needed.
Sample	Considerably large sample size is required.	Students studying in the class of a teacher forms sample.
Experimental Design	Well thought experimental design is developed to maintain comparable conditions and reducing error and bias.	Procedures are planned only in general terms.
Analysis of Data	Complex analysis is often called for.	Simple analysis procedures are usually sufficient.
Conclusions	Conclusions may be in the form of generalizations and developing theories.	Findings are local specific.
Application of results	The generalizations have broad applicability.	Findings are used immediately in the classroom situations by participating teachers to improve their own

Some Distinguishing Features Of Action Research

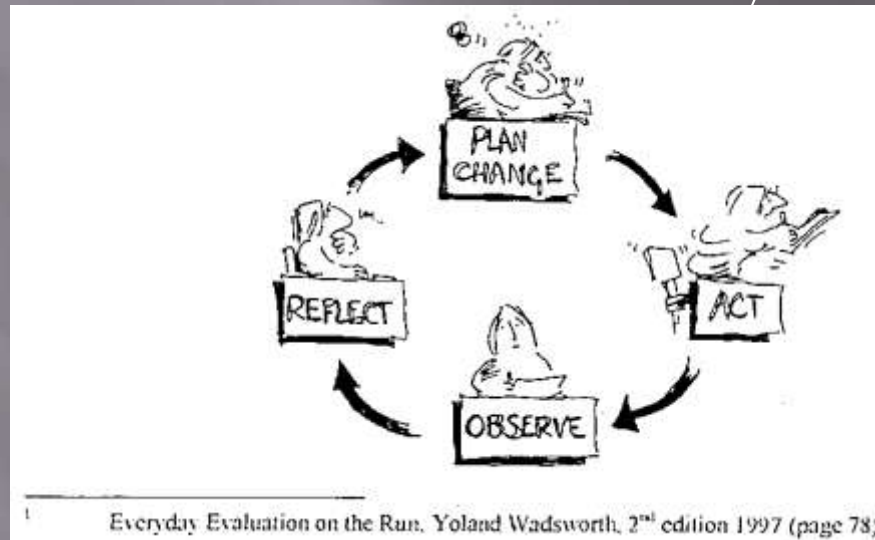
1) It is about action *and* research

It is action that is intentionally researched, and research that is designed to inform subsequent actions.

Some Distinguishing Features Of Action Research

2) It is *cyclical* and *evolves*

The classic action research cycle is :-



Each cycle can be short – maybe just a few hours, days or weeks. There can be cycles within cycles. Over time, a particular piece of action research may evolve into something quite different from its start.

Some Distinguishing Features Of Action Research

3) Each stage of the cycle is *rigorous*

The cycle doesn't just happen. Accepted and appropriate methods of acting, observing, reflecting and planning are used in each cycle.

Some Distinguishing Features Of Action Research

4) It is *critical*

Successful action research is based around shared curiosity not individual certainty. Action research works less well if people seek to prove the correctness of their own ideas. Indeed, people are expected to put their practices, ideas, and assumptions to the test by gathering evidence that could convince them that those practices, ideas and assumptions may be wrong.

Some Distinguishing Features Of Action Research

5) It tends to be *collaborative*

There is no distinction made between those involved in the “action” and those involved in the “research”. Everyone can be involved in both. The aim is to establish self-critical groups or communities participating in all stages of the cycle.

Some Distinguishing Features Of Action Research

6) It often starts with an *engaging question*

Since action research is both action and research oriented, the inquiry starts best with an initial question that is action oriented. Those involved in a particular piece of action research will have many different perspectives and expectations. In order to engage them, this starting question needs to reflect some common ground between all those perspectives and expectations.

DATA

- ▣ PRIMARY DATA : Are those which are collected afresh and for the first time and thus happen to be original in character and known as Primary data.
- ▣ SECONDARY DATA : Are those which have been collected by someone else and which have already been passed through the statistical process are known as Secondary data.

Collection Of Primary Data

- ▣ There are several methods of collecting primary data, particularly in surveys and descriptive researches. In descriptive research, we obtain primary data either through observation or through direct communication with respondents in one form or another or through personal interviews.

Collection Of Secondary Data

- ▣ These are already available i.e. they refer to the data which have already been collected and analyzed by someone else. Secondary data may either be published or unpublished data. Researcher must be very careful in using secondary data, because the data available may be sometimes unsuitable.

Research Traditions

Research Traditions

	Qualitative Research	Quantitative Research
Objective / purpose	<p>To gain an understanding of underlying reasons and motivations</p> <p>To provide insights into the setting of a problem, generating ideas and/or hypotheses for later quantitative research</p> <p>To uncover prevalent trends in thought and opinion</p>	<p>To quantify data and generalize results from a sample to the population of interest</p> <p>To measure the incidence of various views and opinions in a chosen sample</p> <p>Sometimes followed by qualitative research which is used to explore some findings further</p>
Sample	Usually a small number of non-representative cases. Respondents selected to fulfil a given quota.	Usually a large number of cases representing the population of interest. Randomly selected respondents.
Data collection	Unstructured or semi-structured techniques e.g. individual depth interviews or group discussions.	Structured techniques such as online questionnaires, on-street or telephone interviews.
Data analysis	Non-statistical.	Statistical data is usually in the form of tabulations (tabs). Findings are conclusive and usually descriptive in nature.
Outcome	Exploratory and/or investigative. Findings are not conclusive and cannot be used to make generalizations about	Used to recommend a final course of

Quantitative Research-Key Constructs

▣ Validity

- Construct validity: The instruments used measure the construct (aptitude, motivation)
- External validity: Generalizability
- Internal Validity: Controlling variables-intervention

Quantitative Research-Key Constructs

▣ Reliability

- Internal Reliability: Will someone else come up with the same results?
 - Inter-rater reliability: two researchers
 - Intra-rater reliability: the same researcher in 2 different occasions
- External Reliability: Whether another researcher will get similar conclusions or not.

Qualitative Research-Key Constructs

- ▣ Transferability (external validity)
 - ▣ The findings could be applied to other contexts
- ▣ Credibility (internal validity)
 - ▣ How carefully the data is gathered, analysed and presented
- ▣ Dependability (reliability)
 - ▣ the degree to which results can be trusted or reliable
(fit between data and what occurs in natural setting)

Generalizability

- ▣ Underlying the idea of validity and reliability in both quantitative and qualitative research is the concept of generalizability.

Generalizability

- ▣ In **quantitative research**, the degree to which a study can be generalized to other contexts can be determined through statistical procedures, which verify that the results obtained were not due to chance.
- ▣ The entire topic of generalizability looks very different in **qualitative research**. Instead of claiming that whatever has been discovered must be true of people in general, a naturalistic enquirer will claim that whatever understanding has been gained by an in-depth study of a real-life classroom may illuminate issues for other people.

Thank You!



Büşra DURB