Chapter 3

Plan and Procedure

Chapter 3
Plan and Procedure

3.0 Introduction

This chapter provides structure and outlines of the methodology used in conducting the research. It provides the roadmap for the research work. It helps to ensure that research is conducted logically and systematically. This chapter deals with the research design of the study, objectives of the study, and research methodology, including population, Sample, and sampling technique. This chapter also deals with tools for data collection, development and description of the tool, tool validation, and data sources. This chapter explained the process of data collection and how data was analyzed.

3.1 Research Design of the Study

Research design is a blueprint of a research study. It provides the structure and framework of the research process. A descriptive survey was used for the present study. According to Creswell (1994), the descriptive method of research is to gather information about the present existing condition. In this study, the researcher wanted to study how different teacher education institutions affiliated with different state universities implement school internship programme. The focus of this research was to study the current practices of the school Internship Programme. Therefore, the descriptive survey method is appropriate. The Descriptive survey method provides a detailed understanding of the present situation and essential information to help policymakers and academicians make further decisions.

The researcher surveyed to find out the implementation of school internship programme in different Teacher Education Institutions in Gujarat state. The School Internship Framework (2016) was used to identify the components of the school internship programme. Supervisors, school principals, mentors, and student-teachers are the main pillars for implementing school internship, so the researcher wanted to study the roles of supervisors, school principals, mentors, and student-teachers. The researcher also wanted to study their expectations and experiences as they are all involved in implementing an internship. Though supervisors, school principals, mentors, and student-teachers were prominent members of the school internship, it was necessary to study their suggestions and the challenges they faced during the school internship

programme. The researcher tried to get in-depth information about the School Internship Programme.

3.2 Population

In Gujarat, there were Eleven state universities. (Data source: NCTE 2014). As the present study was delimited to the state universities with affiliated teacher education institutions, nine state universities with affiliated teacher education institutions comprised the population for the present study. The list of these nine state universities, along with the number of affiliated teacher education institutions is as below:

Table 3.1 Number of TEIs affiliated with State Universities

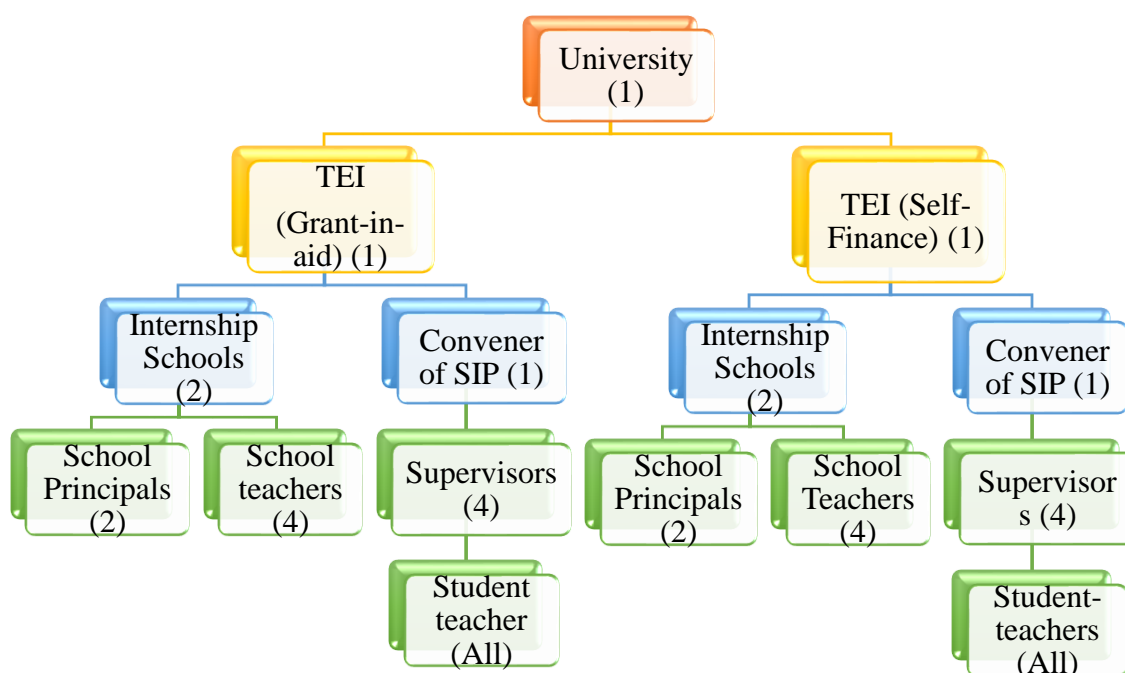| Sr. No.	Name of Universities	Number of Institutions	
		Grant-in-aid TEIs	Self-finance TEIs
1	Veer Narmad South Gujarat University	01	18
2	Sardar Patel University	03	16
3	Gujrat University	06	43
4	Bhakta Kavi Narsinh Mehta University	02	23
5	Krantiguru Shyamji Krishna Verma Kachchh University	01	05
6	Hemchandracharya North Gujarat University	02	87
7	Saurashtra University	04	02
8	Shri Govind Guru University	31	03
9	Maharaja Krishnakumarsinhji Bhavnagar University	02	06
Total		**57**	**203**

