

CHAPTER III

METHODOLOGY OF THE STUDY

3.0 Introduction

The background of the study, along with rationale of the study, statement of the problems, research questions, objectives and delimitations, was given in the first chapter. The second chapter explains the review of related literature. This present chapter includes the methodology, population, sample, tools, procedure of the study and statistical techniques used for the study.

3.1 Research Design

Considering the study's objectives, the researcher used a Descriptive Survey research design for this study. A survey is an instrument to collect data that details one or more features of a definite population (Gay et al., 2019, p. 192). Survey research designs are processed in quantitative research where the researcher runs a study on a sample or a population of individuals to explain the population's attitude, opinions, behaviors or features. The survey research includes quantitative data using questionnaires or interviews. Cross-sectional and longitudinal are the two different types of survey research designs. Cross-sectional survey design determines the existing attitudes or practices or present views or opinions (Creswell, 2017, p.376). It is a single study. It shows a population's current actions, attitudes and beliefs (Gay et al., 2019, p. 193).

The study is both qualitative and quantitative in nature. Qualitative method helps the researcher to better understand the nature, information and process of the program, participants' experiences, attitudes, and behaviours. Quantitative methods provide statistical evidence and generalizable findings, while qualitative methods offer detailed insights into. By integrating the method for data collection helps to comprehensive understanding of the research problem. Both quantitative and qualitative methods allow for triangulation, which improves the validity and reliability of the research findings. By cross-verifying results from different data sources and methods, researcher can increase the trustworthiness and strength of their conclusions. Interviews, and open-ended surveys let the responded to share their viewpoints in their own words. Adopting this mix method data collection process helps in enhancing participant engagement, addressing complex and multifaceted issues etc. This present

study aims to evaluate the school internship program in a teacher education institution in Assam. The school internship is a practical experience for the student-teachers. It includes practice teaching and all the activities of the school. The internship in teaching is held in the third semester of the B.Ed. course under DU and second year of B.Ed. course under GU. The student-teachers must be attached to a particular school where they must complete all the activities like a regular teacher during the four-month internship. This study must collect data from all the main stakeholders using different methods. Using both quantitative and qualitative data collection method has increased the strengths and depth of the findings of the study.

3.2 Population

Population means a group of people carrying the same features. The population can be small or large. For instance, all teachers in high schools in one city (Creswell, 2017). It is a large collection or a set of all elements through which a researcher would like to generalize the sample results (Johnson and Christensen 2014). The population of this present study consists of all the private and government B.Ed. colleges (46) affiliating under state universities of Assam. It also includes all the student - teachers, teacher-educators, principals of B.Ed. College's headmasters / headmistresses of internship schools.

Table No 3.1: Total Population of the Present Study

Names	Total Population
Colleges of Teacher Education	46 B.Ed. colleges are affiliating under state universities, both private and government B.Ed. colleges.
Student-Teachers	4000
Teacher Educators	All the supervised teachers (Approximately 300)
Principal of B.Ed. Colleges	46
Internship- Schools	All the schools are paired with B.Ed. colleges in Assam.
Headmaster/Headmistress	All the headmasters/Headmistress of schools are paired with B.Ed. colleges.

Source: (The intake capacity has been updated as per the minutes of the meeting held on 28th May to 2nd May, 2017 of ERC, Bhubaneswar)

3.3 Sample

A sample is a subgroup of the target population. There are many sampling approaches, such as probability and nonprobability sampling. The researcher can select representative individuals from the population through probability sampling (Creswell, 2017; Gay et al., 2019). Sampling is depicting a sample from a population (Johnson and Christensen 2014).

3.3.1 Sampling Technique

Internship plays a significant role in emerging teaching-related skills, and it offers a wide-range of school experience and helps to personality improvement of B.Ed. students as upcoming teachers. Kamukwema & Neumbo (2021) and Patel (2018) also used Random sampling method for their study to found out challenges faced by the student-teachers during school-based activities such as preparing Lesson planning Selecting, method of teaching and about the experiences and perceptions of student teachers during internship programme respectively. Anees (2022) used observation method for noticing several sides of teaching, including teaching methods, use of TLMs, teaching strategies, co-curricular activities, teaching skills, measures for children with special needs, and assessment methods. Sharma & Chahal (2020) have also used thematic content analysis and triangulation for data analysis to study the status of B.Ed. internship programme and challenges and constraints faced by B.Ed. students during the internship programme. Chary & Perumal (2022) applied descriptive analysis and cross-sectional survey method Student Teachers Perception on School Internship Program. Khan (2017) also used descriptive survey method to study the student and teacher educators' experiences in a two-year B.Ed. program. Salviana et.al., (2021) used qualitative method to investigate of English student-teachers' restrictions during teaching internship. Padillo et.al., (2021) used quantitative-descriptive survey research design in their study. Thus, the researcher has also applied the random sampling technique to draw the sample for the present study. The study is both qualitative and quantitative in nature.

