## CHAPTER III

## RESEARCH METHODOLOGY

## a. Research Methods

This chapter deals with the procedures for conducting the study. It covers Research design, research subjects, data collection technique and instrument, and data analysis procedure.

## b. Research Design

The design of this study is descriptive quantitative. In this research the researcher using descriptive method to describe the phenomenon in the research and using quantitative approach method to analyze the data. Since the purpose of this study is to get information about the use of ProProfs online Computer-based assessment software as an assessment tool. The research use descriptive to describe and interprets what it is. It is primarily concerned with the present although it often consider past event and influence as they relate to the current condition ${ }^{1}$ that statement support the research purpose to get information about the use of ProProfs online Computer-based Assessment software as an assessment tool.

[^0]Based on Aliaga and Gunderson, Quantitative research is explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistics). That statement suits with the researcher's purpose to explain phenomena about students' perceptions about their perception on using ProProfs online Computer-based Assessment by collecting data from numerical data, that followed by analyzing it. Then, from the analysis, the researcher describes it to make the reader easy to understand. Here, the researcher used survey research as a method to answer the research questions. Survey method gathered data from a relatively large number of cases at particular time. This research concerned with students' perceptions on ProProfs online CBA.

## c. Research Subject

The subject of this research is the students of eight semester of UINSA in Classroom Management Course. It is because in this class have applied ProProfs online CBA software as an assessment tool for their Mid-term test. In this occasion, the student is going to answer questionnaire. Based on the preliminary research that the Classroom Management Course includes seventy three students, the researcher takes all of them to make the result more accurate.

## d. Data and Source of Data

The data in this research were divided into two categories. Those were primary data and secondary data. Primary data of the result were questionnaire result. While secondary data of this research was library works.
i. Questionnaire Result

A questionnaire is a means of eliciting the feeling, beliefs, experience, perceptions, or attitude of sample of individuals. As a data collecting instrument, it should be structured or unstructured. The questionnaire in this research was gotten from respondents answer toward some statements in the questionnaire provided. In addition, this questionnaire was to answer the second questions.
ii. Document

Documents are "A readily source of data in research as many already exist in the institutional system. ${ }^{2}$ Burns states that documents have a wide range for research focus which can be used by the researchers, such as students' portfolios of written work, student records and profiles, lesson plans, classroom materials, letters, class memos and newsletters, and previous test or examination papers. Since, ProProfs tool is able to record the students' score, so the researcher chooses to gain the data of students' score. It is investigated to find out the students' score regarding the use of online CBA.

[^1]
## e. Instrument of the Study

i. Questionnaire

The questionnaire is a widely used and useful instrument for collecting survey information, providing structured, often numerical data, being able to be administered without the presence of the researcher, and often being comparatively straightforward to analyze.

In this research, the researcher collected the data by giving questionnaire to participants adopted from journal and theory. The type of questionnaire here used rating scale questionnaire where the research used Likert scale to get information from participant. Likert scale is a psychometric perception scale primarily used in questionnaires to obtain participant's preferences or degree of agreement with a statement or set of statements. Respondents are asked to indicate their level of agreement with a given statement by way of an ordinal scale. ${ }^{3}$

[^2]a) Table instrument

Characteristics of a Good Assessment Program. ${ }^{4}$

Table 3.1

Table instrument about Characteristics of a Good Assessment Program

| No | Characteristics | Indicator | item |
| :---: | :---: | :---: | :---: |
| 1 | Asks important questions | accurately measure what student have learned/taught | 1 |
| 2 | Reflects institutional mission | Mid-term Exam Directions | 2 |
| 3 | Reflects programmatic goals and objectives for learning | Improves student's score | 3 |
| 4 | Contains a thoughtful approach to assessment planning | CBA is better than paper-based assessment | 4 |
| 5 | Is linked to decision making about the curriculum | Conductive environment | 5 |
| 6 | Is linked to processes such as planning and budgeting | User friendly | 6,7 |
| 7 | Encourages involvement of individuals from on and off | Positive or Negative experience | 8, 9 |

[^3]|  | campus |  |  |
| :--- | :--- | :--- | :---: |
| 8 | Contains relevant assessment <br> techniques | grading | 10 |
| 9 | Includes direct evidence of <br> student learning | certificate | 11 |
| 10 | Reflects what is known about <br> how students learn | Favor those who have facility | 12 |
| 11 | Shares information with multiple | Web navigation | 13 |
| 12 | Leads to reflection and action by <br> faculty, staff, and students | CBA vs PBA | 14 |
| 13 | Allows for continuity, flexibility, | Easier to log in and screen design |  |
| and improvement in assessment | 15 |  |  |

