# CHAPTER III

# RESEARCH DESIGN

## A. Type and Approach of Research

Considering the purpose of the research, the writer used the type of descriptive research with qualitative approach.

The writer chooses qualitative method as main data for this research. The qualitative data were obtained from documentation, observation, and interview.

Qualitative research is composed of a variety of genres, elements, and styles, and this introductory chapter reinforces that there is not one but many possible approaches to naturalistic inquiry. Generally, the investigative methods are eclectic, heuristic, and holistic, rather that prescribed, algorithmic, and linier. Emphasis is also placed on the researcher as human instrument, who develops not just rigorous skills but also empathetic understanding and personal creativity in the investigation and documentation of complex social life.[1]

For supporting the qualitative data, the writer also use quantitative data that were obtained from questionnaire that used as minor data and be displayed the data in brief percentage.

Quantitative research will concern itself with statistics such as frequencies and thus will include such phrase as "how

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[1] E-book: Johnny Saldana. *2011. Fundamental of Qualitative Research: Understanding Qualitative Research*. New York: Oxford University Press, Inc, 2011. pg. 30

much," "how often," "how constant," and soon, to describe its inquiry and consequent findings. Qualitative researchers needn't abandon numeric-based questions and data, for they can reveal interesting patterns of social action (e.g., asking a retail salesperson, "On average, what percentage of customers do you interact with daily that you would label 'difficult'?"). But counting should not be central focus of a qualitative study; it should take a supporting role, not a leading one.[2]

Then, Sugiyono stated that a descriptive research is a research to determine the result of independent variable, either one or more variables without making comparisons or linking to other variables. [3] Descriptive research is a research method that is aimed to describe the present or past phenomenon. According Furchan, the characteristics of descriptive research are: [4]

1. Descriptive research tends to describe the phenomenon is, by predict it strictly, regularly, objectively, and accurately.

2. There is no given or controlled treatment and hypothesis test.

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[2] E-book: Johnny Saldana. 2011. *Fundamental of Qualitative Research: Understanding Qualitative Research*. New York: Oxford University Press, Inc. pg. 77

[3] Sugiyono. 2008. *Metode Penelitian Pendidikan pendekatan Kuantitatif, Kualitatif, dan R&D*, Bandung: Alfabeta. Pg 13

[4] A Furchan. 2004. *Pengantar Penelitian dalam Pendidikan*. Yogyakarta: Pustaka Pelajar, Pg. 54.

Based on the explanation above, this research was not tend to test the hypothesis but it purposed to find the information in the field and it would be described and concluded.

**B. Time and Setting of Research**

The writer had time schedule for did the research and the writer used the time to do research and get the data of teachers in Islamic junior high school in Gunungpatisub-district Semarang, conducted the research and analyzed the result. The explanation of time and setting the research were such as follow:

1. Time for research

    The writer did the research from 26th September until 10th October 2016.

2. Setting of research

    The action research was Islamic Junior High School at Gunungpati sub-district in the academic year of 2016/2017.

**C. Source of Data**

Source of the data was a subject where we got the data. There were two kinds of source of data. Those were primary and secondary data;

1. Primary Source

   Primary source is the source which provided the data directly for the writer.[5] This data included of four teachers' pedagogic competence from the data for teachers in Islamic Junior High School at Gunungpati sub-district Semarang.

2. Secondary Source

   Secondary Data is the source which provided the data indirectly for the writer.[6] This source was students who were interviewed for purpose getting such data as teachers' evaluating and assessing from their viewpoint.

D. **Population**

   According to Arikunto cited by Alim, population is all the research subject.[7] In this research, all of English teachers in Islamic Junior High School at Gunungpati sub-district are the population.

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[5] Sugiyono. *Memahami Penelitian Kualitatif.* 2014. Bandung: Alfabeta. Pg.62

[6] Sugiyono. *Memahami Penelitian Kualitatif.* 2014. Bandung: Alfabeta. Pg. 62

[7] Jauharul Alim. 2010. *"Kompetensi Pedagogik Guru PAI di MTs Negeri Kecamatan Winong Kabupaten Pati Tahun Pelajaran 2010/2011"*. Semarang: IAIN Walisongo. Pg. 9