3.3.2 Sample Size

For the present study, the researcher followed a proportional stratified random sampling technique to select B.Ed. colleges as the sample. Only a two-year B.Ed.

program has been selected for this study. The research stratifies the total number of (46) B.Ed. colleges into two strata, private (40) and government (6) B.Ed. colleges. The researcher randomly selected 07 private and 01 government from each stratum B.Ed. colleges. For this study, 400 student-teachers from the B.Ed. course under the state affiliating university of Assam in the academic year 2020-22 have been selected through a simple random sampling technique from the total population. All the teacher-educators from selected B.Ed. colleges related to internship have been taken as samples for the study. All the principals from selected B.Ed. colleges have been taken as samples. Internship schools were selected using a simple random sampling technique. All headmasters have been selected as samples from selected internship - schools.

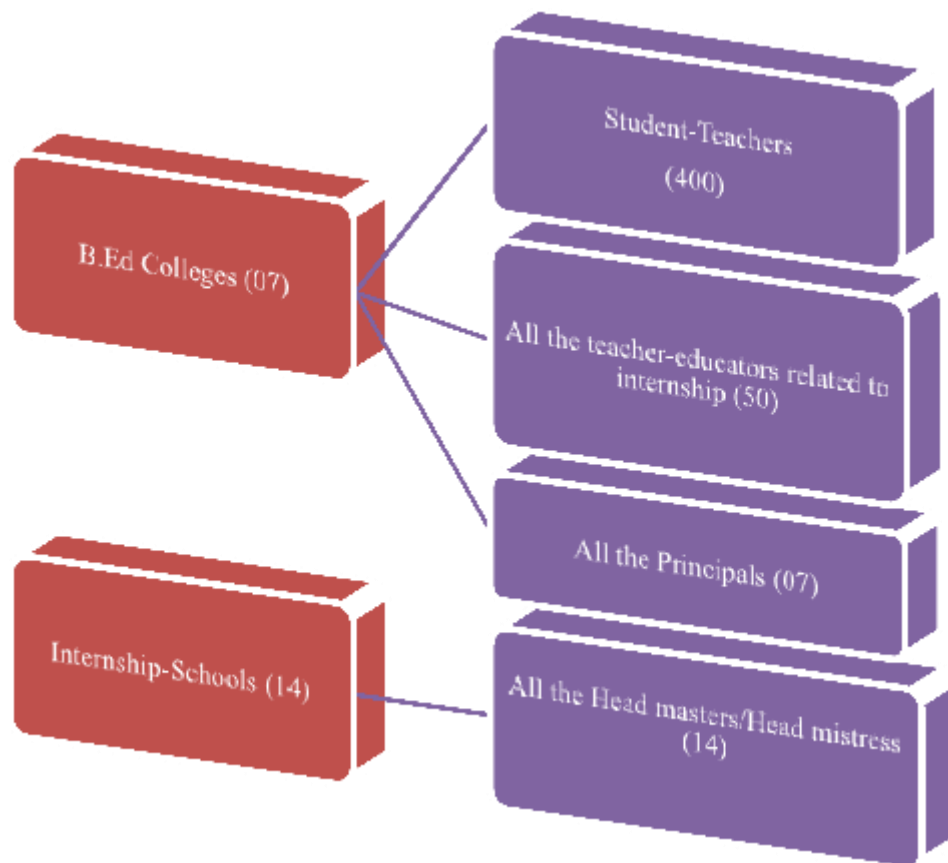


Chart No 3.1: Chart of distribution of sample of the study

Table No 3.2: Seven TEIs as a Sample of the Study

Name of the B.Ed. College	Type of College	Affiliating University
TEI, Nagaon	Government	Gauhati University
TEI, Kaliabor	Private	Gauhati University
TEI, Nagaon	Private	Gauhati University
TEI, Dakshin Guwahati	Private	Gauhati University
TEI, Kamrup	Private	Gauhati University
TEI, Sivasagar	Private	Dibrugarh University
TEI, Jorhat	Government	Dibrugarh University

In Table No 3.2, there are a total of 7 Colleges of Teacher Education under two state universities in Assam. Five colleges under GU and 2 Colleges of Teacher Education from DU were randomly selected as samples. The table shows two government colleges and five private teacher education colleges under GU.

