**INTRODUCTION**

There are many ways to conduct research. Each of these ways is used in various

professional fields, including psychology, sociology, social work, medicine, nursing,

education and so on. However, the field of education often uses action research, an

interactive method of collecting information that's used to explore topics of teaching,

curriculum development and student behavior in the classroom.

Action research is very popular in the field of education because there is always room for

improvement when it comes to teaching and educating others. Sure, there are all types of

methods of teaching in the classroom, but action research works very well because the

cycle offers opportunity for continued reflection. In all professional fields, the goal of

action research is to improve processes. Action research is also beneficial in areas of

teaching practice that need to be explored or settings in which continued improvement is

the focus.

**LEARNING OUTCOMES**

At the end of this unit the students will be able to

1. Distinguish Action Research as a specific type of study.

2. Carryout action research at classroom level on their own.

3. Solve the assessment questions and worksheets given in the unit.

**INTRODUCTION TO ACTION RESEARCH**

Kurt Lewin- German-American social psychologist, who is considered to be the founder

of "Action Research", first used this term in 1940's. Since then, the basic principles of

action research are unchanged. (Hidden Curriculum, 2014). Action Research is the

process of finding the solution through problem solving technique. The expected outcome

of the action research, which addresses the issues, improves the practices. It is done in

groups, during the activity is in progress. The action research is free from the theoretical

responses. It is an investigation of an ongoing process. (Action Research, 2015). Action

Research is a process of inquiry or investigation carried out by and for those taking the

action and are in practical work. (Books and Publications, 2015). Action research is a

process of systematic inquiry that seeks to improve social issues affecting the lives of

everyday people. (Barone, 1996). Action research tends to help the classroom teachers to

improve the educational practices and resolve the educational problems. (Mills, 2011)

As clear by the diversified definitions, action research can engage an individual teacher, a

collaborative group of colleagues sharing a common concern, or an entire school faculty

positively in the developmental process. These three different approaches to organize for

research serve three compatible, yet distinct, purposes:

. Building the reflective practitioner

. Making progress on school wide priorities

. Building professional cultures

Action research is purposeful, solution-oriented exploration that is done in group or

personally by an individual. It is characterized by spiraling cycles of problem

identification, systematic data collection, reflection, analysis, data-driven action taken,

and, finally, problem redefinition. The relation and joining of the terms "action" and

"research" highlights the essential features of this method. It helps in improving

curriculum, teaching, and learning. (Kemmis, 1982).

**6.1 TEACHER AS RESEARCHER**

"It is teachers who, in the end, will change the world of the school by understanding

it" (Lawrence Stenhouse 1988)

As teachers engage in action research they are increasing their understanding of the

schooling process. What they are learning will have great impact on what happens in

classrooms, schools, and in the country in broader perspective in the future. The future

directions of staff development programs, teacher preparation curricula, as well as school

improvement initiatives, will be impacted by the things teachers learn through the critical

inquiry and rigorous examination of their own practice and their school programs that

action research requires.

In schools, action research refers to a wide variety of evaluative, investigative, and analytical

research methods designed to diagnose problems or weaknesses—whether organizational,

academic, or instructional—and help educators develop practical solutions to address them

quickly and efficiently. Action research may also be applied to programs or educational

techniques that are not necessarily experiencing any problems, but that educators simply want

to learn more about and improve. The general goal is to create a simple, practical, repeatable

process of iterative learning, evaluation, and improvement that leads to increasingly better

results for schools, teachers, or programs. (Ed, 2014)

Teacher-researchers can be characterized as those practitioners who attempt to better

understand their practice, and its impact on their students, by researching the relationship

between teaching and learning in their world of work.

