CHAPTER III
RESEARCH METHODOLOGY

A. Method of the Research

Research design was a framework of research methods and techniques chosen by the researcher. By designing the research design, the researcher could pick the perfect research method according to the topic and successfully prepare the research properly. In this research, researchers would use Survey research design. According to Ponto, (2015), survey research can be defined as the collection of information from sample of individuals through their responses to questions. In survey research, respondents answer through surveys or questionnaires. Surveys are a popular research tool for collecting feedback from many respondents. For a survey to collect good quality data, it must have good survey questions, which are a balanced mix of open-ended and closed-ended questions. In this research, closed-ended questions were used by the researcher. Quantitative research design was an approach used to study the relationship between variables. Variables are measured using instruments that produce numerical data and analysed using statistical procedures (Creswell, 2014). In this research design, data was obtained in numerical form, this data was used to measure the correlation between variables, and the final numerical data of this research was interpreted in textual form. This research method used in order to measure the practice of professional leadership and shared vision and goals on school in West Kalimantan.

B. Subject of the Research

In this study, researchers took 26 schools in West Kalimantan as research subjects. The research respondents consisted of teachers from 26 schools divided by level, namely elementary schools, middle schools, and public and private high schools in 8 districts and cities in West Kalimantan. Consisting of 6 schools in Sambas regency, 2 schools in Pontianak city, 6 schools in Kubu Raya regency, 2 schools in Landak regency, 4 schools in Melawi regency, 2 schools in Sanggau regency, 2 schools in Kapuas Hulu regency, and 2 schools in Mempawah regency.

Table 3. 1 Respondents data from 26 schools in West Kalimantan

No	Region	Schools	Respondents
1	Kab. Sambas	SDN 28 Perum Mutiara Indah	9
		SMPN 3 Sambas	21
		SMP Muhammadiyyah Simpang Empat	20
		SMAN 1 Teluk Keramat	30
		SMAN 1 Semparuk	29
		SMKN 1 Tebas	15
2	Kota Pontianak	MTSs Darul Amin	8
		SMA Darul Amin	5
3	Kab. Kubu Raya	SDN 09 Sungai Kakap	21
		SMAN 1 Sungai Kakap	9
		SDN 08 Sungai Kakap	20
		SMPN 1 Sungai Kakap	10
		SMPN 1 Kubu	13
		SMA Muhammadiyah Air Putih	15
4	Kab. Landak	SMPN 2 Mempawah Hulu	15
		SMKN 1 Mempawah Hulu	15
5	Kab. Melawi	SMPN 1 Tanah Pinoh	20
		MTSN 1 Tanah Pinoh	10
		SMAN 1 Tanah Pinoh	15
		SDN 1 TanahPinoh	15
6	Kab. Sanggau	SMAN 1 Jangkang	25
		SDN 09 Perintis	5
7	Kab. Kapuas Hulu	SMAN 1 Semitau	27
		SMPN 2 Semitau	13
8	Kab. Mempawah	SMPN 1 Anjongan	20
		SMAN 1 Mempawah Hilir	30
TOTAL			435

C. Techniques and Tool of Data Collection

Questionnaire was a data collection technique which is done by giving a set of questions or written statements to respondents to answer. This research used Survey Questionnaire Close-Ended as tool of data collection. A questionnaire is simply a list of questions used by researchers to collect or collect data from respondents related to the problem being asked (Rathi & Ronald, 2022).

Close-ended questions would be used for questionnaire. Close questions or close-ended questions, where the respondent would be given several alternative answers that are asked to be selected. Close-ended questions would be used for questionnaire. Closed questions or Close-ended questions, where the respondent would be given several alternative answers that are asked to be selected. Close-ended questions use a set of specific answers in answering questions, which in this study used 4 choices in the questionnaire (Taherdoost, 2021).

The characteristics of the implementation of professional leadership, shared vision and goals in schools were the independent variables and effective school achievement was used as the dependent variable. The design guidelines for the questionnaire to be used were made based on these research variables so that the purpose of data collection could be in accordance with the expected research objectives. According to Alhassan et al. (2022), the questionnaire created has a 4 points Likert Scale to mark each statement on the questionnaire respondents can provide answers to each statement by placing a check mark in the point selection column provided. The Likert scale used for part of the questionnaire were 4 = Sangat sering/Very Frequently, 3 = Sering/Frequently, 2 = Jarang/Less Frequently, and 1 = Sangat jarang/Rarely.