3.3.3 Selection of the Respondents

The study sample covers student-teachers, teachers-educators, principals of TEIs and headmasters/headmistresses of internship schools. The details are given in the table 3.3.

Table No 3.3: List of Sample as Student-Teachers, Teacher-Educators and Principals

Name of the B.Ed. College	Number of Student-Teachers			Number of Teachers-Educator			Number of Principals
	Male	Female	Total	Male	Female	Total	Male/ Female
TEI, Nagaon	23	35	58	2	5	7	01
TEI, Kaliabor	18	30	48	2	3	5	01
TEI, Nagaon	30	37	67	3	5	8	01
TEI, Dakshin Guwahati	27	30	57	2	7	9	01
TEI, Kamrup	23	50	73	2	8	10	01
TEI, Sivasagar	14	38	52	2	3	5	01
TEI, Jorhat	16	29	45	2	4	6	01
Total	151	249	400	17	21	50	

Table No 3.3 shows that student-teachers were selected randomly from private and government B.Ed. colleges as sample. From all these colleges, 400 student-teachers, 50 teacher-educators and seven principals have been selected as samples for the present study. Besides, 14 headmasters/mistress from schools which are paired with the B.Ed. colleges for internship program have been also taken as sample for this study. The details of the student- teachers are shown in Table No 3.3.

Table No 3.4: Sample of Student-Teachers in Details

Affiliating University	Type of College				Total no of Student-Teachers
	Private (N=05)		Government (N=02)		
	Male	Female	Male	Female	
GU	98	147	23	35	303
DU	14	38	14	31	97
Total					400

Table No 3.4 shows the student-teachers from 7 B.Ed. colleges. It includes male and female student-teachers from both private and government B.Ed. colleges under two affiliating universities. The number of female student-teachers is more than that of male student-teachers.

Table No 3.5: Sample of Teacher-Educators in Detail

Affiliating University	Type of college				Total no of teacher-educators
	Private (N=05)		Government (N=02)		
	Male	Female	Male	Female	
GU	09	23	2	5	39
DU	2	3	2	4	11
Total					50

Table No 3.5 displays the teacher-educators from 7 B.Ed. colleges. It includes male and female teacher-educators from both private and government B.Ed. colleges under two affiliating state universities.

3.4 About the Components of School Internship

There are some components or tasks that student-teachers have to complete during the internship period under both Gauhati University and Dibrugarh University. These are practice teaching, lesson plan preparation, action research project, teaching aids preparations and community activities etc.

3.5 Tools Used in the Study

Four tools were developed by the researcher for data collection of the present study. These are

- Questionnaire for student-teachers
- Questionnaire for teacher-educators
- Interview schedule for the principal of B.Ed. colleges
- Interview schedule for headmaster of internship schools

A questionnaire is a flexible and self-report data collection instrument that the researchers use to fulfill their objectives. It helps to gain information about the research respondents' feelings, attitudes, beliefs, perceptions, and thoughts. Both quantitative, qualitative and mixed data can be collected with the help of a questionnaire (Johnson and Christensen, 2014).

3.5.1 Description Questionnaires on School Internship Programme

The researcher has developed questionnaires to collect data related to school internships for this study. While preparing the tools, the researcher consulted with different subject experts.

a) Questionnaire for Student-Teachers

The researcher has constructed a questionnaire for student-teachers, keeping in mind the four objectives of the study. While preparing the draft questionnaire, various aspects of the school internship were considered. The questionnaire started with primary information of the sample like gender, name of the teacher education institutions, name of the affiliated university, stream, pedagogy subject, type of internship school and school location. The questionnaire has been constructed, including four objectives. The items are related to implementation procedure, components of school internship, issues and challenges of school internship and

suggestions. The questionnaire included Yes/No items, multiple-choice items and open-ended items.

b) Questionnaire for Teacher Educators

This was another tool developed by research for the teacher-educators to get data for all the four objectives. It also included Yes/No items, multiple-choice items and open-ended items.

c) Interview schedule for Principal of TEIs or B.Ed. Colleges

The researcher prepared this tool for the principals of B.Ed. Colleges affiliated under two state universities of Assam. The questions have covered three dimensions related to the first, third and fourth objectives.

d) Interview Schedule for Headmaster of Internship Schools

The researcher also developed it for the headmaster/headmistress of internship schools. Items are related to the first, third and fourth objectives of the study.