(Data Source: Official website of the State Universities)

All the student-teachers studying in B.Ed. and their teachers teaching in all teacher education institutions affiliated with the above-listed nine universities formed the population, and all the school principals and mentors of the internship schools which were associated with all above teacher education institutions also constituted the population for the present study.
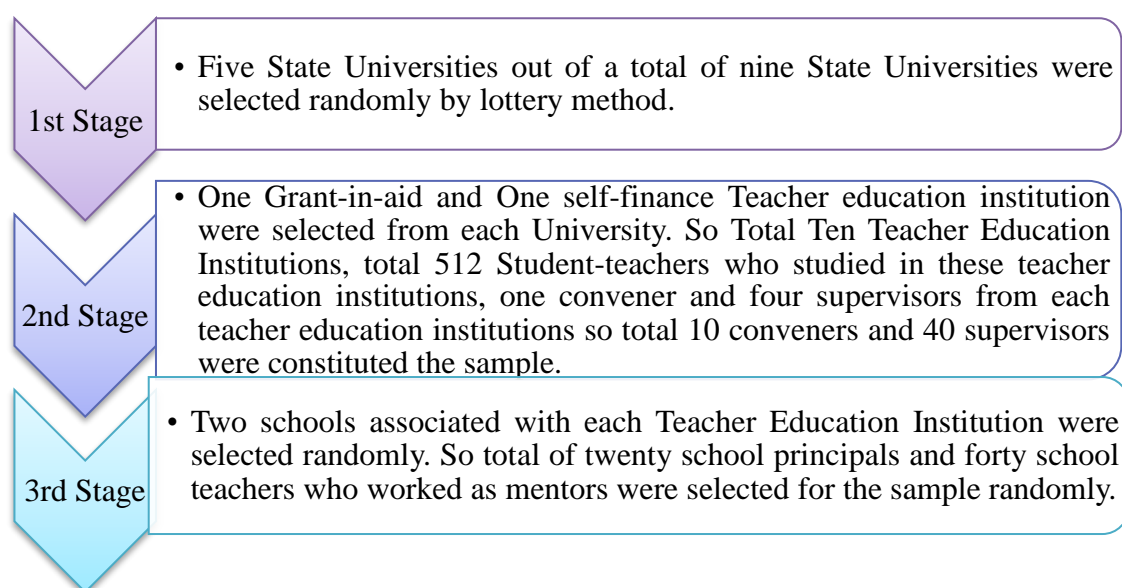
3.3 Sample and Sampling Technique

This study was carried out in Gujarat. A multistage Sampling technique was employed for the present study. The researcher randomly selected five state universities using a lottery method. The selection process of the sample for data collection is shown below:

Figure 4: Selection Process of Sample for the Present Study (Only for One University)

This study was carried out in Gujarat state. A researcher explains the sample selection process in the above figure for only one university. A detailed explanation is given below:

1st Stage
- Five State Universities out of a total of nine State Universities were selected randomly by lottery method.

2nd Stage
- One Grant-in-aid and One self-finance Teacher education institution were selected from each University. So Total Ten Teacher Education Institutions, total 512 Student-teachers who studied in these teacher education institutions, one convener and four supervisors from each teacher education institutions so total 10 conveners and 40 supervisors were constituted the sample.

