

Module 12 Action Research

Unit 12.1 Introduction to Action Research

Contents

Introduction.....	1
About this unit	1
How to use this manual	1
How you will be assessed	1
Finding your way	2
Competency	2
Learning outcomes	2
Assessment criteria	3
Other resources you may find useful	3
 Section 1 Introduction to action research	 5
The Importance of educational research	5
Characteristics of action research	6
Typical Action research ideas	6
Activity 1	7
Ethics of action research	7
Steps in action research projects	8
Activity 2	9
Action research model	9
Requirements for Chapter 1	11
Activity 3	12
Summary	13
Activity 4 Check your progress	14
Suggested solutions to activities	16
 Assignment 12.1-1	 19

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Introduction

About this unit

Welcome to the unit on Action Research.

We hope you will find the study of this topic informative and interesting.

This unit introduces the concepts of research and educational research. The term 'action research' is explained and typical projects are identified. The development of procedural steps to formulate Chapter 1 of the project is the critical element in its application.

How to use this manual

The manual is designed to facilitate the development and application of research and writing skills. You should work through it at your own pace, in the order presented.

This unit includes activities. These are designed to reinforce the information and to enable you to develop and practise the content.

Answers to the activities are provided at the back of this manual. Check your responses as soon as you complete an activity.

An *Assessment task* is provided at the end of the unit. This is designed to assist you in the achievement of the learning outcomes for this unit.

How you will be assessed

Assessment of this unit will take the form of a **written assignment**, which will cover the content outlined in this unit.

This should be completed with guidance from your tutor. In addition, this assignment will enable you to apply the skills discussed in this unit.

Please contact your tutor when you are ready to start the assessment.

Finding your way

As you work through the text, you'll see symbols in the left margin of some pages. These 'icons' guide you through the content.



Read



Important- take note!



Activity



Assessment task



Competency

The resources for the TVET curriculum are competency based. The competency for each unit is expressed as a number of learning outcomes and assessment criteria.

The assessment criteria specify what you must be able to do to show you have gained the knowledge, skills and attitudes needed to achieve each learning outcome.

Each unit has its own assessment criteria specified. **Recognition of prior learning** is encouraged. If you feel confident you have the necessary level of competence to successfully complete the elements shown below, you may be able to take the assessment.

Learning outcomes

When you have completed this unit you will be able to:

- Explain the term ‘research’.
- Identify the importance of educational research.
- Explain the term ‘action research’.
- State the characteristics of action research.
- Identify typical action research projects and their impact.
- Demonstrate the ethics of action research.
- Outline the procedural steps in action research projects.
- Apply the requirements for Chapter 1 of the action research project.

Assessment criteria

- Compare the terms “educational research” and “action research”.
- Identify one educational research project and one action research project.
- Develop the procedural steps of the action research project.
- Develop an action research project – Chapter 1 – utilising the section headings.

Other resources you may find useful

- Cohen, L & Manion, L. (1985). Research Methods in Education. London: Croom Helm.
- McNiff, Jean (1992). Action Research: Principles and Practise. Routledge.
- Winter, R. (1996). Some Principles and Procedures for the Conduct of Action Research in O. Zuber-Skerritt (Ed.) New Direction in Action Research. London: Falmer Press.

Section 1



Introduction to Action Research

Research is an orderly and thorough investigation that allows people to understand problems and why they occur.

Research helps people to develop reliable solutions to problems through systematic data gathering and analysis, followed by interpretation of the findings.

Common fields of research are in science and education. We will focus on **educational research**.

There are four types of research knowledge:

1. Description: Generally increases our knowledge about what happens, e.g., daily situations in schools.
2. Prediction: The ability to use information to predict a phenomenon, e.g., student performance.
3. Improvement: Factors that may transform or bring about change, e.g., motivation levels of students.
4. Explanation: Formulate theories about situations, e.g., the impact of the environment on learning.

The Importance of Educational Research

Research contributes to a continuous improvement of all aspects of education.

The process of education and training must improve on an on-going basis as needs and trends continuously arise in society.

Decisions for change must be based on sound knowledge, which can only be provided by research.

Action Research is the systematic study of attempts to improve education and training practise by the practical actions of those involved in the situation taken after due reflection on the data collected from the situation. It is specifically designed to study a local problem or concern, such as in a classroom or workshop/laboratory setting.

