

## **CHAPTER- 3**

### **METHODOLOGY OF THE STUDY**

Research methodology is an important area of any study to solve research problem systematically. It is a science of study which helps the researcher to carry out the study scientifically. It is a systematic process by which the researcher describes, predicts and explains phenomena. Research methodology also helps the researcher to acquire knowledge for his/her study. Hence, it is essential for the researcher to design his/her methodology very carefully.

In the present chapter, the investigator explains about the method and procedures applied for collecting information for the study. In this chapter, the investigator has also attempted to describe (a) sampling techniques (b) tools used for data collection (c) procedure of tools development and (d) method of data collection.

This study was designed to capture the relevant data/information from the core stakeholders viz Education Volunteers of Special Training Centers, Head Teachers of neighbourhood schools, President of School Management Committees and learners of special training centres as responses of all these were vital for assessing the effectiveness of the special training programme.

#### **3.1 METHOD ADOPTED IN THE PRESENT STUDY:**

The present study was “Descriptive” in nature. In descriptive survey research, the investigator attempts to collect detailed descriptions of existing phenomena with the intent of employing data to justify current conditions and practices or to make more intelligent plans for improving them. The objective of this type of research is not only to analyze,

interpret, and report the status of an institution, group or area but also to determine the adequacy of status by comparing it with established standards.<sup>1</sup> (Koul, 2006, P. 434).

The present study was carried out to know how far special training programme under RTE Act, 2009 has been effective for bringing of Out of School Children (OoSC) to the mainstream education. In this context, the investigator tried to collect information on overall implementation of special training intervention like identification of children & their age appropriate enrolment in neighbourhood school, mechanism & process used for implementation of the programme, evaluation process, status of attendance, performance & mainstreaming of special training learners, appropriateness of academic package and its transaction as per academic level of children and duration of special training, , attendance, performance & mainstreaming of learners and retention of mainstreamed children in formal school.

The main purpose of the study was to analyze, interpret and find out the present status of special training intervention as well as its effectiveness. As such, in present study, Descriptive Survey Method has been adopted as this study attempted to explain and interpret what exists at present in the form of provision, performance of children, processes etc.

### **3.2 POPULATION OF THE STUDY:**

The research population means well-defined collection of individuals or objects which have similar characteristics. It can also be described as a group from which the researcher can obtain information for his/her study and interpret the results of the study. Hence, a population or universe, is any complete group of entries-people, schools, students, hospitals or the like-sharing some common set of characteristics<sup>2</sup> (Mohan, Radha, 2011).

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<sup>1</sup> Koul, Lokesh, 2006, Methodology of Education Research, Vikash Publishing House Pvt. Ltd. New Delhi, Page 434

<sup>2</sup> Mohan, Radha 2011, Research Method in Education, Neelkamal Publication Pvt. Ltd, Hyderabad, P.58

The present study was conducted in Kamrup (Metro) district of Assam. This district has highest number of Special Training centres (including both RSTC & NRSTC) and numbers of deprived children are also more due to migration of parents and children in search of livelihood. In this backdrop, this district was selected for the study.

The district has presently two educational blocks (Guwahati & Dimoria block), 46 clusters and 647 Govt/Prov. Elementary Schools. Both the educational blocks were covered under the present study. In Guwahati educational block, there are 127 Special Training Centres and out of these 127 centres, the investigator selected 58 centres for this study. In Dimoria educational block, there are only 2 Special Training centres and both the centres were selected for the study.

The target population for the study was Education Volunteers (EV), Head Teacher of Neighbourhood School, SMC President and learners of Special Training Centres of Kamrup (Metro) district of Assam. The following table depicts the population of the study:

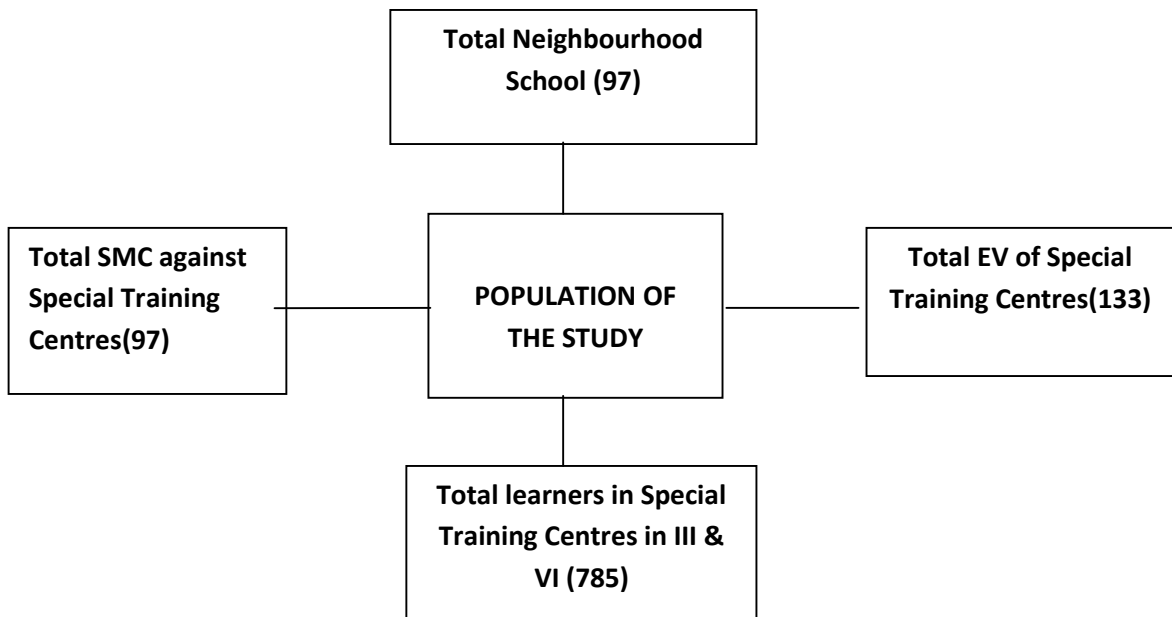
**Table-3.1**  
**POPULATION OF THE STUDY**

Block	Total Special Training centre			Total Education Volunteers	Total Neighborhood Schools	Total SMC	No. of learners in Special Training Centres
	NRSTC	RSTC	Total				
Guwahati	127	-	127	127	96	96	563
Dimaria	01	01	02	06	01	01	222
<b>Total</b>	<b>128</b>	<b>01</b>	<b>129</b>	<b>133</b>	<b>97</b>	<b>97</b>	<b>785</b>

*Source: Sarba Siksha Abhiyan (SSA), Assam, FY-2017-18.*

The population size of the study is shown in the figure 3.1

**FIGURE 3.1**  
**TOTAL SIZE OF POPULATION**



### **3.3 SAMPLE OF THE STUDY AND SAMPLING PROCEDURE:**

Sample is a group of people, objects, or items that is taken from a larger population for measurement. It is the representative of the population for generalizing the findings to the population as a whole. Sampling is the process by which a relatively small number of individuals or measures of individuals, objects or events is selected and analysed in order to find out something about the entire population from which it was selected.<sup>3</sup> (Koul, 2006, p.111). It is a method of determining number of individuals or elements to be selected as sample for the study.

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<sup>3</sup> Koul, Lokesh, 2006, Methodology of Education Research, Vikash Publishing House Pvt. Ltd. New Delhi, P 111.