3rd Stage
- Two schools associated with each Teacher Education Institution were selected randomly. So total of twenty school principals and forty school teachers who worked as mentors were selected for the sample randomly.

A researcher considered five universities, so a total of 512 student-teachers, 10 conveners of school internship, 40 supervisors, 40 mentors, and 20 school principals were randomly selected and considered as the sample for this study.

Table 3.2 Total Sample Drawn from the Population

Sr. No.	Name	Total Sample
1.	Convener of the school internship Programme	10
2.	Student-teachers	512
3.	Supervisors	40
4.	School Principal	20
5.	Mentos	40

3.4 The Procedure of Tool Construction

A researcher prepared the research tools such as an information schedule, questionnaire, and semi-structured interview for data collection. The following steps were applied for the construction of these research tools.

3.4.1 Reviewed Documents and Research Studies.

The researcher reviewed research studies and policy documents related to practice teaching and school internship. A researcher also thoroughly referred to the school internship framework (2016) document to study the school internship programme. A researcher studied the organization of the school internship, the roles of different organizations, and student-teacher tasks' during the internship to get information about the school internship programme.

3.4.2 Identify the Components of the School Internship

Based on the reviewed documents and 57 research studies, the researcher identified the components of school internship based on the research objectives. There were the following components of the school Internship identified by the researcher: Pre-School Internship such as microteaching, block teaching, orientation given to student-teachers, group formation, distribution of marks, lesson plans, observation and assessment of the student-teachers, feedback, guidance, student-teachers' activity, the roles of different personnel, experiences, and expectations of different personnel regarding the school internship, and problem faced by different personnel during the school internship programme.

3.4.3 Presentation of the First Draft of the Research Tool

The researcher prepared the first draft of the tools based on the components of a school internship programme. The close-ended and open-ended questions were included in the research tools. The researcher presented the first draft of tools in the Researchers' Forum at the Department of Education, The Maharaja Sayajirao University of Baroda. (A Researcher Forum gathers researchers, currently engaged in their research work. They gather every Saturday from 3 p.m. to 5 p.m. to discuss relevant topics. During these sessions, one research scholar presents their research proposal, another plays the role of the chairperson, and the remaining research scholars listen carefully, taking notes of suggestions and queries., followed by a discussion). There were approximately 20 research scholars present in the forum. Research scholars gave appropriate suggestions. They suggested the sequence of the items and the language of the research tools. The researcher discussed suggestions given by research scholars with the guide and incorporated appropriate suggestions. The researcher reframed the research tools.

3.4.4 Validation of the Research Tool by Experts

The researcher sent the research tools to the experts through the mail for validation and also discussed the research tools with a few experts face-to-face for validation. The experts were from universities such as The Maharaja Sayajirao University of Baroda, Veer Narmad South Gujarat University, Sardar Patel University, Shri Govind Guru University, and Delhi University. They were working as an Assistant Professor, Associate Professors, and Professors from the different teacher education institutions and departments of the universities. The researcher wanted to collect data from the school principals and mentors, so the researcher distributed research tools for validation to one School Principal and two mentors from the Vadodara and Bharuch districts of Gujarat state. The researcher also discussed the research tools with three experts in face-to-face mode. The following criteria were to be used to validate the tools:

1. Relevance of Components of the School Internship Programme.
2. Logical sequence of each item in research tools.
3. The language used in the preparation of research tools.
4. Understanding of each item of research tools.

Experts gave the following suggestions for improvement of the research tools.

1. Give options for a few items.
2. Use proper terms in research tools.
3. They corrected the language and grammar of the research tools.

4. Avoid overlapping items.

5. Arrange items in a logical sequence.

Based on the comments given by experts, a researcher modified it. The research tools written in the English language were translated into Gujarati language.

3.4.5 Pre-Pilot Testing

The researcher used a convenient sampling in the pre-pilot study. The researcher administered the research tool to only ten student-teachers to examine how long student-teachers took to fill out the questionnaire and whether the language was understood. A researcher instructed student-teachers to ask queries related to questions if they had any doubts. The researcher also discussed doubts with the student-teachers. Student-teachers mentioned that filling it out took too long, so the researcher reduced the number of items. Based on the pre-pilot study, the researcher slightly reframed the research tools.