**Table 3.1 The schools as the population of this research**

| No. | The Schools | Address | Kelurahan |
|---|---|---|---|
| 1. | MTs Al-Asror | Jl. Legoksari Raya No.02 Patemon Gunungpati Semarang | Patemon |
| 2. | MTs Al-Hidayah | Jl. Desel Sadeng Gunungpati Semarang | Sadeng |
| 3. | MTs Al-Islam Gunungpati | Jl. Morokono Gunungpati Semarang | Gunungpati |
| 4. | MTs Al-Islam Sumurrejo | Jl. Mudal 03 Sumurejo Gunungpati Semarang | Sumurejo |

**E. Technique of Collecting Data**

The writer collected the data to achieve the study. The method of data collection consists of:

1. Questionnaire

According to Sugiyono cited by Arif, Questionnaire is a technique of collecting data by giving some question or written questions to get respondent's answer.[8]

Questionnaire was given to each teacher in order to get the teachers' response. The format of the questionnaire was close-ended question. The teachers had to fill thirty-seven questions related the indicators of pedagogic

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[8] Arif Rahman Izzudin. 2013. *Studi Korelasi antara Hasil Belajar Kognitif Aqidah dengan Akhlak siswa kelas VIII MTs Tawang Rejosari Semarang*. Semarang: IAIN Walisongo. Pg.46

competence. The writer gave twenty five minutes so that the writer could answer the whole questions and submitted it.

On the first time, the writer gave questionnaire to the teachers as inducement. Then, it will be the writer's consideration in order to make guidance for teachers' interview, observation, and documentation.

In this case, the goal of using this questionnaire was to find out the understanding of teacher competence. This questionnaire arranged by the writer based on the lattice of instrument.

2. Interview

Estenberg in Sugiyono's book explained that interview is a meeting of two persons to exchange information and idea through question and responses, resulting in communication and joint construction of meaning about particular topic.

Meanwhile, Stainback in Sugiyono's book states that interviewing provides the writer a means to gain a deeper understanding of how participant interpret a situation or phenomenon than can be gained through observation alone.[9]

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[9] Sugiyono. 2014. *Memahami Penelitian Kualitatif*. Bandung: Alfabeta. Pg.72

In this method, the writer interviewed students and teachers related to teacher' evaluating, assessing, and their effort to enhance their competence. First, the writer interviewed students related to teachers' implementation and assessment in the class. The writer made guideline for students' interview based on teachers' implementation about teachers' pedagogic competence in order to do crosscheck. Second, the writer interviewed teachers related to teachers' assessment for their students. The writer made guideline for teachers' interview based on the lattice of instrument about pedagogic competence. Based on explanation above, the writer used structured interview where the writer had been prepared guideline for students' and teachers' interview and each respondent have the same questions.[10]

The interview lasted approximately 15-20 minutes. To make it easier, all the interviews conducted in Indonesian Bahasa then be tape-recorded with the subject's permission. The writer translated it into English. The format of the interview was semi-guided interview. The note in interview as useful guideline for the writer to explore data systematically.

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[10] Sugiyono. 2014. *Memahami Penelitian Kualitatif*. Bandung: Alfabeta. Pg.73

The writer used this method to explore data deeper, valid and truthfulness. The teachers' and students' voice during interview were recorded and after that were transcribed. The use of this Technique interview was for some teachers and students in Islamic Junior High School at Gunungpati sub-district Semarang.

3. Documentation

In this method, the writer observes inanimate.[11] Where the writer observed the teachers' lesson plan to identify teachers' planning competence.

4. Observation

According to Nana cited by Arif, observation is a technique of collecting data which observe the activity directly. There are two ways of observation, participant and nonparticipant observation.[12] In this research, the writer used non participant observation where the writer just observed and noted the teachers' actions dealing with teachers' implementing and assessing competence.

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[11] Suharsimi Arikunto. 2010. *Prosedur Penelitian*. Jakarta: Rineka Cipta. Pg. 274

[12] Arif Rahman Izzudin. 2013. *Studi Korelasi antara Hasil Belajar Kognitif Aqidah dengan Akhlak siswa kelas VIII MTs Tawang Rejosari Semarang*. Semarang: IAIN Walisongo. Pg.48

**F. Technique of Data Analysis**

According to Bodgan cited by Sugiyono, data analysis is the process of systematically searching and arranging the interview transcripts, field notes, and other materials that you accumulate to increase your own understanding of them and to enable you to present what you have discovered to others.[13]

Then, according to Susan Stainback that data analysis is critical to the research process. It is to recognition, study, and understanding of interrelationship and concept in your data that hypotheses and assertions can be developed and evaluated.[14]