**6.1.1 Importance of Teachers’ Research**

Schools are the nurseries for the production of the trained manpower. So it is not enough

for teachers merely to make decisions; they will be called upon to make informed

decisions, decisions which are data driven. Therefore, it is necessary for teachers to be

much more deliberate in documenting and evaluating their efforts. Action research is one

means to that end. Action research assists practitioners and other stakeholders in

identifying the needs, assessing the development processes, and evaluating the outcomes

of the changes they define, design, and implement. The self-evaluation aspect of action

research (by educators and/or students) is congruent with the philosophies contained in

the Total Quality Education and Outcomes Based Education in the world is moving

towards. (Johnson, 1993)

It is important for the teachers as they assists practitioners and other stakeholders in

identifying the needs, assessing the development processes, and evaluating the outcomes

of the changes they define, design, and implement. When the teacher starts working on

action research, s/he is actually considered to be reflective practitioner assessing and

evaluating her own work with different methods and modifying and changing the

teaching related decisions accordingly.

Teacher researchers give an in-depth thought to the question that what they will be going

to learn from their students. To get the answer to this question, they listen to and watch

their students engage in authentic work; collect work samples, photographs, and

transcripts to document what their students say and do; and use that information to evolve

their practice as they celebrate and support the voices and experiences of the children

they teach. In this sense, teacher researchers are innovators, curriculum drivers, agents of

school change, and directors of their own professional development. (Suskind, 2016)

**6.2 DESIGNING ACTION RESEARCH**

**6.2.1 Identification of Problem (Identify a problem to be studied)**

The first step in the action research to identification of the problem. What element(s) of

our practice or what aspect of student learning do we wish to investigate? What in real

sense I want to improve? What is the matter of concern that is not up to my expectations?

Researcher has to decide about the above mentioned questions first. Are the students slow

in grasping the concept? Why the students are not active? How can I develop interest in

my teaching? What method would be effective? Researcher has to hit the exact concern

first to carry on with the next step. Confusion or non clarity at this stage would result in

ruining of the other coming steps like collection of data. One must collect the required

data in order to analyze and then interpret it to develop a plan for the implementation and

further reflection and improvement in the required field of problem. Although all the

steps are interlinked, but the first step is of foremost importance in order to lay down the

strong foundations for the whole process.

**6.2.2 Collect data on the Problem**

Once the problem is identified, the next important step is the collection of data. This job

can be done in many ways. It can be done through observation with check list, through

parents feedback on the questionnaire, by recoding the lesson, by observing the child's

behaviour, by seeing the evaluation results, by counseling the students etc . Right tool;

valid and reliable must be used for the implementable findings.

**6.2.3 Execution and Recording (Organize, analyze and interpret the data)**

Triangulation in research makes it reliable and valid. So ones the data from the sources

has been gathered, it is organized and then analyzed with the help of required statistics.

The results of the statistics and qualitative analysis will show the intensity of the

problem. Now in the light of the data researcher will further proceed to the next step.

**6.2.4 Reflection on the collected data**

Now develop a plan to address the problem in the light of the data and make a plan to

overcome the problem. Taking the example of school, in the light of the data we may

need to re plan the school time table, improve the teaching methodology, change the

evaluation method, bring some changes in the environment etc. The data may reveal

some other problem. That will also be dealt accordingly.

**6.2.5 Action Plan**

Now is the time to have the action plan. Not just to have a plan but to implement revise

and repeat. By repetition in Action Research we mean that now we will implement the

plan which was made in the light of the collected data. While implementing we will again

start observing the process of implementation and record the applied technique or

whatsoever to bring further improvement in the process of learning. We may fail with the

new learner with new technique so we will re plan, recollect the data, do the analysis,

implement the change and again observe the applied technique.

Hence this cyclic method is proposed by many theorists and researchers in one form or

another to go on and on for the improvement in the education system. Action research is

also be called a cycle of action or cycle of inquiry, since it typically follows a predefined

process that is repeated over time. A simple illustrative example is following:

. Collect data on the problem

. Organize, analyze, and interpret the data

. Develop a plan to address the problem

. Implement the plan

. Evaluate the results of the actions taken

. Identify a new problem

. Repeat the process

6.3 TYPES OF ACTION RESEARCH

Many research authors have mentioned the types of action research in different manners.