3.4.6 Pilot Testing

The researcher conducted a pilot study on two different teacher education institutions named N. H. Patel College of Education, Sardar Patel University, and District Institute of Education and Training, Vadodara. The researcher used a convenient sampling. The researcher administered research tools to 100 student-teachers who studied in B.Ed. Programme, five supervisors who taught in teacher education institutions, and four mentors from two schools in the Vadodara district of Gujarat state were not included in the sample. The researcher observed the time taken by student-teachers, teacher educators, and mentors to fill out the research tools and resolve queries related to questions they did not understand. The researcher also interviewed two school principals and two conveners of the school internship. Based on the pilot study, the researcher prepared a list of instructions for student-teachers and mentors because the researcher observed that different terms were used for different personnel.

3.4.7 Final Draft of the Research Tools

Based on a pilot study, the researcher prepared the final drafts of the research tools such as an information schedule, questionnaire, and semi-structured interview for supervisors, school principals, mentors, and student-teachers. All the research tools have been presented in the appendices (IV-VIII). The components and dimensions of the research tools are given in detail as follows.

3.5 Tools for Data Collection

Creswell (2014) defines a *tool* as "a systematic and standardized approach to collecting and analyzing data." The researcher used the following tools for the data collection. The following table describes the research tools used for data collection and sources of data:

Table 3.3: Tools for Data Collection and Data Sources

Sr. No.	Tools for Data Collection	Data Sources
1.	Information Schedule	Convener of the SIP
2.	Questionnaire	Supervisors, mentors, and student-teachers
3.	Semi-structured Interview	School Principals

Detailed information on the research tools is given below:

3.5.1 Information Schedule for Convener of School Internship

A researcher prepared the first draft of the information schedule for the convener of the school internship to get factual information related to the school internship. The first draft of the information schedule was given to the experts in the teacher education field for validation. Experts gave the appropriate suggestions regarding the components of school internship, the language of items, and the sequence of items in the tool. A researcher reduced the items and reframed the few items of the tool. The final information schedule for the convener of the school internship consisted of the following dimensions.

Table 3.4 Components of each Dimension of the School Internship

Sr. No.	Dimensions	Components under the Dimensions
1	Pre-School Internship	1. Skill Orientation 2. Microteaching 3. Simulation 4. Block Teaching 5. Lesson Plan 6. Group Formation 7. Observation of Student-teachers 8. Activities assigned to student-teachers 9. Assessment

2	School Internship	1. School Selection Process
		2. Lesson Plans
		3. Activities assigned to student-teachers
		4. Assessment
3	Post School Internship	1. Annual Lesson
		2. Viva
		3. Assessment

3.5.2 Questionnaire for Supervisors

The questionnaire was comprised of closed-ended questions and open-ended questions. The closed-ended questions were designed to be answered with a simple "yes" or "no" by marking them with a checkmark (✓). Additionally, some questions provided various options for respondents to select based on their perspectives. The close-ended questionnaire allowed supervisors to answer what they had done during the school internship and what practices were going on during the school internship. The open-ended questionnaire allowed supervisors to answer based on their knowledge, understanding, and experiences. Different experts reviewed the first draft of the questionnaire. The appropriate comments given by experts were thoroughly studied and discussed with a guide. The researcher reframed a few items, omitted a few, and prepared a final draft of the questionnaire. The final draft of the questionnaire consisted of 60 items. The questionnaire contained the following dimensions. The different components and number of items are shown below:

Table 3.5 Components of each Dimension of the Supervisor Questionnaire

Dimensions	Components under the Dimensions	No. of Items
Orientation about school internship and school	Provide orientation related to school internship to the student-teachers and school principals; Orientation related to the school	**04**
Meeting	Supervisors visit schools, Conduct meetings with student-teachers, school principals, and school teachers	**06**

Monitor the student-teachers	Observation of student-teachers, Providing feedback and guidance, Examine the documents, Assessment of the student-teachers	14
Expectations of supervisors related to the school internship	Expectations regarding the duration of the school internship, Semester for organizing the school internship, School selection, Type of schools, Providing orientation to school principals and mentors, Providing school orientation to student-teachers, Lesson plan, Supervisor visit, Monitoring the student-teachers Providing stipends to student-teachers	29
Problems faced by supervisors during the school internship	Orientation, school selection, Observation, feedback, Administrative work, Assessment	06
Suggestions regarding internship	Suggestions for improvement of internship	01
Total Questions		**60**

