



ACTION RESEARCH

SESSION 4.5

DATA COLLECTION THROUGH THE USE OF DOCUMENTS AND MATERIALS



Objectives

At the end of the session, teachers should be able to:

- 1 identify documents and materials that can be used as data or sources of data;
- 2 differentiate primary and secondary sources;
- 3 justify the importance of external and internal criticism when using documents and materials as data or sources of data;
- 4 explain the ethical considerations when using documents and materials as data or sources of data; and
- 5 select documents and materials that can serve as data and/or major sources of data according to Action Research topics.



Key Understandings

- 1 Documents and materials can be used as data and/or sources of data.
- 2 There are primary and secondary documentary and material sources. Each of these should undergo both external and internal criticism prior to inclusion as data and/or source of data for the Action Research.
- 3 Ethics should be observed when using documents and materials as data and/or sources of data.

Materials

- Laptop
- LCD projector
- Marking pens
- Manila paper
- Masking tape
- Metacards
- Samples of documents for the task under Activity (e.g., student's notebook in Math showing computations, student's diary, letters)

written by students and/or by parents to children who are students, portfolio with self-reflection page, teacher's old record book, teacher's lesson plan or lesson guide, minutes of a faculty meeting, school Improvement Plan or School Development Plan, school records of latest LAPG, PHIL-IRI, or NAT scores, and photocopies of a page from each of these documents)

- Copies of the worksheet for the task under Activity
- Copies of the table for the task under Application



APPROXIMATE DURATION

120 minutes/ 2 hours



References

Department of Education. 2017. Supplemental Research Guides and Tools. DM 144, s. 2017.

Santiago Canyon College. n.d. Identifying Primary and Secondary Sources. Santiago Canyon College (website). Accessed _____.
<https://sccollege.edu/Library/Pages/primarysources.aspx>

McKernan, James. (1991) 1996. Curriculum Action Research: A Handbook of Methods and Resources for the Reflective Practitioner. London: Kogan Page.

Mills, Geoffrey E. (1999) 2017. Action Research: A Guide for the Teacher Researcher. Boston: Pearson

Introduction

Begin the learning session by saying: "Good day, teachers! I would like to welcome you to today's LAC session. In this session, we will be focusing on the use of documents and related materials as data and/or sources of data. I have

prepared activities that will guide us towards the achievement of the objectives for today's session.

At the end of this session, you are expected to be able to identify documents and materials that can be used as data and/or sources of data; differentiate primary and secondary sources; justify the importance of external and internal criticism when using documents and materials as data or sources of data; explain the ethical considerations when using documents and materials as data or sources of data; and select documents and materials that can serve as data and/or major sources of data for Action Research topics.”

Activity (30 minutes)

Lead the conduct of the pre-discussion group task by observing the following instructions.

- 1 Ask the participants to count off by five. Have the participants with the same numbers (e.g., all 1's, all 2's, all 3's and so on) be seated together.
- 2 Once the groups are formed, distribute two documents (together with photocopies of a page for each document) for each of them to study (student's notebook, diary, or letter). Also, give them a copy of the worksheet titled "Assessment of Documents." Ask the groups to examine the documents given to them in terms of their physical appearance as well as their content. Have them write their assessment on the worksheet provided. Give them 10 minutes to accomplish everything.

WORKSHEET: Assessment of Documents

Name/Title of document:
Date produced:
Produced by:

Assessment of Documents	
Physical Features	Content

- After 10 minutes, call the group together for sharing. Listen to each group discuss the documents they have. Begin with group 1. Continue until all groups have shared, then collect all the documents used for the task.

NOTE TO THE FACILITATOR:

You may look at some sample entries for this worksheet provided at the end of this session guide.

Analysis (10 minutes)

Process the output of the groups for the activity by asking them the following guide questions.

- What can you say about the documents that you just perused? (They contain information that can be used as data for research.)
- What types of information are contained in the documents? (factual narrations of events, accomplishments and plans, students' mental processes, personal feelings and thoughts)
- Can you conceive of an Action Research topic or question to which the documents might be useful? (How do students analyze a Math problem? What were a student's thoughts about his or her experience? What plans were initiated and/or accomplished for the school?)

4. What might be the requirements for you to believe in the contents of the documents? (Its authenticity must first be established or verified by an authority.)
5. What is the advantage of the documents over other data collection methods discussed such as paper-and-pencil tests, interviews, and observations? (They contain facts and spontaneous actions, thoughts, and feelings.)
6. What might be a disadvantage of using documents for Action Research? (It is sometimes difficult to establish authenticity; some documents may not survive through time; photocopies are not credible sources of information)

Abstraction (40 minutes)

Proceed to the discussion part of the session by saying: “Let us now focus on how and when to use documents and related materials as data and as sources of data for Action Research.”

UNDERSTANDING DOCUMENTS AND MATERIALS

Documents and related materials refer to written materials that can serve as sources of data for the research. These are used as data or sources of data about students and schools in Action Research when these contain specific information that cannot be obtained from other sources like paper-and-pencil instruments, interviews or observations.