In other hand, Yosegh defines that data analysis means studying the tabulated material in order to determine inherent facts or meanings. It involves breaking down existing complex factors into simpler parts and putting the parts together in new arrangements for the purpose of interpretation.[15]

After obtained the needed data, they were analyzed. The analysis was conducted through following steps:

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[13] Sugiyono. 2014. *Memahami Penelitian Kualitatif*. Bandung: Alfabeta. Pg.88

[14] Sugiyono. 2014. *Memahami Penelitian Kualitatif*. Bandung: Alfabeta. Pg.88-89

[15] E-book: Yogesh Kumar Singh. 2006. *Fundamental of Methodology and Statistic*. New Delhi: New Age International Limited Publisher. Pg. 223

1. Analyzing Data from Questionnaire Result

Questionnaire result was analyzed to find out teachers' pedagogic competence in Islamic Junior High School at Gunungpati sub-district. There were 37 items of questionnaire that described the criteria. Items' answer used attitude scale. According to Nana, attitude scale was stated in questions and be assessed by respondent whether the questions was supported or not. Because of that, the questions was divided into two categories, they are positive and negative and positive questions.[16] Also, the scale were:

    a) Always

    b) Often

    c) Sometimes

    d) Never

The analysis began with calculating the percentage of each item. It was known how many percentages the teachers who chose "Always," "Often," "Sometimes," "Never." There are 2 types of the questions, it was positive and negative questions. For the positive questions' scoring, answer of;

    a) "Always" had 4 points,

    b) "Often" had 3 points,

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[16] Nana Sudjana. 2016. *Penilaian Hasil Proses Belajar Mengajar*. Bandung: Remaja Rosdakarya. Page 80

c) "Sometimes" had 2 points, and

d) "Never" had 1 points.

for negative questions', the scoring were

a) "Always" had 1 point,

b) "Often" had 2 point,

c) "Sometimes" had 3 point, and

d) "Never" had 4 point[17]

After all items were calculated, the data would be described and classified appropriated with the result. From all the result, it drew the conclusion of teachers' pedagogic competence in Islamic Junior High School at Gunungpati sub-district.

2. Analyzing Data from Interview Result

The data from interview were transcribed comprehensively and the comments of the subjects were written down in relevant section.The result of the teachers and students' interview were firstly be transcribed. From each question explained to find out the teachers' pedagogic competence from students' viewpoint and the improvement efforts from the teachers and schools. Then, the writer would choose the data which appropriated with the needed answer so that it can be described in the

[17] Suharsimi Arikunto. 2010. *Prosedur Penelitian*. Jakarta: Rineka Cipta. Page 259

finding chapter and finally the data can be interpreted or concluded.

3. Analyzing Data from Documentation Result

In this method, the writer would identify the teachers' lesson plan. The writer would identify whether the teacher had prepared their lesson plan appropriated with the required standards. If they had, they would get 1 point and if the didn't they would get 0 point.

4. Analyzing Data from Observation Result

This observation used camera and notes to document all activities or data from sources. In this method, the writer would identify the teachers' implementing and assessing in the class. The writer would identify whether the teacher assessed their students and implemented the learning appropriated with the required standards. If they did, they would get 1 point and if the didn't they would get 0 point.

In this case, the writer divided the classification of teachers' score about pedagogic competence into three aspects. They are planning, implementing, assessing and evaluating competence. The classification was obtained from the mean result which used the formula below:

$$Mx = \frac{\Sigma X}{N}$$

Where:

Mx    : Mean.

$\Sigma X$    : Total scores.

N    : Number of Cases. [18]

Then, it would be categorized by Range and Interval formula[19]:

$$\textbf{Range} = \text{Maximal score} - \text{Minimal Score}$$

$$\textbf{Interval} = \frac{\text{Range}}{\text{Class}}$$

The first one is planning competence and the classification is:

**Table 3.2 Category of Lesson Plan**

| No. | Score | Meaning |
|-----|-------|---------|
| 1.  | 6-7   | Very Good |
| 2.  | 3-5   | Good |
| 3.  | 0-2   | Enough |

**Table 3.3 Category of Questionnaire**
**(Planning Competence)**

| No. | Score | Meaning |
|-----|-------|---------|
| 1.  | 18-24 | Very Good |

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[18] Anas Sudjiono. 2005. *Pengantar Statistik Pendidikan*. Jakarta: PT Raja Grafindo Persada. Pg. 81

