

## **Chapter III**

### **Methodology**

#### **3.1 Introduction**

A methodology is a crucial component of research. A systematic approach that an investigator uses to accomplish their necessary aims in a particular field of study is referred to as methodology. Its primary focus is on providing a thorough explanation of the samples, instruments, and methods that the researcher uses when conducting research. It could be viewed as a science that examines the accuracy of research methods. Moreover, it entails a methodical approach from the initial identification of the issue until its resolution.

Stephenson (1953) stated, A method for sealing objects as statements is called methodology. It is a method for methodically resolving research challenges. Similar to this, research methods outline the various steps of a strategy that should be used to solve a research problem. These steps include how the problem has defined terms, how to choose research subjects, how reliable data collection instruments are, how to analyze and interpret data, and how to draw conclusions and generalizations. As a result, choosing the best approach for a research project is a crucial task for the researcher to complete.

#### **3.2 Research Method**

The nature of the current study is that of a descriptive survey. Based on its nature and appropriateness, the investigator has chosen to use the descriptive survey method. The most popular and extensively used approach in education is without a doubt the descriptive survey method. It is beneficial to explain educational occurrences in terms of conditions like preexisting relationships. Survey studies are conducted in order to compile comprehensive metaphors of occurrences that are already known. After then, facts are utilized to either validate the situation and practices as they currently exist or to develop more clever ideas for altering them. Based on the nature of the inquiry, the descriptive survey method has been approved as an appropriate research approach for the current study interpretation, comparison, measurement, classification, assessment, and generalization are all involved. It examines and researches occurrences in an environment that is naturally occurring.

Their goals are both short and long-term; yet, these investigations offer data that will serve as the basis for more fundamental study as well as information helpful in issue solving.

"Descriptive surveys are the only way to obtain opinion, attitude, suggestions for improving educational practices, and other data," claims Lokesh Kaul. Its goal is to gather accurate and relevant information on the phenomenon's current state and, to the extent feasible, to derive reliable general inferences from the information gathered. To investigate the concerns surrounding the schooling of children with special needs, the investigator needs a list of Assam's special schools.

A variety of sources were used to build the list of special schools. Twenty (20) special schools make up the final list, of which sixteen (16) were run by non-voluntarily organizations and four (04) by the Assam's government.

### 3.3 Population of the Study

In the current study, a census method was used to obtain a comprehensive image of the facilities that are now in place. The survey included all twenty (20) special schools currently in operation. Twenty principals/heads of institutions, 211 instructors, and parents were chosen from each school to make up the sample. 134 parents of children with exceptional needs made up the sample. A selection of the study's institutions and the special schools that are currently shown in Table 3.1.

**Table 3.1 Number of Government and Registered NGOs Special Schools in Assam**

<b>Name of the School</b>	<b>Year of Establishment</b>	<b>Type of School</b>	<b>No. of Teachers</b>	<b>No. of Students</b>
Government B.D.S Deaf and Dumb school, Guwahati	1949	Govt.	11	400
Srimonto Sankar Mission Blind School, Nagaon	1955	Private	11	80
Assam AndhaSishuVidyalaya, Lakhimpur	1969	Private	11	75
Moran Janamangal Adarsha Blind School, Dibrugarh	1972	Private	09	30
Jorhat Blind School, Jorhat	1974	Govt.	15	150
Guwahati Blind School, Guwahati	1976	Govt.	13	250
Ghilamara Blind School,	1985	Private	10	45

Lakhimpur				
Sishu Sarothi, Guwahati	1987	Private	06	110
Prerona, Jorhat	1992	Private	15	150
Jorhat Deaf and Dumb School, Jorhat	1995	Govt.	01	70
Monfort School, Guwahati	1996	Private	13	55
Ashadeep day rehab centre, Guwahati	1996	Private	15	57
SarawatiBagdhawniJatiyaBidyalaya, Guwahati	1999	Private	15	72
Special Residential School for Handicap, Bajali	2000	Private	10	55
Tapoban Student's Welfare Home, Bajali	2005	Private	09	110
Destination child home, Guwahati	2005	Private	08	40
Titabor Physically Handicapped (Deaf & Dumb) School and Training Centre, Jorhat	2006	Private	13	50
Sarothi – A Centre for Ability Development, Nalbari	2007	Private	15	150
Assam Rehabilitation Centre, Guwahati	2012	Private	05	40
Arunoday Deaf and Dumb School, Nalbari	2015	Private	06	40
Total			211	2033