Sometimes, the data that an Action Research requires are those that are produced by students (or schools) such as written work, term papers, portfolios, reports, diaries, and the like. For example, if we want to know about grammatical errors committed by Grade 7 students, the best source of data will be their written work such as essays and reports. If we want to find out the artistic abilities of Grade 3 pupils, we may have to look at their art projects. A teacher who is interested to know about the behavior problems of elementary pupils may ask the Guidance Office or Office of Student Discipline for reports of disciplinary cases for the past school year. Student portfolios are also a rich source of information for a research on evidences of learning in specific

subjects like Science.

SAMPLING METHOD

Both random and nonrandom sampling methods may be applied to documents and materials when used as data or sources of data. The Action Researcher can randomly choose a document from several samples. Documents may be assigned a number and numbers can be randomly chosen in selecting which documents will be included for the study. For example, if twenty students have each written a diary and only five diaries are needed for the research, random numbers can be employed to select which five diaries will be examined.

More often, however, sampling of documents for Action Research may be nonrandom. Only the documents that have survived the test of time and are available during the period of data collection for the study may be incorporated in the research (accessible sampling). This might be the case for letters or correspondences. Suppose the study is about the relationship of students with their parents who are Overseas Filipino Workers (OFWs). Only those letters that the students are willing to surrender for inspection by the researcher will be included.

The researcher may also be looking for certain types of documents or materials. For example, a teacher may want to see how scaffolding can change understanding and application of Mathematical formulas among boys who have difficulty with the subject. The teacher may decide to collect their assignment notebooks (purposive sampling).

In another situation, the researcher may want to make sure that the number of Self-Reflections that will be analyzed represents boys and girls in the entire class according to proportion (quota sampling). Hence, if the class is composed of 20 boys and 30 girls, and only 10 self-reflection sheets will be studied; 4 of the sheets will be from boys and 6 from girls.

PRIMARY AND SECONDARY DOCUMENTARY (OR MATERIAL) SOURCES

The following are some of the primary and secondary materials that can be used for collecting data.

- 1 Primary Documentary (or Material) Sources. These include written or non-written evidences, such as sound recordings, pictures or photographs, and artifacts. These provide Action Research with direct or firsthand evidence about

students or events in which students are involved. These are original student products that may constitute the data or from which data for Action Research may be obtained when all other data collection methods are not applicable. Published materials can also be considered as primary sources if they originate from the particular time period covered by the study and have been composed or created by someone (example, a student) who is the subject of the study.

The value of primary documentary or material sources is that they reflect the individual viewpoint or activity of a research participant. In scientific research, they present original thinking or thought processes, personal feelings and insights, and actions done in private that are difficult to obtain using other data collection methods.

Examples of primary documentary or material sources are diaries, letters, and correspondences; internet communications (emails and messages); photographs and drawings; works of art and literature; books and other written materials published at the specific time covered by the study; public opinion polls; speeches; official personal documents such as birth certificate and report card; school records on important variables such as enrollment, retention, dropout, and promotion rate; artifacts of all kinds such as notebooks and portfolios; audio and video recordings of student events; and technical reports and scientific journal articles on experimental research.

- 2** Secondary Documentary (or Material) Sources. These refer to documents and materials that explain, examine, clarify, criticize, scrutinize, assess, review, and sort out primary documentary sources. Technically, these are generally one or more steps away from the primary documentary sources; thus, they do not have the novelty and immediacy of the original documents. Many secondary documentary sources gather, consolidate, and repackage information obtained from primary ones for the purpose of disseminating the information more widely and making them more usable. Similar to primary documents and materials, secondary documents and materials can be found in written and audio-visual formats such as pictures and video clips.

Examples of secondary documentary sources are biographies, reference books, and articles from magazines, journals, and newspapers written and published after the event; literature reviews and review articles; and textbooks and abstracts. Take note though that textbooks may become a primary documentary source if the study is about the content, design, and quality of textbooks.

SPECIFIC DOCUMENTS AND MATERIALS AS DATA AND/OR SOURCES OF DATA

Below are sample documents and materials from where data can be elicited.

1 Sources about Students

Most Action Research are conducted for and with students. The following are some of the documents that can be used as data and/or sources of data about them.

- written assignments
- projects (written and objects)
- students' records (anecdotal record, attendance, report card, test report)
- students' portfolio

2 Sources about Teachers

Sometimes the subject of the Action Research are the teachers' competencies, teaching strategies, or instructional materials used in the classroom. The following are documents that can be used as data or as as possible sources of data about them.

- lesson plans
- classroom observation tools
- minutes of the meetings
- print materials (journal, school paper, photograph, letter, diary, memo)
- Nonprint materials (objects, teaching aids, audio-video recordings)

EXTERNAL AND INTERNAL CRITICISM

Researchers need to consider the external and internal criticism when using documents for data collection.

- 1 External Criticism. This refers to the process of examining the authenticity of documents and materials used as data and/or data sources in Action Research. The Action Researcher must determine the genuineness or validity of the document or material by answering questions such as "Is it what it appears or claims to be?" and "Is it acceptable as data or source of data for the research?". It is the duty of the researcher to first attest to the authenticity of the document or material before it is used as data or source of data for the study.