Kemmis and McTaggart (1988, p.5) provide another definition:

Action Research is a form of collective self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practises, as well as their understanding of these practises and the situations in which these practises are carried out.

Characteristics of action research:

- On-the-spot procedure designed to deal with a concrete problem located in an immediate situation.
- Used where specific information is required to deal with a concrete problem or concern, or where a new approach is to be integrated into an existing system.
- Flexible and adaptable - findings are applied immediately or in the short term.
- Feedback obtained during the investigation is used to make modifications and revisions to arrive at a viable solution.
- Often requires collaboration among teachers, or teachers and administration.
- Involves making improvements to practise by trying things out.
- “You” (the researcher) are the central person in the research.
- You are trying to bring about some improvement to the problem or concern that is being researched.
- Action research is something you do ‘with’, not ‘on’ your students.



Typical action research project ideas

Action research projects must have direct relevance to your teaching. Some project ideas are:

Objectives	Projects
<ul style="list-style-type: none"> • To improve a situation • Morale, motivation • Problem solving • Performance • Assessment of innovations 	<ul style="list-style-type: none"> • Classroom/laboratory environment routines, procedures • Relationships, productivity, formal and informal instruction • Indiscipline, absenteeism, learning • Examination results, on-the-job • Teaching/learning methods, materials, textbooks



Activity 1 Terminology

1. Compare the terms 'educational research' and 'action research'.

2. Identify one educational research topic and one action research topic.

Turn to page 16 for suggested answers to this activity.



Ethics of action research

- Respondents' views must be kept confidential.
- Everyone has the right to non-participation.
- Respondents have the right to remain anonymous.
- Access to data should be restricted: only those involved in the research should have access.
- Respondents should be protected from adverse consequences resulting from their participation.
- Do not expose participants to physical or mental harm.
- The researcher should explain the purpose of the study to participants. In the case of experimental research, this may be done after the experiment.

- Permission to collect data should be obtained from the relevant authorities.
- Avoid researching sensitive issues that may lead to conflict.
- Researchers must maintain integrity. Falsifying data to make findings agree with hypotheses is unprofessional, unethical and unforgivable. Likewise, do not use fictitious respondents.

Steps in Action Research Projects

Action research involves an initial exploration, to gain understanding of the problem or concern. This is followed by an intervention that is intended to solve the problem.

Further data collection is carried out, and new interventions are implemented until there is a sufficient understanding of the problem, or a workable solution is achieved.

The steps are:

- | | |
|------------|---|
| Step 1 | Reflect upon a problem or concern that you can do something about. |
| Step 2 | Identify a topic, state its background, formulate research questions, and list its significance. |
| Step 3 | Review the literature. Read reputable works on the area related to your topic. Establish the important factors related to the problem or concern. |
| Step 4 | Collect data from various sources. |
| Step 5 | Analyse and reflect on the data, then identify likely solutions. |
| Step 6 (a) | Implement the solution and collect more data to assess the impact of the solution. |
| Step 6 (b) | Implement other solutions, collecting data to assess the success of these refinements. |
| Step 7 | Report the results. |