(Field investigation, session: 2022-2023)

The sample of parents of children with special needs was collected from the above-mentioned institutions. It was discovered that there were too many parents in the population to handle. As a result, 134 parent respondents were taken as a sample by convenient sampling technique.

### 3.4 Sample

A census sampling is used to get a full picture of the special educational facilities that are currently available. For this study, every special school has been chosen. The study includes 211 teachers, 134 parents of children with special needs, and 20 principals or heads of institutions as sample participants. Convenient sampling is used to choose the parents.

The profile of teacher and parents sample in special schools of Assam are presented in table 3.2.

**Table3.2 Profile of Sample Teachers and Parents of Children**

<b>Teachers' Profile</b>		
<b>Highest Qualification</b>	<b>No. of Teachers</b>	<b>Percentage</b>
HSLC	21	9.95%
HS	40	18.96%
B.A/B.Sc	50	23.7%
M.A/M.Sc	65	30.8%
B.Ed	20	9.48%
M.Ed.	15	7.11%
<b>Total</b>	<b>211</b>	<b>100%</b>
<b>Educational profile of parents</b>		
<b>Qualification</b>	<b>No of Parents</b>	<b>Percentage</b>
Illiterate	40	29.85%
Undermatric	40	29.85%
HSLC	20	14.93%
HS	15	11.19%
B.A/B.Sc	14	10.45%
M.A/M.Sc	05	3.73%
<b>Total</b>	<b>134</b>	<b>100%</b>
<b>Parents' Occupation</b>		
<b>Occupational Information</b>	<b>No. of Parents</b>	<b>Percentage</b>
Daily wage labour	30	22.39%
Shopkeeper	05	3.73%
Govt. Employee	05	3.73%

Agriculturalists	20	14.93%
Private Employee	04	2.99%
Unemployed	70	52.24%
<b>Total</b>	<b>134</b>	<b>100%</b>

The M.A./M.Sc. degree holds the greatest percentage of teaching positions in special schools, followed by B.A./B.Sc. (23.7%) and higher secondary (18.96%). This information is displayed in the above table. Teachers who qualify for HSLC (9.95%), B.Ed. (9.48%), and M.Ed (7.11%) have the lowest rates.

In addition, the occupations of the parents of children with special needs are displayed in the above table. Parents make up the largest percentage of jobless workers (52.24%), followed by wage workers on a daily basis (22.39%) and farmers (14.93%). Shopkeepers (3.75%), government employees (3.73%), and private employees (2.99%) have the lowest percentages of parents. The parents' educational backgrounds have a significant impact on the child's schooling. The table 3.2 shows the educational qualification of parents of Children with special needs. Maximum number of parents are illiterate and under matric (29.85%). 14.93 per cent of parents are HSLC passed. Followed by 11.19 per cent of parents are higher secondary passed. 10.45 per cent of parents are B.A/B.Sc passed. The lowest percentages of parents are (3.73%) M.A/M.Sc passed.

### **3.5.0 Tools and Techniques Used in the Study**

Depending on the information needed to investigate the indicated problem, the investigator uses one or more tools to gather data. Furthermore, a variety of data collection methods and instruments, varying in complexity, design, administration, and interpretation, are needed for study. Every instrument or method is suitable for gathering particular kinds of data or proof. The instruments that are accessible for the investigator to choose from yield data. The researcher used questionnaires, interview schedules, and observation techniques to gather data for the current study.