External criticism can be performed by examining the external features of the document or material and/or its author as follows:

- Language and writing style—Are these typical of the author and consistent with what was observed in his or her other written works?
- Physical appearance (such as paper quality and format or raw material, in the case of an object)—Does the document or material look original in terms of the paper and format used?
- Authorship—Is/are the author/s of the document or material known and/or mentioned or indicated in the document or material? Does/Do the author/s or creator/s possess the characteristics or qualifications to write the document or produce the material? Is/Are the author/s or creator/s knowledgeable about the content of the document or the message or purpose of the material?

2 Internal Criticism. This pertains to the accuracy of the contents of a document. The truthfulness of what the document says have to be ascertained by the Action Researcher. Questions like “Is the document telling the truth?” and “Is the content of the document consistent with known facts about the writer and/or the topic?” are addressed through internal criticism. It might be deduced that if the authenticity of the document or material and its authorship are already established, it follows that the content must also be truthful. This might be true. However, it is also possible that a document and its author are authentic, but if it is produced under duress or pressure, the content may not be truthful. Or, it might also happen that the author is biased and, therefore, presents only half the truth in the document. This is the reason why internal criticism has to be undertaken even if a document’s or material’s authenticity has been proven. Internal Criticism of documents may be accomplished by scrutinizing the words and statements in terms of the following:

- Meanings—The meanings of words and statements must be consistent with known facts.
- Credibility—The words and statements must be trustworthy and reliable.

For material sources such as artwork of students, content is not a relevant consideration for authentication. Physical examination of the object may be enough.

ETHICAL CONSIDERATIONS

There are ethical matters that must be considered when using documents and materials as data and/or sources of data for Action Research.

- 1 Proper permission
Official permission must be obtained for all documents and materials that will be used as data and/or sources of data to answer the Action Research question.
- 2 Confidentiality
Anonymity of the individuals identified or mentioned in the documents must be ensured. Safekeeping of documents and materials must also be properly observed.
- 3 Authenticity of documents and materials
Accuracy, credibility, and dependability of document and material sources must be confirmed.



Application (30 minutes)

Lead the participants in putting into practice what they have learned so far about documents and materials as data collection method by doing the following activity. Observe the given instructions.

- 1 Following the same groupings for the earlier activity, distribute manila paper and copies of the table below to the participants. Then, ask them to work together and complete the table.
- 2 Ask the participants to identify the document/s that can be used to answer the listed Action Research questions. Have them discuss each question and decide which document/s will provide the necessary data.
- 3 Ask the participants to write their answers on the manila paper provided. Give them 10 minutes to complete the task.

	Research Questions	Document/s to be Used
1	What are the common flaws of Grade 7 students in English grammar?	
2	Which cocurricular activities help develop the personality of students?	

3 What has been the trend in dropout rates among elementary or secondary students for the past five years?

4 What are the priority projects, programs, or activities of schools in the district?

5 Do teachers incorporate student-centered strategies in their classes?

4 After 10 minutes, call the group together for sharing. Ask each group to share their outputs, beginning with Group 1. Summarize the outputs by mentioning the best responses for each research question.

Closing (5 minutes)

End the learning session by saying: “As we end our LAC session today, let us reflect on the following quotation from Bo Bennett:

‘A dream becomes a goal when action is taken toward its achievement.’

—Bo Bennett

Thank you for your participation today. Do not forget to bring a copy of your documents in the next LAC session. Goodbye and see you again soon.

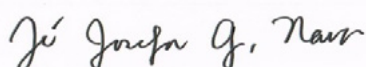
SAMPLE ENTRIES FOR THE WORKSHEET UNDER ACTIVITY (ASSESSMENT OF DOCUMENTS)

Name/Title of document: Assignment on Solving Algebraic Equations Written in Notebook	
Date produced: July 15, 2018	
Produced by: Joanne D.L. Cruz	
Assessment of Documents	
Physical Features	Content
<ul style="list-style-type: none"> • spiral-ruled notebook • writings in pencil • lots of erasures • some errors are corrected by writing over them • assignment written on three pages 	<ul style="list-style-type: none"> • carelessness in copying the problem from the worksheet to the notebook • error in transposing terms • error in finding the quotient

SAMPLE RESPONSES FOR THE TABLE UNDER APPLICATION

Research Questions	Document/s to be Used
1 What are the common flaws of Grade 7 students in English grammar?	<ul style="list-style-type: none"> • sample papers or essays of students
2 Which cocurricular activities help develop the personality of students?	<ul style="list-style-type: none"> • calendar of school activities for the past year • record of activities from coordinator • posters • student organization's reports and calendars of activities
3 What has been the trend in dropout rates among elementary or secondary students for the past five years?	<ul style="list-style-type: none"> • school report card
4 What are the priority projects, programs, or activities of schools in the district?	<ul style="list-style-type: none"> • School Improvement Plan/School Development Plan
5 Do teachers incorporate student-centered strategies in their classes?	<ul style="list-style-type: none"> • lesson plans of teachers

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