## f. Data Collection Technique

Data collection technique is very important on the research because the main purpose of the research is collecting the data. ${ }^{5}$

There are some procedures to be follow during the research, in order to find out the valid data to answer the research problems. The procedures are:

1. The researcher prepares all the instruments to collect the data. There were many steps in preparing the instruments:
a) Making the questionnaire. The questions in questionnaire related to the students' perception toward ProProfs online CBA software as an assessment tool.
b) Validity. The researcher asked the expert to check the validity of the questionnaire.
2. The researcher doing the research
a) The researcher distributes the questionnaire to the participants.
b) After getting the data, the researcher starts to analyze the data and make the conclusion as the result of the research.
[^4]
## g. Data Analysis Technique

In this research, the data collected by used questionnaire and interview analyzed by using descriptive quantitative method. Then, the researcher classified the data into quantitative data. It also helped the researcher to conclude, made some decisions and answered the problem research. The data analysis procedures are defined below:

## 1. Questionnaire

After the researcher gets the questionnaires done, the researcher did some steps to analyze the data:
a. The researcher calculate the percentage and counted the students' answer through the total of each item will be multiplied with a hundred percent then the result of it will be divided with the number of the students.
b. To measure attitudes, opinions, perceptions of a person or group of people about a problem, it is usea Likert scale ${ }^{6}$. It was explained as follows: Students' perception questionnaire was arranged based on the Likert scale. It was assessed with the following scale ${ }^{7}$ :

$$
\text { i. Very Weak= } 1
$$

[^5]\[

$$
\begin{array}{cl}
\text { ii. } & \text { Weak }=2 \\
\text { iii. } & \text { Average=3 } \\
\text { iv. } & \text { Strong }=4 \\
\text { v. } & \text { Very Strong = 5 }
\end{array}
$$
\]

c. The score of students' perception was calculated with the every single question and was looked for the percentage by using formula as follow:

$$
\% S R S=\frac{\sum S R S}{S R S m a k s i m u m} \times 100 \%
$$

## Information:


d. The percentage result can be measured by using Likert scale.It was explained as follows:

Table 3.2
Criteria of Students' Perception

| Percentage | Criterion |
| :---: | :---: |
| $81 \%-100 \%$ | Very Strong |
| $61 \%-80 \%$ | Strong |
| $41 \%-60 \%$ | Average |
| $21 \%-40 \%$ | Weak |
| $0 \%-20 \%$ | Very Weak |

e. Documentation

The Mean of students' score was calculated by using formula as follow:

$$
\mu=\frac{\Sigma \mathrm{X}}{\mathrm{~N}}
$$

$\mu=$ Mean
$\Sigma=$ Sigma
$\mathrm{N}=$ The number of data

If the data take from population, the symbol for Mean is $=\mu^{8}$

The categorization of students' examination score as follows:

## Table 3.3

The categorization of students' examination score

| Score | Criterion |
| :---: | :---: |
| $90-100$ | Excellent |
| $80-89$ | very good |
| $70-79$ | good |
| $60-69$ | fair |
| $<60$ | poor |

[^6]
[^0]:    ${ }^{1}$ JohnW Best \& J jamesv.Kahn, ( 2006), Research in Education, Pearson new international edition p. 118

[^1]:    ${ }^{2}$ Anne Burns, "Collaborative Action Research for English Language Teachers," 140.

[^2]:    ${ }^{3}$ Dane Bertram, "Likert Scales".

[^3]:    ${ }^{4}$ Catherine A. Palomba and Trudy W. Banta, Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education, (San Francisco, CA: Jossey-Bass, 1999), 16.

[^4]:    ${ }^{5}$ Sugiyono, " metode penelitian pendidikan", (2013).

[^5]:    ${ }^{6}$ Sugiyono, "METODE PENELITIAN ADMINISTRASI", (Cet. 5, Bandung, CV ALFABETA, 1998), p. 73
    ${ }^{7}$ Sugiyono, Statistika untuk Penelitian, (Bandung; Penerbit Alfabeta, 2010) p. 93-95

[^6]:    ${ }^{8}$ Morrisan, "METODE PENELITIAN SURVET", (Cet. 2, Jakarta, KENCANA, PRENADAMEDIA GROUP, 2014), 249.