Instrument indicators on the questionnaire using statements adapted from Irwan (2019). Instrument indicators contained in the questionnaire had been analyzed and grouped by a team of researchers/researchers-related research in accordance with the variables contained in the indicator of effective schools by Sammons et al. (1995). In this study the instrument indicators statement that would be used in the number: 1-14 (in the questionnaire of appendix I). Instrument indicator statements Number 1, 2, and 3 would be used to collect data related to variable Professional Leadership. Meanwhile, to collect data related to Shared Vision and Goals variables on learning would be done by using the instrument indicator statements Number 4-14 on the questionnaire.

D.   Research Procedure

The researcher would do the research and collect the data start from August 2022 until November 2022 and continuing with data integration and analysis. The

planning of this study would be implemented as served on the Research Plan and Procedures Table below:

Table 3. 2 Research Plan and Procedures

Date	Activity
Monday/01/August/2022	Determine each research variable, via zoom. Discusses what must be seen, assessed, and monitored when plunging into the field.
Monday/01/August /2022	Perception equalization, via zoom. Equate the perception of each observer. And determine various indicators of variables.
Tuesday,9 August-Wednesday, 9 November/2022	Collecting data, at this stage the researcher spread the questionnaire into 26 schools that separated into 8 regencies on West Kalimantan in order to collect quantitative data.
Saturday,25-Friday, 31/March/2023	Data integration, where activities are carried out with other researchers who research other schools. Personal interviews were conducted with each researcher, and group meetings were held to ask about the results obtained at the schools they studied.
Sunday,02-Wednesday,5 /April/2023	After obtaining the data then analysing the data, where the data that has been obtained will be understood. We need to understand this data analysis activity so that we can easily interpret it clearly and precisely.

E. Technique of Data Analysis

In this research, the data analysis technique that would be used is Descriptive Quantitative and Inferential Statistics. All data obtained were analysed using descriptive statistics and statistical inference with the help of Statistical Package for Social Sciences (SPSS) version 25 program.

1. Descriptive Quantitative Analysis

According to Loeb et al., (2017) quantitative descriptive analysis describes the world or a phenomenon by identifying patterns in the data to

answer questions about "who", "what", "where", "when", and "to what extent".

Descriptive analysis is an attempt to simplify data. This theory is in line with the theory put forward by Sutanapong, (2015), where descriptive statistics are properties of the data collection; this statistic describing the data. As such, data alone is not descriptive research, as data serves no purpose: data dumps, versatile data dashboards, and tables of summary statistics may be useful for some purposes, but do not qualify as descriptive analysis. Through tables or graphs, large data sets can be summarized numerically, allowing researchers to obtain information and describe findings through frequency, mean, median and other statistical measures (Howard, 2013). In this study, descriptive statistics were used to describe principals' professional leadership practices, shared vision and goals in several schools in West Kalimantan.

Table 3. 3 Mean Score Categories

Mean Score	Category
4,00	Sangat sering/Very Frequently
3,00-3,99	Sering/Frequently
2,00-2,99	Jarang/Less Frequently
0,00-1,99	Sangat jarang/Rarely

Source: Alhassan (2022)

2. **Inferential Statistic Analysis**

Inferential statistics is one of the techniques commonly used in analysing quantitative data. Inferential statistics is one of the data analysis techniques in quantitative research that requires researchers to infer and establish the relationship between samples and populations to make estimates from samples and generalize them as representatives of the population, often used because of the difficulty of reaching very large populations by selecting samples that represent the population with appropriate methods (Marshall & Jonker, 2011). According Sutanapong, (2015), inferential statistics is defined as using the sample descriptive statistics to make an inference (estimation) of the population. Inferential statistics, used to infer from sample group generalizations that can be applied to a wider population and allow the

detection of large or even small differences (significant differences) in variables or correlations between variables relevant to a particular research question.

Descriptive quantitative analysis and inferential statistics were used in analysing the data to answer the research questions. Where questions regarding professional leadership practices, vision and shared goals in schools would be answered by analysing data using descriptive quantitative analysis, while questions relating to variations in school professional leadership practices, vision and shared goals in schools was answered with data that would be analysed with inferential statistical techniques.

These variables are determined prior to data collection, and data is then generated using these estimators to produce parameters that are considered representative of the population values based on the sample (Farren, 2014). In this research, inferential statistics were used to describe the variation of the variables practiced.

Researchers chose this method because it was considered appropriate to analyse the data that would be obtained in the study. The results of the analysis of the data obtained was used as the result of the research.

Table 3. 4 Interpretation of the Correlation Coefficient

No	r count	Interpretation
1	0,00 - 0,199	Very weak/Weakly
2	0,20 – 0,399	Weak
3	0, 40 – 0,599	Medium
4	0,60 – 0,799	Strong
5	0,80 – 1,00	Very strong/Overpowering

Source: Sugiyono (2010) in (Safitri, n.d.)