The investigator produced the tools after consulting with professionals and going over several studies on special schools. The research instruments employed in this study are:

1. Questionnaire for the Principals or Heads of the institutions and teachers
2. Interview Schedule for parents of children with special needs

### 3. Observation method

#### 3.5.1 Questionnaire

A questionnaire is a research tool that consists of a list of inquiries whose responses yield details on the subject, person, or event. One could think of questionnaires as a type of written interview. A questionnaire is described as "a systematic compilation of questions that are submitted to a sampling of the population from which information is desired" by Barr, Davis, and Johnson.

The questionnaire could have a "Open" or "Closed" form. Respondents must either check their answers or give brief answers on the closed form. They consist of a series of inquiries to which participants may provide a finite number of answers.

The respondent is invariably allowed to reply only with "yes", "no", or "no-opinion", or is requested to select an answer from a short list of probable responses. He/she is placed to ask tick (✓) mark in a space provided on the response sheet. Sometimes he/she is requested to insert brief answers of his/her own. For certain types of information, the closed form of the questionnaire is very useful; because it is very easy to respond. The open form of the questionnaire calls for free responses in the respondent's own words. The form of the questions is unstructured and no clues are provided to the respondent. The open form of questions provides for greater intensity of responses and the greatest benefit of this type of question is the independence that is given to the respondent to reveal his/her opinion and to clarify his responses (Koul, 2009).

##### 3.5.1a Questionnaire for Principal

In the study, the investigator collected data using a set of self-developed questionnaires for Principals/Heads of the Institutions of special schools. The questionnaire was carefully prepared to be comprehensive, covering all aspects of the study. The purpose of the questionnaire designed for the principals and heads of institutions was to gather data based on the study's first, second, and sixth objectives. The first objective questionnaire covers infrastructure features such as classrooms, the ability to modify furniture to accommodate various forms of disability, the availability of libraries and hostels, the availability of sanitary conditions and clean drinking water, the availability of medical facilities and health campaign programs, the availability of free study materials, the availability of transportation, and the presence of psychological clinics in schools.

However, the questionnaire also includes the availability of teaching-learning aids which is essential for better communication in special schools. Another segment of the questionnaire, lied on the sixth objective, discusses government schemes and policies aimed at improving education for children with special needs. The items included are financial and budget allocation borne by the government conducted survey and support from government and NGOs, awareness camps organized by the government, facilities and special curriculum provided by SEBA, schemes for multi-disciplinary services, and newly introduced schemes by govt. of Assam, facilities for early detection and identification of Children with special needs and provide counselling services for parents of children with special needs.

The second objective questionnaire includes items related to the different types of disabled children available in special schools. Besides, the respondents were also asked to give information regarding the facilities that prevail in special schools for different types of disabled children.

A copy of the questionnaire for Principals/ Heads of the institution is provided in Appendix I

### **3.5.1b Questionnaire for Teacher**

The teacher questionnaire was developed using the third and fourth aims of the current study as its basis i.e., to assess the many challenges that instructors in special schools encounter and to gain knowledge about the problems that kids with special needs encounter. The questionnaire for problems of children with special needs included items such as student attendance in class, undertaken assignments, participation in play activities, sensitivity and acceptance of teacher's suggestions, health-related issues, communication and learning problems, and approaches to the teacher for problem-solving.

The fourth objective on the problems of teachers includes the teaching problems, difficulties and challenges, teaching methods used, disruptive students in the classroom, and student progress assessment. The questionnaire also includes the classroom and housing services for children with special needs, modifying furniture and sufficiency of teaching aids, transportation facilities for improved accessibility, curricular and extra-curricular activities, and various vocational courses and study materials.