3.5.2 Development of Tools

The researcher has developed two questionnaires. One is for student-teachers, and the other is for teacher-educators. Apart from two questionnaires, two interview schedules were designed by the researcher. One is for principals of TEIs, and the other is for headmasters of the internship schools. The researcher has prepared the first draft of the tools. After the pilot study of the questionnaires, the researcher modified the draft and sent it to different experts in the country for its content validity and to finalize the tools. Following are the details of the development of the tools.

3.5.3 Development of a Questionnaire for Student-Teachers, first draft

The researcher was careful while preparing the items for the tools. Both open and close-ended items have been included based on the study's objectives. The purpose of the first tryout is to see the feasibility of the research tools.

3.5.4 Draft Questionnaire for Student-Teachers

Instructions were given by the researcher to fill up the questionnaire, including the personal information of the sample. The researcher has sketched the questionnaire into four different parts. Each one has included various items based on the objectives of the study.

Table No 3.6: Structure of the First Draft Questionnaire for Student-Teachers

Areas	Type of the Items
Implementation Procedure	Yes/No Type, Multiple TypeOpen-ended type
Components	Yes/No Type, Multiple TypeOpen-ended type
Issues and Challenges	Yes/No Type, Open-ended type
Suggestions	Open-ended type

A total of 113 items were drafted for student-teachers and 83 items for teacher-educators. After trying out the items on 100 samples, the final draft was sent to the different experts in the country for content validity. The details of the number of experts are given in table 3.8.

3.5.5 Tryout of the first draft of the Questionnaire for Student-Teachers

The first tryout is to see the feasibility of the research tools. The researcher was instructed to fill out the questionnaire, including the personal information of the sample. Table No 3.6 depicts the area and type of items for the student-teachers. The researcher has sketched the questionnaire into four different parts. Each one has included various items based on the objectives of the study.

After trying the items, the researcher changed some points. Under personal information, the researcher has changed the following points like qualification word modified to stream and the area of location has been modified to school location etc. The many modifications have been made after trying it out because some of the items are not necessary and relevant. Some questions are deleted because they are repeated or like other questions. After modifications of the tool, the final draft was sent to the different experts in the country for content validity. The details of the number of experts are given in the table.

3.5.6 Development of Questionnaire for Teacher-Educators

The researcher has developed a questionnaire for teacher-educators. Table No 3.7 shows the areas and type of items for the teacher-educators. The researcher has sketched the questionnaire into four sections. Each one has included various items

based on the objectives of the study. It also included Yes/No items, multiple-choice items and open-ended items.

Table No. 3.7: Structure of the First Draft Questionnaire for Teacher-Educators

Areas	Type of the Items
Implementation Procedure	Yes/No Type, Multiple Type Open-ended type
Components	Yes/No Type, Multiple Type Open-ended type
Issues and Challenges	Yes/No Type, Open-ended type
Suggestions	Open-ended type

Table No 3.7 depicts the areas and type of items for the teacher-educators. Each one has included various items based on the objectives of the study. There were 83 items for teacher-educators. After trying out the items on 70 samples, the final draft was sent to the different experts in the country for content validity. The details of the experts are given in the appendix.

3.5.7 Designing Interview Schedules

Interview schedules mean to collect views and opinions from the head person of the institution who is related to the implementation procedure of the internship process. It was designed as a supplement data. It is an additional way to collect more data from different participants. The topic or content of the interview is the same as with the questionnaires. The key purpose of conducting interviews is to collect more ideas and experience during the school internship.

The interviews with the principals and headmasters helped to gather data for study's objectives. The questions include implementation procedures, issues and challenges or problems faced during school internship, and suggestions to improve the program.

3.5.8 Pilot Test of the Tools

The pilot test is necessary to know whether the tools are going to collect research data or not. Therefore, the researcher must try the tools before using them in the final data collection. Piloting tests help to know whether the questions are adequate or too long

and whether the questions are achieving the study's objectives.

Tools were tried out on volunteer participants, including teacher-educators, headmasters and principals, before the actual data collection. The interview schedules are for helping the researcher collect data that may not be collected through questionnaires. The researcher has given the necessary instructions before administering the tools.

3.5.9 Pilot Testing of the Questionnaire for Student-Teachers

The researcher has given necessary instructions before administering the tools. The researcher has conducted a pilot test questionnaire for student-teachers on 100 samples from the following B.Ed. Colleges.

- College of Education, Boko, Kamrup.
- Nazir Ajmal Memorial College, Nagaon.

3.5.10 Pilot Testing of the Questionnaire for Teacher-Educators

The pilot study of the questionnaire was done on 60 teacher-educators from the following B.Ed. Colleges.

- College of Education, Boko, Kamrup
- Nazir Ajmal Memorial College, Nagaon.

