



Republic of the Philippines  
 Department of Education  
 REGION VII, CENTRAL VISAYAS  
 Division of Cebu Province



**SELF-LEARNING HOME TASK (SLHT) # 1**

Subject: **Inquiries, Investigation and Immersion**

Grade Level: 12

Quarter: 4      Week: 1

Competency: Describe adequately the research instrument of the study.

Competency Code:

Name \_\_\_\_\_ Section \_\_\_\_\_ Date \_\_\_\_\_

School: Dalaguete National High School      District: Dalaguete 1

**Readings/Discussions**

**Questionnaire**

The questionnaire is the most common instrument in data gathering. One advantage of making the questionnaire is that the researcher administering it has an opportunity to establish rapport with the respondents, to explain the purpose of the study and to explain the meaning of items that may not be clear and which appear to be vague by the respondents. Moreover, the questionnaire can either be self-administered or mailed.

**Types of Questions**

**a. Yes or NO type.** Items are answered by “yes” or “no.”

Examples:

Do caregivers have the right to refuse calls? ( ) Yes ( ) No

Do senior high school students come to class early? ( ) Yes ( ) No

**b. Recognition type.** Alternative responses are already provided, and the respondents simply choose the given choices. It also contains close-ended questions.

Examples:

Specialized in Technical- Vocational Track

\_\_\_\_\_ Home Economics

\_\_\_\_\_ Information Comm. Technology

\_\_\_\_\_ Agriculture

\_\_\_\_\_ Automotive

\_\_\_\_\_ Welding

\_\_\_\_\_ Electricity

\_\_\_\_\_ Hair Culture

\_\_\_\_\_ Others, please specify: \_\_\_\_\_

Educational qualifications

\_\_\_\_\_ Elementary Graduate

\_\_\_\_\_ College Graduate

\_\_\_\_\_ High School Graduate

\_\_\_\_\_ MA/PhD

\_\_\_\_\_ Technical Graduate

\_\_\_\_\_ Others, please specify: \_\_\_\_\_

**c. Completion type.** The respondents are tasked to fill in the blanks with the necessary information. Questions are open-ended.

Examples.

When I see a misbehaving student, I will, as a teacher, \_\_\_\_\_  
\_\_\_\_\_.

In order to pass my failing subjects, I will \_\_\_\_\_  
\_\_\_\_\_ regularly.

- d. Coding Type.** Numbers are assigned to names, choices and other pertinent data. This entails knowledge of statistics on the part of the researcher as the application of statistical formulas is necessary to arrive at the findings.

Example:

On a scale of one (1) to ten (10), how will you rate the skills of your manager?

- e. Subjective type.** The respondents are free to give their opinions about an issue of concern.

Examples:

What can you say about teachers who are deeply committed to their work?

Will senior high school students be allowed to change their specialization? Why?

- f. Combination type.** The questionnaire is a combination of two or more types of questions.

### Wordings of Questions

1. State questions in an affirmative rather than in a negative manner.
2. Avoid ambiguous questions e.g. those which contain words like many, always, usually, few.
3. Avoid double negative questions (e.g. Don't you agree with the idea that minors should not be allowed to drink liquor or Aren't failing students be not hindered to enrol for the coming years?)
4. Avoid double- barreled questions (i.e., asking two questions in one question).

Examples:

Will you be happy joining the Division Quiz Bee and be given additional examinations afterwards?

Do you want to run for the Student Council and aim to be a valedictorian?

### Characteristics of a Good Data Collection Instrument

1. It must be concise yet able to elicit the needed data. According to Shelley (1984), the length of a questionnaire must be two to four pages and the maximum time answering is ten minutes. A desirable length of each question is less than 20 words?
2. It seeks information which cannot be obtained from other sources like documents that are available at hand.
3. Questions must be arranged in sequence from the simplest to the complex.
4. It must also be arranged according to the questions posed in the statement of the problem in Chapter 1 of your thesis.
5. It should pass validity and reliability.
6. It must be easily tabulated and interpreted.

## Scales Commonly Used in an Instrument

1. **Likert Scale.** It is a common scaling technique which consists of several declarative statements that express a viewpoint on a topic. The respondents are tasked to indicated how much they agree or disagree with the statements.

Example: Likert Scale to measure attitudes towards Mathematics.

Example:

1. I am interested in solving numbers and equations	SA	A	D	SD
2. I enjoy using calculators.	SA	A	D	SD
3. I am so engrossed in reading too many instructions.	SA	A	D	SD
4. Symbols and numbers are visibly catchy.	SA	A	D	SD
5.I find it easy to memorize formulas.	SA	A	D	SD

LEGEND: SA- Strongly Agree    A- Agree    D- Disagree    SD- Strongly Disagree

2. **Sematic Differential Scale.** The respondents are asked to rate concepts in a series of bipolar adjectives. It has an advantage of being flexible and easy to construct.