A copy of the questionnaire for Teachers of the special school is provided in Appendix II

### **3.5.2 Interview Schedule**

The interview is a face-to-face process of communication or engagement when the subject, or interviewee, provides the necessary information verbally. Even though interviews are typically connected to counseling or psychotherapy, they can be a useful tool for gathering data about individuals in a variety of research contexts. Interviews are categorized based on their design or structure as well as the intended usage. Interviews are classified into “structured” and “unstructured” types. In this study unstructured interview is conducted. It provides greater flexibility to respond. Although the sequence of questions and the procedure are pre-determined, the interviewer is largely free to arrange the forms and timing of the questions. Unstructured interviews are labelled as focused. It aims at some particular event or experience rather than on general lines of inquiry about the interview (Koul,2009). Compared to unstructured interviews, organized interviews are more scientific because they provide the controls necessary to avoid the creation of scientific generalizations. Each printed schedule included a blank page at the end for the investigator to record any information not included in the timetable.

#### **3.5.2a Interview for Parents**

A plan for interviews was developed using the fifth aim to come across how parents felt about the schooling of their children with special needs. The interview was mainly conducted to recognize the perception of parents on certain factors like care and support from schools, information regarding socio-economic status, availability of curriculum and free study materials, arrangement of parents-teacher meet, provision of feedback appraisal, provision of co-curricular activities, and any kind of government support.

The interview schedule had a few changes after the initial try-out. A systematic interviewing procedure was used in this investigation. The parents who were chosen for this study were contacted at home. While visiting their children at school, a few parents were contacted. Initially, the investigator made an effort to establish a cordial rapport with the parents. Following a casual conversation, the researcher outlined the goal of the investigation and asked the parent to supply the required data. Additionally, the investigator guaranteed the confidentiality of the information they provided. Additionally, the investigator guaranteed the confidentiality of the information they provided. The investigator went over the questions with the parents when they were prepared for the interview. While some parents were apprehensive, others came clean and acknowledged that their kids were the source of multiple issues. Face-to-face interviews were used to elicit their comments, which the investigator



noted on the calendar. Every printed schedule had a blank page at the end allowing the researcher to write down any information not integrated in the plan for the interview.

A copy of the interview schedule is given in Appendix III

### **3.5.3 Observation**

Observation is a more natural way of gathering data. It seeks to ascertain what people think and do and by observing them in action as they express themselves in various situations and activities. The use of observation as a research method is being honed to the point where it is expected to significantly advance descriptive research. Direct observation is the greatest method for studying significant personality traits that manifest in behavior, as opposed to indirect methods like questionnaires and interviews. It is among the greatest ways to create an enduring documentation of occurrences. The investigator in this study observed the special needs children at various points in time, particularly when their instructor interacted with them in the classroom.

The investigator spent a considerable amount of time in the classroom with approval from the relevant authorities. This provided the investigator with knowledge on how educators prepared and developed relationships with the students, what resources were developed and used for teaching, and how the lessons were taught. However, after visiting the residential schools, the researcher noticed the facilities provided for the inmates. In addition, the investigator watched the kids through out yoga, music, and art sessions, as well as Morning Prayer. Through these observations, the investigator has been able to see how special children have tried to communicate their feelings through a variety of activities and followed directions. In addition, it was noted how the youngster was trained by the speech therapist during their sessions.

However, the children were found to be distracted during their first visit to special schools, but after several visits, they became comfortable and friendly.

### **3.6.1 Justification of Questionnaire for Principal**

The questionnaire for the principal/head of the institution is intended to assess the facilities provided for children with special needs in special schools across Assam. The questionnaire includes the infrastructure available in special schools. The infrastructural facility includes enough number of classrooms in special schools, as good classrooms are the first requirement of any educational institution. Library facilities are required in every school, and respondents

are asked if books are specially designed for children with special needs. Braille slates and styluses, learning devices, study guides, special needs books, and supplementary materials are examples of study materials used in special education. Children with special needs are often inaccessible, so every school must provide modified furniture for various types of disabled children. Thus, each respondent was asked about the availability of modifying furniture for children in special schools. Respondents were also asked about providing free study materials to children, as the preponderance of them were from poor socio-economic backgrounds.