Activity 2

Procedural steps of the action research project

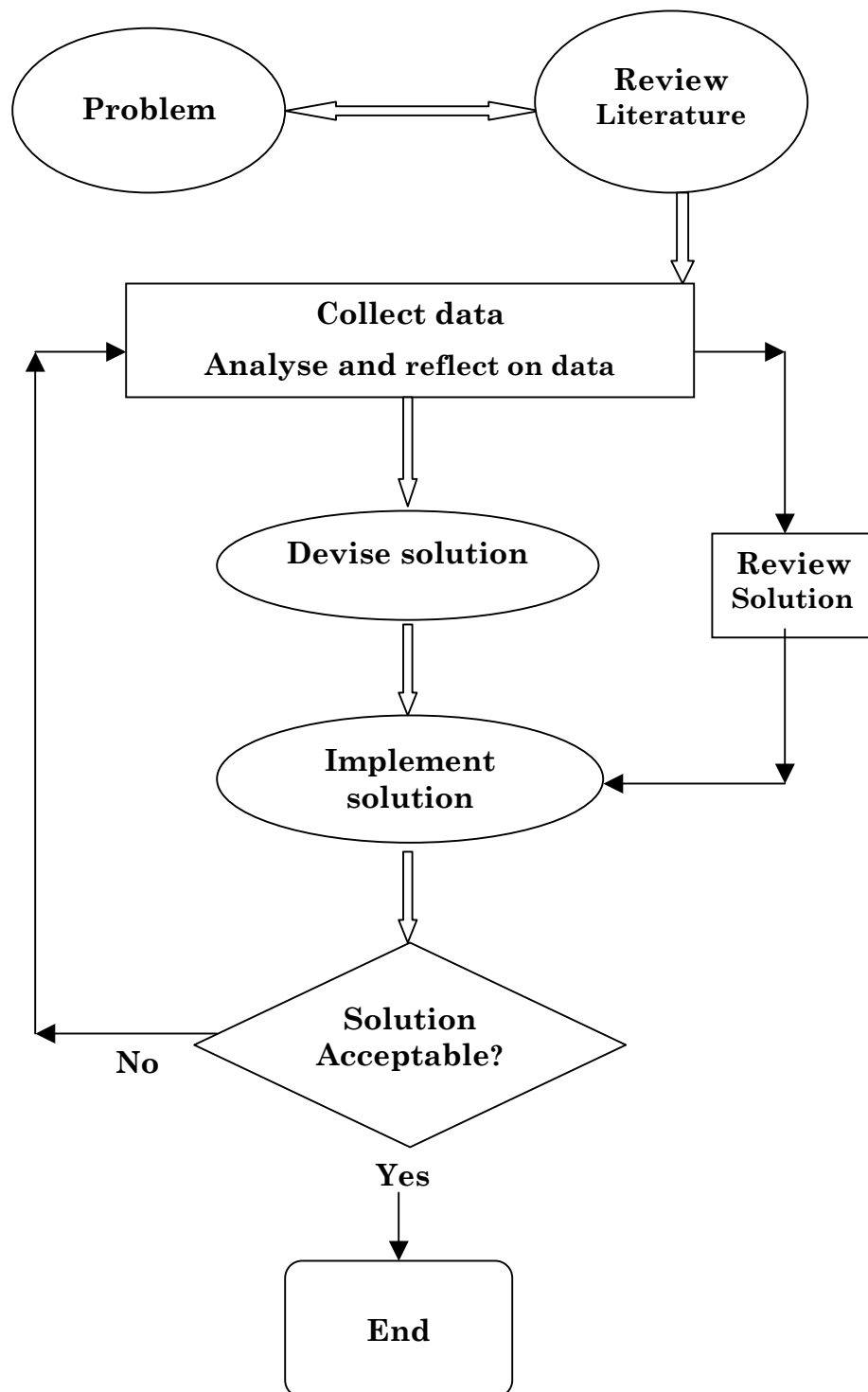
For each of the procedural steps outlined above, write short statements to justify its placement within the project.

Procedural Steps	Justification
Reflect on a concern	
Develop a title, state its background	
List research questions and state its significance	
Review literature	
Collect data	
Analyse data	
Implement solutions	
Report results	
Share information	

Turn to page 16 for suggested answers to this activity.



Action research model





Requirements for Chapter 1

Title: A description of the work, stated in about 12 words.

Example: "Improvements in Safety Practises Among Year 1, Group 2 Woodwork Students".

Background to the Problem: The circumstances underlying the problem. It's history, effects, related factors, noted incidents, etc., leading to what you are going to study because of these happenings.

Example: "In recent times, there has been an increasing number of minor workshop accidents among Year 1 Woodwork students...."

The Problem Statement: A brief statement of what is to be investigated.

Example: "The purpose of this study is to determine the level of safety that is practised in the woodwork workshop...."

Research Questions: A statement of specific questions for which the investigation is expected to yield answers.

Example: Specifically, the study will attempt to answer the following questions:

- *Are workshop accidents caused by poor safety practises?*
- *Can the quality of student supervision be a major factor in workshop accidents?*

Hypotheses: A tentative explanation, which guides the research.

Example: The hypotheses are that:

- *Workshop accidents are caused by poor safety practises.*
- *The quality of student supervision is a major factor in workshop accidents.*

Significance of the Research: In this section it is usual to state the following:

- how this particular project will add to knowledge of a certain topic
- how the problem is likely to be solved
- explain the state of affairs after this problem has been solved

Example: “The findings of this study can lead to improvements in safety practises in school workshop/laboratory settings...”

Limitations: Conditions beyond the control of the researcher. Which may impose restrictions on the conclusions and generalizations to other situations.

