

Procedures for Collecting Data in Action Research

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Six W's

- Who?
- Why?
- What?
- hoW?
- When?
- Where?

Who: Participants

- “The primary data in action research are derived from interviews with primary and key stakeholders” (Stringer, 2007, p. 68)
 - **Primary and key stakeholders:** Those who are directly involved with the problem
 - Carefully consider those who have the most direct knowledge of the problem
 - **Traditional Research** requires strict sampling techniques
 - **Action research** uses participants where the problem occurs

Why: Two potential reasons (Why) for collecting data

1. Create an Action Plan to solve the problem
 - Information needed:
 - Causes of the Problem
 - Ideas for Solution
 - This is typically done through Focus Group and/or Interviews
 2. Determine the effectiveness of the Action Plan
 - *See next slide for more details*
- Depending on the nature of the problem, data can be collected for either or both reasons

HoW: Determining the Effectiveness of the Action Plan

- Two general strategies in an Action Research Study (either or both can be used)
 - **Pre-test Post-Test design:** Baseline data (before intervention) is compared to post-test data
 - **Stakeholder Evaluation:** Ask participants/other stakeholders if the intervention was effective and how it can be improved
- **VERY IMPORTANT NOTE ON PRE-TEST POST-TEST DESIGN**
 - The purpose of Action Research is to improve educational practice in a specific, local context, so a one-group pre-test post-test design is acceptable
 - **HOWEVER:** The purpose of scientific research is to generalize results beyond the specific context, so a one-group pre-test post-test design is NOT acceptable in scientific research due to maturation and history threats to internal validity

What: Instruments

- **Traditional Research** requires standardized instruments
 - **Action Research** uses instruments that are convenient and relevant to the context
- The best instrument in Action Research is one that is meaningful to the situation in which the problem occurs

Types of Instruments

- **Interviews:** Researcher ORALLY asks participants questions one-on-one from an interview schedule and records their responses
- **Focus groups:** Researcher develops an interview schedule, assembles a small group of people who can answer the questions, and records their ORAL responses
- **Questionnaires:** Researcher measures attitudes, beliefs, and behaviors of all individuals affected by the problem, typically by SELF-REPORT
- **Examination:** Measure knowledge of a topic
- **Documents, Records, and Reports:** Records (performance, attendance), plans (e.g., lesson plans), memos, minutes, reports, etc.

Application of Instruments in Action Research

- **Interviews and Focus Groups:** Gather information about causes of the problem and brainstorm potential solutions
 - Also can ask about the effectiveness of the solution
- **Questionnaires:** Gather pre-test and post-test data about the problem
 - Also can ask about the effectiveness of the solution
- **Examinations:** Gather baseline data about problems related to performance
- **Documents, Records, and Reports:** Gather baseline data about the problem

Interview/Focus Group Protocol

- **In the context of Action Research**, interviews should be viewed as an informal conversation to help gather participants' viewpoints and ideas
- **Interview Protocol:** Form created by the researcher with instructions on the interview process and questions to be asked
 - Part 1: Introduction of you as researcher and the research study
 - Part 2: Questions for participants' biodata information
 - Part 3: Questions related to the causes of the problem and/or solutions to the problem

Interviews and Focus Groups

- "A major problem with the interview process is that questions are easily tainted by the researcher's perceptions, perspectives, interests, and agendas" (Stringer, 2007, p. 70).
- The researcher should avoid putting words in the mouth of the participant
 - **INCORRECT:** You seem to be coming late to class every day. Could it be because your parents are giving you too much work at home?
 - **CORRECT:** You seem to be coming late to class every day. Why were you late to class today?

Interviews and Focus Groups

- Start with a general question, then move to more specific questions
 - *Questions on causes of the problem*
 1. What has caused you to be late to class this week?
 2. Do your parents influence you to be late to class? How?
 3. Do your teachers influence you to be late to class? How?
 4. Do your peers influence you to be late to class? How?
 - *Questions on solutions to the problem*
 1. What do you think can be done to help you come to class on time?
 2. What can the teacher do to help you come to class on time?
 3. What can your parents do to help you come to class on time? Etc.

Focus Group Strategies

- Arrange the participants in a circle with the audio recorder clearly placed in the middle
- **Introductions:** Introduce yourself and allow participants to introduce themselves to the group
- Introduce the research study
- **Set ground rules to ensure every participant's free participation**
 - Each person should have the opportunity to express their opinions and perspectives
 - Participants should be respectful and open-minded with each other

Focus Group Strategies

- Optional for Focus Groups
 - Ask participants to think about an issue for a few minutes and write down their responses
 - Ask each participant to read and elaborate on their response
 - These responses can then be discussed

Questionnaires

- Unlike traditional research, questionnaires for Action Research do NOT have to be standardized
 - Validity and reliability information is not necessary
- Instead, questionnaires should be short and directly linked to the problem under study
- Two applications of questionnaires
 - **SELF-REPORT** on the degree/frequency of the problem (used as pre-test post-test)
 - Gather information on participants' evaluation on the effectiveness of the Action Plan

Sample Self-Report on Exam Malpractice

Part 4: Personal Behavior

Indicate if you have personally done in any behavior within the past three years that you have been in school. Remember, it will not be possible to link your responses to you personally, so do not be afraid to be honest.

35. Copy your continuous assessment answer from another student.	YES	NO
36. Read another student's answers on their exam script during the exam.	YES	NO
37. Ask another student for an answer during the exam.	YES	NO
38. Write answers on an exam script beforehand to carry it into the hall.	YES	NO
39. Trade your script with a student in the exam so they write your answer.	YES	NO
40. Write answers or notes on your body, clothing, or personal belongings.	YES	NO
41. Use your handset to receive texts from another person with answers.	YES	NO
42. Bring a sheet of paper into the exam hall with answers written on it.	YES	NO
43. Pay the lecturer to give you the questions before the exam.	YES	NO
44. Arrive early to the lecture hall to write answers on the table.	YES	NO

Not Too Young to Learn Evaluation Form

1. What is your overall evaluation of the workshop? (Please circle one.)

1 2 3 4 5
Poor Weak Average Good Excellent

2. What did you learn from the workshop?

3. What was the best part of the workshop?

4. What suggestions do you have to improve for future workshops?

5. What topics would you like to learn more about in future workshops?

6. What suggestions do you have for future activities (workshops, trainings, etc.) that would help you in your role as an early childhood educator

When (Time) and Where (Location)

- Thoughtfully consider when and where to conduct interviews/focus groups/questionnaires to ensure accurate information is provided by participants

In Conclusion

- Your project **MUST** include a way to evaluate the effectiveness of the Action Plan
 - This can be done one (or both) of two ways:
 1. Collecting data about the problem at pre-test and post-test (typically through self-report questionnaire or exam)
 2. Collecting data from the participants on their beliefs of the effectiveness of the intervention (typically through open-ended questionnaire/interview)
- Your project **MAY** (but does not have) to also collect data before the intervention to help you develop an Action Plan (typically through focus group/interview):
 - Causes of the problem
 - Potential solutions to the problem