Furthermore, one of the most important aspects of any school is hygiene. Every institution should have proper sanitation facilities. Respondents were asked about having separate washrooms for boys and girls as well as having running water in the washrooms, which is essential for hygiene. Respondents were asked about the availability of pure drinking water facilities in schools, such as aqua guards, filters, tap water, tube wells, and so on. Safe drinking water is essential in this context. The questionnaire for principals/ heads of the institutions also discusses the separate hostel facilities for both boys and girls. They were also inquired about the presence of a medical unit in each school, citing that a child with special needs frequently experiences poor health. The investigator also inquired about organizing health campaign programmes for Children with special needs to create awareness regarding different health-related hazards. They also provided information about having a psychological clinic, which is necessary for proper guidance in various mental disorders.

Transportation is another crucial factor in the accessibility of children with special needs. The respondents are asked about various types of transportation services offered in special schools. They were inquired about having appropriate teaching-learning aids to improve communication with the teacher and other school personnel. The investigator also questioned about having facilities, such as a proper building environment. A proper building environment is vital for enhanced student accessibility. Besides, organizing co-curricular activities is essential for the all-round development of students. Therefore, the investigator inquired about various activities such as dance, drama, music, and model making. Remedial programmes are another important in this regard for modifying the teaching-learning process. These types of programmes are necessary for special children. So, the principals/heads of the institutions were probed for organizing these remedial programmes in schools. Organizing excursions and educational tours is necessary for children. It is an outdoor activity that is essential for the student's personality development. Furthermore, guidance and counselling

services are essential for Children with special needs. Motivational programmes are essential for student's academic progress; they help to boost their confidence in a variety of fields. Recreational activities such as drama, singing, and dancing are also important for special children, and they should have opportunities to participate in these activities. Respondents provided information about school-based recreational activities. The investigator also explored concerning the government schemes and policies for improving the education of Children with special needs in special schools from the respondents. The special schools received financial assistance from various sources, which reflects their financial situation. The questionnaire also addressed the government's allocation of funds as well as support from NGOs or other agencies. It also queried about new and existing schemes formulated to improve the welfare of children. Similarly, the questionnaire discusses the awareness camps organized by the government of Assam for special children and parents. It also discusses SEBA's role, such as different facilities and specialised curriculum for Children with special needs. Information regarding resources like early diagnosis and detection for children with special needs and counseling programs for parents of special needs children is also included in the main questionnaire. Early detection and identification are other essential services that Children with special needs require at the outset. Counselling for parents is vital so that they can effectively deal with their children based on their differences.

### **3.6.2 Justification of Questionnaire for Teachers**

The questionnaire for teachers examines the various issues that teachers face when dealing with children with special needs, such as how they manage disruptive students in the classroom. This questionnaire also discusses any special courses or training that the teacher has completed, which is necessary for the teacher's accountability and professional development. Assessments of students' progress and the adoption of new methods in teaching in special schools were discussed. Respondents are also asked about their difficulty teaching the different types of disabled children and the challenges they face in the classroom. The questionnaire investigates the facilities available to children with special needs, such as appropriate classrooms for students, residential or hostel facilities for proper accommodation, modifying furniture for proper accessibility for various types of disabled children, and suitable devices. The investigator has also identified sufficient resources and appropriate teaching aids. The respondents were inquired about selecting an appropriate curriculum and organizing extracurricular activities, both of which are crucial for the child's overall development. Furthermore, vocational courses contribute to student's economic

independence, as evidenced by the questionnaire. Various academic activities boost students' confidence levels. The investigator examines the various types of activities offered in special schools. Providing free study materials is an important factor in generating interest among students. The investigator inquired about having a proper transportation facility in special schools. Children with special needs require proper transportation to ensure their accessibility.