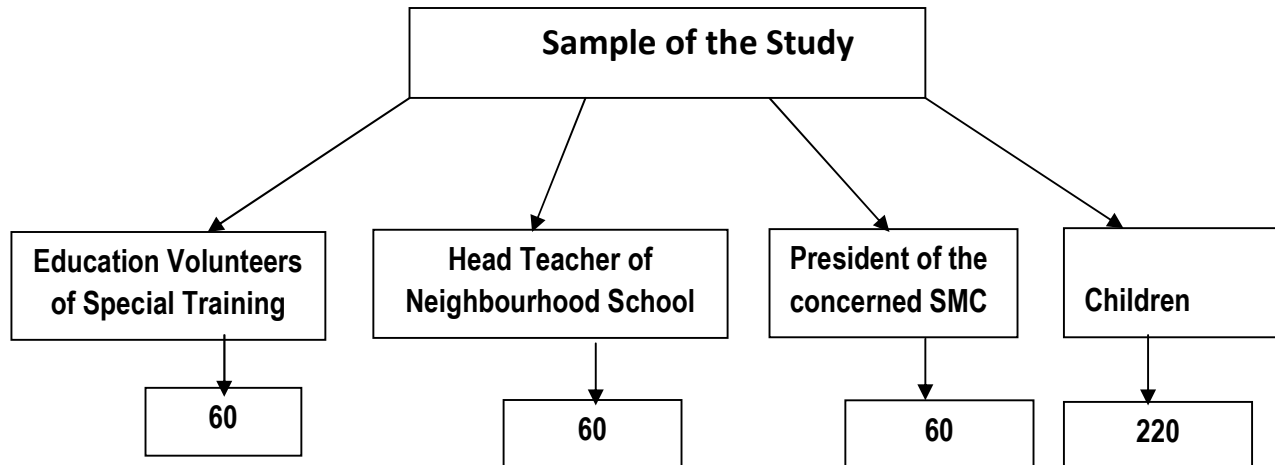
Kamrup (M) has total 129 Special Training centres for providing education support to the Out of School children (OoSC). Out of 129 Special Training centres, 128 centers are Non Residential Special Training Center and 01 is residential special training centre. For the present study, 60 special training centres (including 01 residential special training centre), 60 respective neighbourhood schools and 60 respective SMCs represented by President were selected.

To know the academic achievement of the children, self structured achievement test was administered for class- III & VI learners. For Lower Primary level, class-III was selected as the learners of special training are either never enrolled or drop out, their learning at the foundation stages is often found to be below the expected average level. Further, class-III is the middle class of lower primary level. In case of Upper Primary level, class-VI was selected as this class is the entry stage for upper primary level. A total of 220 learners [150 Class-III and 70 class-VI) were selected for the study to know their academic performance.

Thus, the sample size for the present study was- 60 Education Volunteers (46.51% of total Education Volunteers), 60 Head Teachers of neighborhood Schools (61.86% of total neighbourhood schools), 60 Presidents of School Management Committees of neighbourhood schools (61.86% of total School Management Committees of neighbourhood schools) and 220 learners (representing 26.64 % sample of class-III standard, 31.53% of class-VI standard and 28.05% sample of overall total population of class-III & VI special training centres of the district).

Equal representation of the segments consisting of East, West, North and South part of the district was taken for selection of sample. In the present study, sample was selected by adopting “Simple Random Sampling” technique. The following figure shows the sample size of the present study:

**FIGURE 3.2**  
**DESIGN OF THE SAMPLE SIZE**



#### **3.4 PROCEDURES FOR DATA COLLECTION**

For the present study, data were collected through Primary & Secondary sources. The two blocks of the district viz. Guwahati Urban and Dimoria were covered under the study. Primary data were collected from the Education Volunteers, Heads Teachers of the neighbourhood school, SMC presidents and learners of class-III & VI of Special Training centres through Interview Schedule and achievement test. The investigator personally visited the sample centres & neighbourhood schools for collection of data and interacted with the respondents. The purpose of the visit was explained to the respondents. After taking consent from the respondents, interview was held with them and their responses were recorded in the specified schedule. Achievement Test (written & oral) was conducted for sample learners of special training centres to know their academic performance. The secondary data were collected from Ed.CIL Office, New Delhi, NIRD Hyderabad, NCERT, New Delhi, NUEPA, K. K. Handique Library, Gauhati University, Omeo Kumar Das Institute of Social Change and Development, Guwahati, University of

Science and Technology, State Mission Office, SSA , District Mission Office, SSA , Block Mission Office, SSA, the reports/documents published by the Govt.(Central & State), school/centre records, Ed. CIL.(New Delhi), NCERT, State Council of Educational Research and Training (SCERT) etc.. Discussion with various stakeholders like State Programme Officers, State Programme Associates, Districts Programme Officers, District Quality Managers, Cluster Resource Coordinators, District Mission Coordinators, Consultants of Ed. CIL office, Officials of NCERT, NUEPA etc. were held and some vital information were collected from them. The secondary data were also collected from books, journals, research studies, guidelines, notifications etc. The investigator also collected information from internet, different educational websites etc. for the study.

Moreover, the investigator also visited the homes of some SMC Presidents for collection of information from them. Before administering the tools, the respondents were informed about the purpose of collection of data and it was assured that their responses would be kept confidential.