3.5.11 Pilot Testing of the Interview Schedule for Principals

The researcher has conducted a pilot test on two principals of the following B.Ed. colleges.

- College of Education, Boko, Kamrup
- Krishna Bora B.Ed. College, Nagaon

3.5.12 Pilot testing of the Interview Schedule for Headmasters

The researcher has conducted a pilot test on two headmasters of the following internshipschools.

- Kiran Bala Goswami Balika H.S Secondary School, Nagaon
- Githarthi School, Jorhat

After trying out the questionnaires, the researcher deleted unclear, repeated and unsuitable items from the tools based on participant feedback. Then, the modified draft was sent to the experts for its validity.

3.5. 13 Validation of the Tools

All the tools, i.e., two questionnaires and two interview schedules with the research plan and request letter, have been sent to the experts in the related study field to check the content, adequacy and correctness of the items. Content validity is established based on opinions/suggestions/modifications given on questionnaires and interview schedules by the five experts. All the experts agreed that adequate content validity exists in the questionnaires and interview schedules. All the comments/suggestions given by the experts were summed together and included in the final tools. Accordingly, all the unclear words, inadequate alternative items, and negative items were removed from the final draft. After all the modifications, the tools were ready for administration.

Table No 3.8: Number of Experts Selected to Validate the Tools

Sl. No	Name of the University	Number of experts
1	Gauhati University, Assam	1
2	NCERT, New Delhi	2
3	Regional Institute of Education (NCERT), Bhubaneswar.	1
4	Tezpur University	4

A request letter for the experts, a list of experts and a copy of the tools are attested in the appendix.

Experts have given the following overview of tools

- a) Be specific and clear
- b) Remove repeated content
- c) Try to pinpoint the questions.
- d) The questionnaire for teacher-educators is prepared well.
- e) Provide sufficient space for open-ended questions.

- f) Questions for principals should be more database rather than school head teacher.
- g) The justification behind Yes and No can be asked for qualitative data.
- h) The interview schedule needs to be short and compact.
- i) Manage the interview schedule so that it can be conducted and covers all the important points and aspects of the study.
- j) Ask separate questions in interview schedules.
- k) Restrict to 18 questions for the interview schedules.

The final draft of the tools declared by the experts was administered to the study participants.

3.6 Period of the Internship Conducted by DU and GU

The program starts from March to June in the TEIs under Gauhati University and from May to June 2022 under Dibrugarh University. The internship starts in the IV semester.

3.7 Procedure of the Data Collection

The researcher has collected data in two phases. In the first phase, the researcher collected data from student-teachers who went for their internship from March to May 2021 under GU. Three hundred-four student-teachers and 37 teacher-educators have responded in the first phases. The second phase is from May to June 2022 under DU. Ninety-six student-teachers and 13 teacher-educators have responded in the second phase. The researcher had to wait a semester to collect data due to the COVID-19 pandemic lockdown.

At first, the student-teachers were asked to respond to the self-made questionnaire. A briefing was given to the student-teachers about the points of the study. They were asked to read and put tick marks and write their opinion regarding components, situations faced during internship or changes for teaching, improvement in teaching or relationship with mentors. 18 were remaining because of unfinished information. Sample student-teachers were both male and female.

Teacher-educators were asked in the same way to fill out the questionnaires. The researcher has collected responses from teacher-educators through the questionnaires. Out of 70 questionnaires sent to the teacher-educators, 50 teacher-educators responded

properly. The researcher interviewed the seven college principals and 14 headteachers/headmistress of internship schools for 15-20 minutes according to the planning of the study. At the same time, the researcher had taken photographs and audio recordings. Interviews were recorded. Some of the interviews were not able to be recorded. However, they were not permitted to record the interviews.

During the school internship, the researcher visited the schools during the internship period. Some of the relative data were noted down. The details of the data analysis are given in Chapter IV.

3.8 Statistical Techniques

For the quantitative part the researcher has used statistical techniques like percentage, frequency, and graphical representation and for the qualitative part thematic analysis have been used wherever necessary.

Objective wise data analysis techniques have been presented in the following data.

Table No 3.9: Objective Wise Technique of Data Analysis

SL. No	Objective of the Study	Technique Used for the Data Analysis
1	Objective No 1	Frequency, percentage, graphical representation
2	Objective No 2	Frequency, percentage, graphical representation
3	Objective No 3	Frequency, percentage, thematic analysis, graphical representation
4	Objective No 4	Percentage, thematic analysis

In this chapter, the researcher presented the methodology of the study. The next chapter, chapter IV, deals with the analysis and interpretation and discussion of the data.