The teacher's questionnaire also covers issues that are unique to special needs children, like the importance of student attendance to the child's education. Assignments mostly show the student's consistent development. The respondents were questioned whether students freely complete the assignments assigned by the teachers in class. They were asked about the student's participation in play activities with their classmates or peers, which helped them, develop their motor skills. Besides, teachers use praise or reward work as a motivational tool in any classroom setting. Regarding these issues, the respondents were asked about the student's sensitivity and acceptance of the teacher's suggestion. It also investigates children's communication problems which influence teacher-student interactions. Health problems such as low immunity, low vision, movement and balance problems, prolonged infection, and loss of appetite all have an impact on the education of children with special needs. Teacher respondents were asked about communication issues, health concern, learning difficulties, and other issues that confront children with special needs. Writing, language, and reading problems, as well as poor comprehension and academic performance, all have an impact on children's education. These problems create a barrier in educating Children with special needs. Thus, the teacher questionnaire attempts to gather relevant information on this issue.

### **3.6.3 Justification of Interview Schedule for Parent**

The parent interview is crucial for learning about parents' perceptions on educating their children with special needs. This interview is associated with the fifth objective of the study. The interview was designed for parents of children with special needs to identify difficulties and problems related to these children. The interview discusses parent's role in supporting their children as well as the socio-economic status of their families, which influences their children's educational outcomes. It has been observed that the socio-economic background of the family influences the education of Children with special needs, as the majority of families live in rural areas. Children require the appropriate amount of support to continue their education. Besides, parents were also asked about receiving adequate support from the school to educate their children. Academic progress and feedback for children with special

needs should be discussed with their parents to ensure suitable evaluation. The interview also discusses the children's academic progress, the scheduling of parent-teacher meetings, and the provision of feedback appraisals to students to evaluate their progress. Each child with special needs is unique, and they should be offered a curriculum that is suitable for them. Consequently, the interview discusses the suitability of the existing curriculum and the provision of free study materials to children, considering that the majority of students are from low-income families. Various innovative methods and techniques should be used to educate children with special needs. It also investigates various strategies for implementing co-curricular activities for their children. The investigator asked the parents if they were receiving any type of government assistance for their child's education whether financial or otherwise. Parents' satisfaction with their child's education is extremely important. Thus, the investigator discusses parents' satisfaction and perceptions of their children's education.

#### **3.6.4 Justification of Observation**

Observations are the elements that are commonly used to investigate diverse contexts that entail monitoring students' conduct. The data collected through observational schedules are frequently qualitative and quantitative. Observation is the use of sensory systems to record the behaviour of an individual. As a result, the observation schedule used in this study examines the behaviour of both students and teachers in special schools. Children with special needs were observed not only in schools but also in the home environment. Reliable observations are required for evaluating the data obtained from observation.

#### **3.7 Procedure of Data Collection**

The investigator personally visited the special schools and obtained the required primary data by administering a questionnaire to the Principals or Heads of Institutions and teachers. The relevant information was collected following several visits to each institution. Some school authorities refused to provide information on certain issues, such as teacher salaries, the availability of teaching aids/equipment, and grant-in-aid received from the government. As a result, with consistent effort, the investigator was able to obtain the necessary data. Also, the teachers were cooperative and assisted the investigator in the data collection.

#### **3.8 Sources of Data Collection**

The study is based on both primary and secondary data. The investigator approached personally each principal, teacher, and parent of children with special needs in special

schools to extract essential information for primary data. For secondary data, the investigator collected some official information regarding the study from various departments in Assam regarding children with special needs. The investigator collected some official information regarding the study from various departments in Assam. These are:

1. Social Welfare Department, Assam
2. Composite Regional Centre, Guwahati Medical College
3. Regional Rehabilitation Centre, Mahendra Mohan Choudhury Hospital
4. State Child Protection Society, Beltola, Guwahati

### **3.9 Data Analysis and Interpretation**

Data in research needs to be methodically processed and analyzed. The following statistical techniques were applied in the current investigation.

Calculation of percentage: The percentage of a given table indicates the number out of one hundred. The ratio is the quantitative relation between two similar magnitudes determined by the number of times.

Bar Graph: The bar graph may be arranged either horizontally or vertically. It represents data by bars of equal width, drawn to scale length. In a bar graph, the bars are usually separated by space. The current study makes use of vertical bars.