[19] Sudjana. 2005. *Metode Statistika.* Bandung: Tarsito. Page 79

| No. | Score | Meaning |
|-----|-------|---------|
| 2. | 9-17 | Good |
| 3. | 0-8 | Enough |

The second one is implementing competence and the classification is:

**Table 3.4 Category of Observation**

| No. | Score | Meaning |
|-----|-------|---------|
| 1. | 8-11 | Very Good |
| 2. | 4-7 | Good |
| 3. | 0-3 | Enough |

**Table 3.5 Category of Questionnaire**
**(Implementing Competence)**

| No. | Score | Meaning |
|-----|-------|---------|
| 1. | 42-60 | Very Good |
| 2. | 21-41 | Good |
| 3. | 0-20 | Enough |

The third one is assessing and evaluating competence and the classification is:

**Table 3.6 Category of Questionnaire**
**(Assessing and Evaluating Competence)**

| No. | Score | Meaning |
|-----|-------|---------|
| 1. | 44-64 | Very Good |
| 2. | 22-43 | Good |

| | 3. | 0-21 | Enough |
|---|---|---|---|

Then, for the classification of planning, implementing, and assessing and evaluating competence were:

**Table 3.7 Category of Planning Competence**

| No. | Score | Meaning |
|---|---|---|
| 1. | 12-16 | Very Good |
| 2. | 6-11 | Good |
| 3. | 0-5 | Enough |

**Table 3.8 Category of Implementing Competence**

| No. | Score | Meaning |
|---|---|---|
| 1. | 25-36 | Very Good |
| 2. | 13-24 | Good |
| 3. | 0-12 | Enough |

**Table 3.9 Category of Assessing and Evaluating Competence**

| No. | Score | Meaning |
|---|---|---|
| 1. | 22-32 | Very Good |
| 2. | 11-21 | Good |
| 3. | 0-10 | Enough |

**Table 3.10 Category of Pedagogic Competence**

| No. | Score | Meaning |
|-----|-------|---------|
| 1. | 20-28 | Very Good |
| 2. | 10-19 | Good |
| 3. | 0-9 | Enough |

## G. Validity of Data

Validity test of Data was Triangulation data. The reason used two data that will be collected to convince of data's truth. The term in research is the researcher do cross check or re-check to the data. Another term of re-checking is 'triangulation.' Tri = three and Angulasi from angle is viewpoint. So cross check or re-check data can be done through three sources data or three methods technique.[20]

Triangulation is a technique of checking the data validity with using something out of the data. According to Denzin cited by Moloeng, triangulation includes of triangulation method, the researcher, data source, and theory.[21]

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[20] Prof. Dr. Suharsimi Arikunto.2010. *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta. Pg. 52

[21] Lexy J. Moloeng. 2009. *Metode Penelitian Kualitatif*. Bandung: Remaja Rosdakarya. Pg. 330

1. Methodological triangulation

    This triangulation involves using more than one method to gather the data such as interviews, observations, questionnaires, and documents.

2. Investigator triangulation

    This triangulation involves multiple researchers in an investigation.

3. Data triangulation

    This triangulation involves time, space and persons.

4. Theory of triangulation

    This triangulation involves using more than one theoretical scheme in the interpretation of phenomenon.

    According to Bodgan triangulation is powerful technique that facilitates validation of data through cross verification from two or more sources. In particular, it refers to the application and combination of several research methods in the study of the same phenomenon. In addition this method can be used both quantitative as the validation and qualitative as the inquiry studies. By combining multiple observers, theories, methods, and empirical materials, researchers can hope to overcome the weakness or intrinsic

biases and the problems that come from single method, single-observer, and single-theory studies. [22]

In this case, the writer used methodological triangulation. The data which was used three angles from result of questionnaire- observation- interview.

The writer divided the indicators of teachers' pedagogic competence into three aspects. There were planning, implementing, and evaluating aspects. In the first aspect, the writer used documentation data which supported with questionnaire result. Then for the implementing aspect, the writer used observation data which supported with questionnaire and students' interview result. And for the evaluating aspect, the writer used data from teachers and students interview which supported with questionnaire result

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[22] En.m.wikipedia.org/wiki/triangulation downloaded on Thursday, 22 september 2016 at 08.30 PM