

CHAPTER III RESEARCH METHODOLOGY

A. Research Design

In this research used survey research as a method. According to Ponto, J (2015) survey research can be defined as information collected through participants' responses to questions from a sample of individuals.

Quantitative research is a scientific method which implementing a systematic process to build hypothesis for the final result. Quantitative research method is the process of data collection by collecting numerical data from the sample, summarize, average, find patterns, build predictions and proceed it into a final result in the form of data (Rana *et al.*, 2020).

B. Subject of Research

In this research used teachers from school in West Kalimantan as subject of research. The research subjects involved teachers from 26 schools, including 22 public schools and 4 private schools in 8 regencies in West Kalimantan.

Table 3. 1: Subject of Research

No	Region	Schools	Respondents
1	Kab. Sambas	SDN 28 Perum Mutiara Indah	9
		SMPN 3 Sambas	21
		SMP Muhammadiyah Simpang Empat	30
		SMAN 1 Teluk Keramat	20
		SMAN 1 Semparuk	29
		SMKN 1 Tebas	15
2	Kota Pontianak	MTSs Darul Amin	8
		SMA Darul Amin	5

No	Region	Schools	Respondents
3	Kab. Kubu Raya	SDN 09 Sungai Kakap	13
		SMAN 1 Sungai Kakap	15
		SDN 08 Sungai Kakap	21
		SMPN 1 Sungai Kakap	9
		SMPN 1 Kubu	20
		SMA Muhammadiyah Air Putih	10
4	Kab. Landak	SMPN 2 Mempawah Hulu	15
		SMKN 1 Mempawah Hulu	15
5	Kab. Melawi	SMPN 1 Tanah Pinoh	15
		MTSN 1 Tanah Pinoh	15
		SMAN 1 Tanah Pinoh	20
		SDN 1 Tanah Pinoh	10
6	Kab. Sanggau	SMAN 1 Jangkang	10
		SDN 09 Perintis	20
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. Technique and Tool of Data Collection

The technique used in data collection in this research is questionnaires. According to Rukminingsih *et.al*, (2020) data collection on quantitative can be done with questionnaires.

This research used questionnaire in tool of data collection. Questionnaires is one of the most used data collection techniques in survey strategy. According to Creswell (2012) the questionnaire is a form used in the survey design that will be filled out by participants in the study, and then returned to the researcher.

Participants' selected answers to questions by providing basic personal or demographic information.

Close-ended questions are used for questionnaire. Closed questions or Close-ended questions, where the respondent will be given a number of 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, 2022).

The characteristics of purposeful teaching implementation and concentration on teaching and learning in schools are the independent variables and the achievement of effective schools is used as the dependent variable. The design guideline of the questionnaire to be used is made based on the research variables, which is useful for data collection to match the expected research objectives. The questionnaire created has a 4-point 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 the questionnaire section is 4 = Frequently/*Sangat Sering*, 3 = Frequently/*Sering*, 2 = Less Frequently/*Jarang*, and 1 = Rarely/*Sangat Jarang* (Alhassan *et al.*, 2022).

The instrument indicators on the questionnaire used statements adapted from Irwan (2019). The instrument indicators contained in the questionnaire have been analyzed and grouped by the research team / related researchers according to the variables contained in the effective school indicators by Sammons *et al.*, (1995). In this research, the instrument indicator statements to be used are numbered: 16, 17, 18, 19 (in the appendix I). Instrument indicator statements number 18 and 19, will be used to collect data related to purposeful teaching practices variables. Meanwhile, to collect data related to the variable concentration on teaching and learning practices will be done by using instrument indicator statements number 16 and 17 on the questionnaire.

D. Research Procedure

The researcher was collected the data research start from August 2022 until November 2022 and continuing with data integration and analysis. This research was carried out as presented in the research procedure table below:

Table 3. 2: Research Procedure

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 analyzing 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

The data analysis of this research used descriptive quantitative and inferential statistic. The used of both data analysis techniques aims to answer each problem in this research, where descriptive quantitative to answer research problem number 1, and inferential statistics to answer research problem number 2.

Quantitative descriptive analysis is a phenomenon, which answers question about who, what, where, when, and to what extent by identifying patterns in the data. Descriptive analysis is the simplification of data, the presentation of know capabilities, methods, practices, need, population and settings with research or policy questions in a relevant way. and inferential statistic (Loeb *et al.*, 2017).

Inferential statistics are used in inferring from sample group generalizations applied to the wider population. Such as making the relationship between the sample and the population, like finding the average age of the population, the average height, the largest population among gender, etc. (Marshall, G., & Jonker, L, 2011). In other hand according to Sutanapong, (2015) inferential statistic is use of sample descriptive statistics to make inferences (estimates) of the population. By sample is observation; Population estimates are inferred values without observation.

In this research, the data is presented through the average or mean, mode, range, standard deviation, variation and percentage of responses given by repondents to the statements given. To get the final result of the analysis, the mean/average value of the analyzed data will be classified based on the table below:

Table 3. 3: Mean Score Categories

Mean Score	Category
4,00	Sangat Sering dilakukan/ Very Frequently
3,00 – 3,99	Sering dilakukan/ Frequently
2,00 – 2,99	Jarang dilakukan/ Less Frequently
0,00 – 1,99	Sangat Jarang dilakukan/ Rarely

The techniques used in analyzing data in this research are using Ms. Excel and SPSS 25, the use of these two techniques depends on the type of data to be analyzed, for the use of Ms. Excel is useful for analyzing nominal data, and for finding the

average of existing data. Then researchers used SPSS 25 to determine the relationship between variables, school origin of origin and school level. Then the researcher will compare the average answers of the subjects from the results of the research on the variables based on school origin and school level, which aims to find variations in the implementation of these variables in the schools studied.

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 (2014)