### **3.5 TOOLS USED FOR DATA COLLECTION:**

Special Training is one of the important provisions of RTE Act, 2009 for bringing the Out of School Children into the fold of Elementary Education. As there was no suitable tool available for collecting the required information for the present study, the researcher used self structured tools for collection of data.

For the present study, data were collected directly through Interview and Observation from core stakeholder viz Education Volunteers, Head Teachers of the neighborhood school, concerned SMC President of the schools as well as learners. Both quantitative and

qualitative tools were used to collect data. The details of self structured tools used for the study are described below:

**Table-3.2**

**TOOLS USED FOR DATA COLLECTION**

**Quantitative tools:**

<b>SN</b>	<b>Tool</b>	<b>Respondent</b>	<b>Broad nature of data</b>
1	Interview Schedule	Education Volunteers	Intervention of Special Training
2	Interview Schedule	Head Teacher of neighbourhood school	Support to the intervention, monitoring the implementation etc.
3	Interview Schedule	President, SMC	Identification and enrolment of OoSC, monitoring of Special Training Centre etc.
4	Question Paper for Achievement Test	Children	Performance in core subject viz. Mathematics & Language (Assamese).

**Qualitative tools:**

<b>Tool</b>	<b>Source</b>	<b>Broad nature of data</b>
Observation schedule	Classroom	Overall classroom functioning, environment, participation of students etc.
	Records	Age appropriate enrolment and teaching, TLP, Attendance, evaluation, IEP, academic package etc.

**3.6 CONSTRUCTION OF THE INTERVIEW SCHEDULE FOR THE EDUCATION VOLUNTEERS**

The investigator administered a self structured interview schedule for collecting required information for the study. This interview schedule was administered to collect data from



the Education Volunteers of the centres which were selected as sample for the study. The investigator studied different documents/ materials/guidelines related special training for the development of self structured interview schedule.

Seven (7) dimensions were identified and based on these seven dimensions; the investigator prepared the self structured interview schedule for Education Volunteers. The details of these dimensions are stated below:

- i. The first dimension was about general information. The total item under this dimension was 7.
- ii. The second dimension was RTE Act, 2009 & age appropriate enrolment of children and this dimension included 3 items.
- iii. The third dimension on mechanism and process of special training comprised of 18 items.
- iv. The fourth dimension was about evaluation strategy of special training learners and 07 items were included under this dimension.
- v. Fifth dimension was about attendance of special training learners covering 5 items.
- vi. Sixth dimension was about mainstreaming. This dimension consisted of 4 items.
- vii. Seventh dimension was about support after mainstreaming and linkage with neighborhood school. This included 4 items.

### **3.7 VALIDITY OF THE INTERVIEW SCHEDULE FOR THE EDUCATION VOLUNTEERS:**

Koul (2006, p. 127) states that a test is said to be valid if it measures what it claims to measure. Some steps were followed by investigator to know the validity of the Interview Schedule designed for the study. Firstly, to get firsthand experience on implementation

of Special Training intervention at field level, the investigator conducted a discussion with few field level stakeholders of Special Training viz Education Volunteers, District Quality Manager who are the main catalyst of special training at field level and gathered some preliminary knowledge and information before designing of the study. Based on experiences gathered from the field, the investigator designed draft interview schedule for the Education Volunteers.

Secondly, the investigator initially prepared 70 items in the interview schedule of Education Volunteers based on the dimensions mentioned above. The draft interview schedule was shared with 3 experts (Dr. Chhaya Konwar, Education specialist UNICEF, Assam, Dr. Vijoy Kumar, Faculty of NIRD, Hyderabad and member of EC, SSA, MHRD and Nandita Medhi, State Programme Officer, Sarba Siksha Abhiyan, Assam) having familiarity on special training intervention to determine the content validity of the interview schedule. The draft interview schedule was also shared with Prof. Polee Saikia, Department of Education, Gauhati University to offer her expert views regarding relevance of items included in the schedule. The experts had given some suggestions and as per their suggestions few modifications (addition/deletion) were made in the interview schedule. Finally, out of 70 items, 56 items were finalized by the investigator.