Example: Description of the class president

Competent	5	4	3	2	1	Incompetent
Punctual	5	4	3	2	1	Not punctual
Pleasant	5	4	3	2	1	Unpleasant

*More examples:*

1. What was the ease of your experience with our company?  
 Extremely difficult  
 Somewhat difficult  
 Neutral  
 Somewhat easy  
 Extremely easy
2. The company did everything they could to make my process as easy as possible.  
 Strongly Agree  
 Agree  
 Undecided  
 Disagree  
 Strongly Disagree
4. How much effort did you have to put forth while working with our company?  
 Much more than expected  
 Somewhat more than expected  
 As much as expected  
 Somewhat less than expected  
 Much less than expected
5. How would you describe your employment status?  
 Employed full-time  
 Employed part-time  
 Freelance/contract employee  
 Self-employed  
 Unemployed

6. How many employees working at your company?

- \_\_\_ 0-20
- \_\_\_ 21-50
- \_\_\_ 51-100
- \_\_\_ 101-1,000
- \_\_\_ 1,001+

**Very important note:** The questionnaire should match with the research objectives.

### **How to Describe the Research Instrument**

The following items may be included in the formulation of your Research Instrument in your own study;

1. Type of the instrument used
2. Conceptual definition of instrument with corresponding references
3. Rationale or reasons why the researcher has decided to use the instrument
4. Description of the essential parts of the instrument. It will also increase the index of validity if references are cited.

Take note that the instrument used by other researchers are considered standardized instruments when there have high coefficient indices of reliability and validity. When they are used for other studies, permission should be sought from the instrument originator/formulator/ maker and appropriate citations must be placed. An instrument used for a certain country or culture should establish its culture-based validity when used in other countries.

*Example on how to describe Research Instrument*

**Title: Competency-based Modular Learning Material for Third Year Students Unpublished Thesis, Asian Development Foundation College, Inc.**

#### **Research Instrument**

Gathering of necessary data for the survey was done through a survey questionnaire. This questionnaire elicited the following pertinent information: teacher's profile, financial attitudes, behavior and knowledge of teacher.

Data on the work performance of teachers in relation to their instructional competence, their school, home and community linkages and their personal circumstances, social growth and professional characteristics were gathered through their CB-PAST or Competency-Based Performance Appraisal System for Teachers in the Division Office of the Department of Education.

In addition, data on the number of elementary teachers per district in the Division of Bataan were also gathered from Personal Services Itemization-Teaching and Non-teaching Personnel-Public Elementary Schools- Department of Education, Division of Cebu.

Permission to administer to survey questionnaire was requested from the Division Superintendent through channels. The researcher personally administered the survey throughout the district. This was done so the proper instructions were given to the teachers. The survey questionnaires were retrieved as soon as the teachers had completed answering the questionnaires.

*Another Example:*

**Title: Competency-based Modular Learning Material for Third Year Students  
Unpublished Thesis, Asian Development Foundation College, Inc.**

### **Research Instrument**

The instrument employed in the study were the achievement test for the students and survey questionnaire for the teacher. These two instruments were described as follows.

**Achievement test for Students.** The achievement test was a 100 item-test that was developed by the researcher and designed to determine the achievement level of third year high school students in Chemistry. The content of the test was based on the Philippine Secondary Competencies.

**The Survey Questionnaire for the Teacher.** The survey questionnaire for the teacher is composed of three parts. It elicited to what extent the skills in Chemistry were developed among third year high school students, the techniques used by the teacher in teaching the subject and the problems encountered in teaching concepts relative to the subject.

*(samples taken from Cristobal and Cristobal, 2017)*

The questionnaire is the most common instrument in data gathering. One advantage of making the questionnaire is that the researcher administering it has an opportunity to establish rapport with the respondents, to explain the purpose of the study and to explain the meaning of items that may not be clear and which appear to be vague by the respondents. There are six type of questions: Yes or No type, Recognition type, Completion type, Coding type, Subjective type and Combination type. There also characteristics that we can say an instrument is good. Scales that are commonly used are Likert Scale and Semantic differential scale. Likert scale is a common scaling technique which consists of several declarative statements that express a viewpoint on a topic. The respondents are tasked to indicated how much they agree or disagree with the statements while Semantic differential scale is used when the respondents are asked to rate concepts in a series of bipolar adjectives. There are also steps in designing the questionnaire; Background, Questionnaire conceptualization, Establishing the validity of the questionnaire, Establishing the reliability of the questionnaire, Pilot-testing and Revising the questionnaire.

### **Exercise:**

Directions: Match the items in column A with the column B. Write the letter of the correct answer in a separate sheet of paper.

#### **Column A**

1. Items are answered by “yes” or “no.”
2. The respondents are tasked to fill in the blanks with the necessary information.
3. The respondents are free to give their opinions about an issue of concern.
4. It is a common scaling technique which consists of several declarative statements that express a viewpoint on a topic.
5. This entails knowledge of statistics on the part of the researcher as the application of statistical formulas is necessary to arrive at the findings.
6. The questionnaire is a combination of two or more types of questions.
7. This is the most common instrument in data gathering.
8. Do students need to wear school uniforms upon entering the school?
9. What is your opinion about Anti-terror Bill?
10. The respondents are asked to rate concepts in a series of bipolar adjectives.

#### **Column B**

- A. Questionnaire
- B. Yes or NO type
- C. Recognition type
- D. Coding type
- E. Subjective type
- F. Combination type
- G. Likert Scale
- H. Semantic Differential
- I. Completion type

### **Assessment/Application/Outputs (Performance Output)**

At this time, write and describe the Research Instrument of your study. See the example given in the discussion above as your guide.

## **Chapter III RESEARCH METHODOLOGY**

### **Research Instrument**

### **Suggested Enrichment/Reinforcement Activity/ies (Performance Output)**

Construct and provide a copy of the Research tool or questionnaire of your study.

### **Research Questionnaire**

### **References**

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**NOTE:** Contents adapted from the module of DepEd Cebu City Division, Region VII