3.5.3 Questionnaire for Mentors

The researcher prepared a questionnaire comprising closed and open-ended questions to get information related to the school internship from the mentors. The closed-ended questions were designed to be answered with a simple "yes" or "no" by marking them with a checkmark (✓). Additionally, some questions provided various options for respondents to select based on their perspectives. The close-ended questionnaire allowed mentors to answer what they had done during the school internship. The open-ended questionnaire allowed mentors to answer based on their knowledge, understanding, and experiences. Different experts reviewed the first draft of the questionnaire. The appropriate comments given by experts were thoroughly studied and discussed with a guide. The researcher reframed a few items, and a few items were omitted and prepared the final draft of the questionnaire. The final draft of the questionnaire consisted of 62 items. The questionnaire contained the following dimensions. The different components and number of items are shown below:

Table 3.6 Components of each Dimension of the Mentor Questionnaire

Dimensions	Components under the Dimensions	No. of Items
Awareness about school internship and school	Visit teacher education institutions, Orientation related to school internship, Orientation related to the school	**07**
Meeting	Conduct meetings with the supervisor	**03**
Monitor the student-teachers	Keep a record of student-teachers' attendance, provide facilities, Observation of student-teachers, provide feedback and guidance, Examine the documents, Assessment of the student-teachers	**19**
Expectations of supervisors related to the school internship	Expectations regarding the duration of the school internship, Semester for organizing the school internship, Observation of school teachers, providing orientation to school principals and mentors, providing school orientation to student-teachers, Lesson plan, Supervisor visit, Monitoring the student-teachers, Provide stipends to student-teachers	**24**
Experiences	Experiences regarding the school internship	**01**
Problems faced by supervisors during the school internship	Orientation, school selection, Observation, Feedback, Administrative work, Assessment	**07**
Suggestions regarding internship	Suggestions for improvement of internship	**01**
Total Questions		**62**

3.5.4 Questionnaire for Student-teachers

The closed-ended and open-ended questionnaires were developed to get information from student-teachers. The closed-ended questions were designed to be answered with a simple "yes" or "no" by marking them with a checkmark (✔). Additionally, some questions provided various options for respondents to select based on their perspectives.

The close-ended questionnaire allowed student-teachers to answer what they had done during the school internship and what the practices were going on during the school internship. The open-ended questionnaire allowed student-teachers to answer based on their knowledge, understanding, and experiences. Different experts reviewed the first draft of the questionnaire. The appropriate comments given by experts were thoroughly studied and discussed with a guide. The researcher reframed a few items, and a few items were omitted and prepared the final draft of the questionnaire. The final draft of the questionnaire consisted of 110 items. The questionnaire contained the following dimensions. The different components and number of items are shown below:

Table 3.7 Components of each Dimension of the Student teacher Questionnaire

Dimensions	Components under the Dimensions	No. of Items
Current Practices	Orientation related to school internship and the school, Supervisors visit the school, Observation, Feedback, Examine documents and Assessment by supervisor	**29**
Activities performed by student-teachers during the internship	Observation of school teachers and fellow students, case study, action research, diagnostic test, remedial classes, analysis of textbook, lesson plan, co-curricular activities, community-related activities, blueprint, assessment tool, term paper, reflective diary, administrative activities	**33**
Experiences of student-teachers	Experiences with teacher education institution and schools during the school internship	**01**
Expectations related to the school internship	Expectations regarding the duration of the school internship, Semester for organizing the school internship, Observation of school teachers, Providing orientation to school principals and mentors, Providing school orientation to student-teachers, Lesson plan, Supervisor visit, Monitoring the student-teachers, Provide stipends to student-teachers	**33**
Problems faced by student-	Orientation, school selection, Observation, Feedback, Administrative work, Assessment	**13**

teachers during the school internship		
Suggestions regarding internship	Suggestions for improvement of internship	**01**
Total Questions		**110**

3.5.5 Semi-structured Interview for School Principals

The researcher prepared a semi-structured interview schedule to collect the data regarding the school internship. The first draft of the interview schedule was given to the experts, who were teacher educators and school principal of internship school. The researcher incorporated all the appropriate suggestions and prepared the final draft of the interview schedule. The final interview schedule for the school principal consists of 38 items. There are different items under the five dimensions, such as the orientation of the school internship, roles of school principals during the school internship, expectations regarding school internship and experiences during the school internship, and problems faced by school principals during the internship.