Example: “This study was limited by the following factors:

- *The unavailability of detailed accident reports.*
- *The prolonged absence of some students.”*

Delimitations: Boundaries beyond which the study is not concerned.

Example: This study is not concerned with safety factors in other school workshops or other class groupings or levels. It is therefore limited to the stated group and subject area.



Activity 3 Choosing a topic

As a teacher, how may you assist your students, and improve the quality of their learning? Reflect upon the following questions as you contemplate an Action Research topic.

- What are some of my concerns in my area of practise?
- What action should I take?
- How will I analyse my actions?
- How will I report my actions?

No solutions have been provided for this activity.



Summary

In this section, we explored the introductory processes of action research. **Research** is an orderly investigation that allows for the understanding of problems and the development of solutions.

Educational Research contributes to the improvement of all aspects of education and training.

Action Research is an approach to professional development and improved student learning, in which teachers reflect on their work and make changes in their practise.

Some typical issues from which action research projects may evolve:

- class routines – teaching and learning processes
- student relationships, morale
- problem solving in the classroom, areas of indiscipline, absenteeism
- student performance – theory and practical
- teaching/learning methods, materials

Steps to be followed include:

- exploration
- intervention
- further data collection
- new interventions

Ethical Issues are principles to which research activities must ascribe. These ensure that information is utilised in a responsible manner, and that those sampled or researched are not exploited or disadvantaged.

Chapter 1 requirements

- Title
- Background to the problem
- The problem statement
- Research questions or hypotheses
- Limitations
- Delimitations



Activity 4

Check your progress

Develop the draft of an action research project - Chapter 1 – by utilising the section headings

1. My action research title is_____

2. The background to the problem is_____

3. The problem statement is_____

4. Research questions or hypotheses (maximum 4) are_____

5. The significance of the research_____

6. Delimitations are _____

7. Incorporate the respective sub-headings (1-7 above) into an essay format as a draft version of Chapter 1 of your Action Research project. Aim for a maximum of 400 words or 2 word-processed pages.

Discuss your answers with your tutor.

Suggested solutions to activities

Activity 1 Terminology - page 7

Possible responses:

1. Comparisons of the terms educational research ‘and ‘action research’.

Educational Research

- involves all aspects of education – generally broad based
- a form of scientific inquiry
- for theses or dissertations
- on-going and developmental
- may be difficult to be applied into practise

Action Research

- generally specific and personally oriented
- encourages reflective activities
- on the spot problem solving
- relies on collaboration and trial and error mechanisms

2. Possible topics

Educational research

- Motivation Levels of Teachers Before and After Training
- Policy-making in Schools
- Experiments on Teacher Enthusiasm
- Psychological Testing of Adolescents in a Named School
- Tardiness Among Male Adolescents at a Named School

Action research

- Observations of A School Improvement Project
- Tardiness Among Male Students in a Named Class Group
- Teacher Morale at a Named School
- Motivation Levels of A Group of Untrained Teachers

Activity 2 –page 9**Procedural steps within an action research project**

Procedural Steps	Justification
Reflect on a concern	<i>An attempt to improve the practise of teaching and learning.</i>
Develop a title – and state its background	<i>Name the project and outline its circumstances, historical development and factors.</i>
List research questions or formulate hypotheses and state their significance	<i>Questions or statements that you would like your research to answer, as well as the hoped for changes.</i>
Review literature	<i>The theoretical support for the topic.</i>
Collect data	<i>It establishes the status, it describes existing practise.</i>
Analyse data	<i>An attempt to give meaning to the data and relate it to the research questions.</i>
Implement solutions	<i>Put certain processes in place, to enable observation.</i>
Report the results	<i>A written presentation of the findings.</i>
Share information	<i>Oral presentation and discussion of the research project and its findings.</i>

Activity 3 –page 12

There are no suggested solutions to this activity. You should discuss your responses with your tutor or a colleague to get their opinion.

Activity 4 – page 14

Discuss your answers with your tutor.



Assignment No. 12.1-1

You are now required to do the Assignment 12.1 – 1 that will be found at the end of this unit or distributed by your tutor.



Assignment No. 12.1-1

To be completed and returned to your tutor for assessment.

This is an open book assignment and you may refer to whatever references you have at your disposal.

Name: _____ **Due Date:** _____

Write Chapter 1 of the Action Research project.

Aim for a maximum of 400 words or two (2) word-processed pages – double-spaced.