Grundy (1982) discusses three modes of action research:

1. Technical

2. Practical and

3. Emancipatory

On the basis og Grundy’s modes of investigation McKernan (1991) also list three types

of action research (Masters, 1999):

Type 1:

the scientific-technical view of problem solving;

Type 2:

practical-deliberative action research; and

Type 3:

critical-emancipatory action research.

We will discuss the McKernan Model in detail.

Type 1: The Scientific - Technical View of Problem Solving:

The goal of the researcher in this approach is to test a particular intervention based on a

pre-specified theoretical framework, the nature of the collaboration between the

researcher and the practitioner is technical and facilitatory. The researcher identifies the

problem and a specific intervention, then the practitioner is involved and they agree to

facilitate with the implementation of the intervention. The communication flow within

this type of research is primarily between the facilitator and the group, so that the ideas

may be communicated to the group.

Grundy has developed a model describing technical action research. (Grundy, 1982)

Grundy discusses three types of knowing.

. The first is techne or knowing-how, the source of skilful action.

. The second is episteme, the source of scientific action or knowing that.

. The third type of knowing is phronesis, the knowing-why, the source of moral

action which is often called practical judgment.

Techne, as occurs in Type 1 action research results in a making action, it is product

related. While phronesis results in a doing-action or praxis, and is therefore product

centered as described in Type 2 below.

http://www.aral.com.au/graphics/mp\_judge.gif

**Type 2: Practical - Deliberative Action Research**

This design of action research allows for a more flexible approach.

According to McKernan the practical model of action research trades off some

measurement and control for human interpretation, interactive communication,

deliberation, negotiation and detailed description. "The goal of practical action

researchers is understanding practice and solving immediate problems".

"Practical action research fosters the development of professionalism by emphasising the

part played by personal judgement in decisions to act for the good of the client". This

mode of action research "promotes autonomous, deliberative action which was given the

name of "Praxis".

TYPE 3: Enhancement approach/Critical-Emancipatory Action research/Critical

Science perspective

In this type of action research there are two goals for the researcher using this approach,

one is to increase the closeness between the actual problems encountered by practitioners

in a specific setting and the theory used to explain and resolve the problem. The second

goal, which goes beyond the previous two approaches, is to assist practitioners in

identifying and making explicit fundamental problems by raising their collective

consciousness.

This type of action research requires much more effort than mere classroom teaching,

learning, observing and reflecting. It requires more scientific approach to be applied in

classroom and institutionalized researches. It is not in the methodologies that the three

modes of action research differ, but rather in the underlying assumptions and world views

of the participants that cause the variations in the application of the methodology

(Grundy 1982). Emancipatory action research "promotes emancipatory praxis” that is it

promotes a critical consciousness which exhibits itself in political as well as practical

action to promote change. This is exactly where action research pushes the researchers to

become critical thinkers and reflective practioners and bring the real change not just in

schools but in society (Grundy 1987).

DO NOT FORGET!

Continuous improvement in teaching and learning like any other profession is the need of

all times. Action research is very important for the teachers as they are dealing with the

future of the country. It asks such question like -What do I want to improve?, Why am I

concerned about it?, What can I do to improve it?, Who can help me and how? How will I know it has improved?

6.4 SELF ASSESSMENT QUESTIONS

1. As a teacher you are teacher the movement of earth to the students from the text

book. When the evaluation of the chapter was done, none of the students came up

with 100% marks in the objective type 20 items. What action will you take as a

teacher? How will you implement the action research on this case.

2. How can action research bring change in the teaching learning process in an

institution?

3. What are the steps of action research? Write each step in detail.

4. There is a problematic child in the class. You are a subject teacher for the teaching

of Mathematics. What qualitative and quantitative data will you collect from whom

and how? How will you go about it for the improvement of his behaviour using the

action research process.

Listen to these short videos:

1. https://www.youtube.com/watch?v=8jENIAs-V4Q (Process of Action Research)

2. https://www.youtube.com/watch?v=cYno85t1YmI (Action Research Defined)

3. https://www.youtube.com/watch?v=gpVvZbv69Kc (Action Research in Classroom)