3.6 Procedure for Data Collection

A researcher took permission from the head of the Department of Education, The Maharaja Sayajirao University of Baroda, for data collection. The researcher personally visited every sampled teacher education institution and school for data collection. The first researcher telephonically contacted the heads/principals of all selected teacher education institutions and asked for the date for data collection. A researcher personally visited the sampled teacher education institution after finalizing the date with the heads/principals of the teacher education institutions. The researcher also assured the head/principals that data would be used for research purposes only and kept confidential. All teacher education institutions allowed researchers to collect data except two teacher education institutions. So, the researcher selected two teacher education institutions from the spare sample and collected data.

The heads/principals of the teacher education institutions introduced the researcher to the student-teachers and teacher educators. The researcher explained the research work and the purpose of it in brief to the student-teachers and teacher educators. The researcher gave the following instructions to the student-teachers:

1. Consider the 'Mentor' term as a school teacher.
2. Consider a 'Supervisor' as a college Teacher.
3. Ask, if you have any doubts regarding the questions.
4. Complete different parts of the tool within a specific time.
5. There is no marking for questions.
6. Return the research tool after the completion of each part.

The researcher collected data through the questionnaire, divided into four parts based on the research objectives. The first part was given to the student-teachers, and after it was filled out, they were given back to the researcher; then, the researcher gave the second part to the student-teachers. Student-teachers were asked to clarify specific questions during the data collection, and the researcher solved the queries. The researcher also collected data from the convener of school internship and teacher educators through an information schedule and questionnaire, respectively. A researcher asked the teacher education institutions regarding the internship schools where student-teachers went for internship. Among these internship schools, the researcher selected two randomly and received information about school principals, mentors, and their mobile numbers. The researcher personally visited the internship schools. Permission was sought from the school principals, and a permission letter was forwarded to the school principals for data collection. Before conducting the semi-structured interview, the researcher explained the research work and its purpose to the school principals and mentors. The interviews were conducted in Gujarati language based on the respondents' understanding. The researcher later translated the conducted interviews.

The researcher also conducted telephonic interviews as a few supervisors and student-teachers were absent on the day the researcher went for data collection, and the researcher could not visit the teacher education institutions again due to COVID-19.

Table 3.8 Duration of Data Collection

Sr. No.	Phases of Data Collection	Duration
1.	Pre-Pilot Study	November, 2019
2	Pilot Study	December, 2019
3	Final Administration of Tool	January to March, 2020
4	Telephonic Interview	April to May, 2020

3.7 Data Analysis

The collected data were quantitative and qualitative in nature. Thus, a researcher analyzed the data both quantitatively and qualitatively. The data was collected through an information schedule, questionnaire, and semi-structured interviews, which were analyzed quantitatively and qualitatively. Frequencies and percentages were computed for the close-ended items, while content analysis was employed for the open-ended questions. All the quantitative data was entered and analyzed in Microsoft Excel, and qualitative data was analyzed through the Qualitative Data Analysis software, QDA Miner Lite.

In the present study, a researcher transcribed the qualitative data. After that, the researcher read the data repeatedly to understand it and coded the data with different colors. After coding, a researcher generated the categories for data and analyzed them. The research quantified the qualitative data through QDA Miner Lite and converted it into frequency and percentage form. The process of qualitative data analysis of the present study is described in the following figure:

Figure 5: Process of Qualitative Data Analysis in the Present Study

The following table describes the techniques used for analysis, categorized by objectives and tools.

Table 3.9 Analysis of the Collected Data Categorized by Objectives and Tools

Objectives	Tools	Items of the Questions	Techniques of Analysis
Objective 1	Information Schedule	Close-ended	Content analysis
Objectives 2, 3 & 4	Questionnaire and Semi-structured Interview	Close-ended and Open-ended	Frequency, Percentage, and Content Analysis

Objective 5	Questionnaire and Semi-structured Interview	Open-ended	Frequency, Percentage, and Content Analysis
Objective 6	Questionnaire and Semi-structured Interview	Open-ended	Content Analysis