**INFO SHEET #1: Technical Terms in Research**

**Competency**

**MELC:**

**EN10V-IVa-30.** Distinguish technical terms used in research.

**Objectives**

After the end of the lessons, the learners are expected to be able to:

1. distinguish the technical terms used in research;

2. identify the parts of a research paper and its appropriate technical terms, and

3. use appropriate sources to define research terminologies.

**Key Information**

**TECHNICAL TERMS USED IN RESEARCH**

**Research** is a process of systematic inquiry that entails collection of data, documentation of critical information, analysis and interpretation of what data/ information, in accordance with suitable methodologies set by specific professional fields and academic disciplines.

**Technical terms or terminologies relevant to research are the following:**

**▪ Accuracy** -- a term used in survey research to refer to the match between the target population and the sample.

**▪ Anonymity** -- a research condition in which no one, including the researcher, knows the identities of research participants.

**▪ Confidentiality** -- a research condition in which no one except the researcher(s) knows the identities of

the participants in a study.

**▪ Control Group** -- the group in an experimental design that receives either no treatment or a different treatment from the experimental group. This group can thus be compared to the experimental group.

**▪ Correlation** -- a common statistical analysis, usually abbreviated as r, that measures the degree of relationship between pairs of interval variables in a sample.

**▪ Delimitation** -- refers to the boundaries of the research study, based on the researcher’s decision of what to include and what to exclude. They narrow your study to make it more manageable and relevant.

**▪ Dependent Variable** -- a variable that varies due, at least in part, to the impact of the independent variable. In other words, its value “depends” on the value of the independent variable.

**Framework** -- the structure and support that may be used as both the launching point and the ongoing guidelines for investigating a research problem.

**▪ Hypothesis** -- a tentative explanation based on theory to predict a causal relationship between variables.

**▪ Independent Variable** -- the conditions of an experiment that are systematically manipulated by the researcher. A variable that is not impacted by the dependent variable, and that itself impacts the dependent variable.

**▪ Margin of Error** -- the permittable or acceptable deviation from the target or a specific value. The allowance for slight error or miscalculation or changing circumstances in a study.

**▪ Mean** -- implies average and it is the sum of a set of data divided by the number of data.

**▪ Null Hypothesis** -- the proposition, to be tested statistically, that the experimental intervention has "no effect," meaning that the treatment and control groups will not differ as a result of the intervention. Investigators usually hope that the data will demonstrate some effect from the intervention, thus allowing the investigator to reject the null hypothesis.

**▪ Non-probability sampling** -- the selection of subjects or sampling units from a population using non-random procedure. E.g., Convenient Sampling, Purposive Sampling.

**▪ Population** -- the target group under investigation. The population is the entire set under consideration. Samples are drawn from populations.

**▪ Questionnaire** -- structured sets of questions on specified subjects that are used to gather information, attitudes, or opinions.

**▪ Probability Sampling** -- the selection of subjects or sampling units from a population using random procedure, E.g., Simple random Sampling, Stratified random Sampling.

**▪ Random Sampling** -- a process used in research to draw a sample of a population strictly by chance, yielding no discernible pattern beyond chance. Random sampling can be accomplished by first numbering the population, then selecting the sample according to a table of random numbers or using a random-number computer generator.

**▪ Sample** -- the population researched in a particular study. Usually, attempts are made to select a "sample population" that is considered representative of groups of people to whom results will generalized or transferred.

**▪ Statistical Analysis** -- application of statistical processes and theory to the compilation, presentation,

discussion, and interpretation of numerical data.

**▪ Triangulation** -- a multi-method or pluralistic approach, using different methods in order to focus on the research topic from different viewpoints and to produce a multi-faceted set of data. Also used to check the validity of findings from any one method.

**▪ Validity** -- the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure.

**▪ Variable** -- any characteristic or trait that can vary from one person to another [race, gender, academic major] or for one person over time [age, political beliefs].

**Parts of Research**

1. **Title page** - this is the first page of the paper that contains an informative title and gives description of the content of the paper. It usually contains the name of the author/s.
2. **Abstract** – contains the summary of the entire study or research. The abstract also provides the overview of the research. The length is no more than 250 words.
3. **Introduction** – describes the topic under investigation and identifies research gaps. It is the part where how current research will address that research gap or unresolved issues.
4. **Literature Review** – it contains the sources directly related to the study. It is divided into two sections which are related concepts and related studies.

• Related concepts – present some of the fundamental concepts needed by the readers to better

understand the study.

• Related studies – refers to reviewing or studying research that is already existing.

1. **Methodology** – describes the tests, experiments, steps on how the research was conducted or performed. It features the participants, the study design, the instruments used, data gathering procedure and data analysis. Instruments includes questionnaire, interview, focus group discussion, survey and tests.
2. **Results** – shows the data collected and results of statistical data analysis.
3. **Discussion** – it features the summary and explanation of the result collected from the study in relation to the previous studies presented in the literature review.
4. **Conclusion** – contains the restatement of the findings, recommendation and implications. The conclusion may be included into the discussion.
5. **References** – cites the list sources used in the study. They may be books, dictionary, thesaurus and online sources such as websites, online journals, online articles, online videos..etc

**Proposed Performance Tasks**

**What am I?**

**Activity #1**

**Directions:** Give the meaning of the following research terminologies by using dictionary, thesaurus, and online sources (Google, online dictionary…etc.). Write the definition on the blank.

1. data- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. limitation- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. operational definition- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. reliability- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. technical definition- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_