Thirdly, the investigator conducted a pilot study on a small group of Education Volunteers where this interview schedule was applied. The Pilot study was conducted to get essential information about actual field situation as well as to know the accuracy and validity of the tool. The findings of the pilot study were placed before the experts in the university during the presentation of six months progress work. The Experts presented in the presentation suggested the investigator to remove few less important items from the interview schedule which they did not found much relevant for the study and accordingly 47 items were finalised as per the suggestion of the experts. The continuation of further research work was done using this interview schedule with 48 items and information was collected from the target respondents. It was found that the schedule prepared for the

study could fulfil the objectives of the study and respondents actively participated during the interview taken for the study. The distribution of items as per dimensions is shown below in the table 3.3.

**Table-3.3**  
**DISTRIBUTION OF ITEMS OF THE INTERVIEW SCHEDULE MEANT FOR**  
**EDUCATIONAL VOLUNTEERS:**

SN	DIMENSIONS	ITEM NO	TOTAL NO. OF QUESTION
1	General Information about Centre & Respondent	1,2,3,4,5,6,7	7
2	RTE & Age Appropriate Enrolment	8,9,10	3
3	Mechanism and process of Special Training	11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28	18
4	Evaluation of Special Training learners	29,30,31,32,33,34,35	07
5	Attendance	36,37,38,39,40	05
6	Mainstreaming	41,42,43,44	04
7	Support after mainstreaming and Linkage with neighborhood school	45,46,47,48	04
<b>Total</b>			48

**3.8 CONSTRUCTION OF THE INTERVIEW SCHEDULE FOR THE HEAD TEACHERS OF NEIGHBOURHOOD SCHOOL:**

For collecting information for the present study, the investigator constructed another interview schedule for Head Teacher of Neighbourhood School. As per provision of RTE Act, 2009, the Out of school children should first be enrolled at age appropriate class in neighbourhood school. Only after age appropriate enrolment at neighbourhood school, the special training should be arranged to the children as per their need. The Head Teacher of

the school is responsible for smooth implementation of the special training programme. As such, Head Teacher of neighbourhood school was also taken as one of the respondents of the study. In case of construction of the interview schedule for the Head Teachers of Neighbourhood School also, the Investigator studied various materials like Gazette of RTE Act, State RTE rule, Minutes of National Review meeting, National & State level guideline of Special Training and other research literature related to different dimensions of the interview schedule and accordingly tool for Head Teacher was developed. A total of six (6) dimensions were identified and based on these six dimensions, the investigator prepared the self structured interview schedule for Head Teacher of neighbourhood school. The details of these dimensions are stated below:

- i. The first dimension was about general information of the school and respondents. 6 items were included under this dimension.
- ii. The 2<sup>nd</sup> dimension was about RTE & age appropriate enrolment and this dimension included 3 items.
- iii. The 3<sup>rd</sup> dimension was about mechanism and process of special training intervention and this dimension included 10 items.
- iv. The 4<sup>th</sup> dimension related to evaluation and this dimension included 5 items.
- v. The 5<sup>th</sup> dimension was about monitoring and support and this dimension included 5 items.
- vi. The 6<sup>th</sup> dimension was about retention of mainstreamed children and this dimension included 9 items.

### **3.9 VALIDITY OF THE INTERVIEW SCHEDULE FOR THE HEAD TEACHERS OF NEIGHBOURHOOD SCHOOL:**

The investigator depended on content validity to establish the validity of the interview schedule prepared for the Head Teachers of neighbourhood school. The investigator followed some steps to know the validity of the interview schedule designed for the Head Teacher of neighbourhood school.

**Step-I :** To get some preliminary information on implementation of Special Training Intervention under their jurisdiction, the investigator met few Head Teachers of neighbourhood school and discussed the matter of Special Training. Based on experiences gathered from the Head Teachers of neighbourhood school, the investigator designed draft interview schedule for Head Teachers.

**Step-II:** The investigator prepared 45 items in the interview schedule of Head Teachers based on the dimensions mentioned above. The draft interview schedule was shared with 3 experts (Dr. Chhaya Knowar, Education specialist, UNICEF, Assam, Dr. Vijoy Kumar, Faculty of NIRD, Hyderabad and member of EC, SSA, MHRD and Nandita Medhi, State Programme Officer, Sarba Siksha Abhiyan, Assam) having familiarity on special training intervention. The draft interview schedule was also shared with Prof. Polee Saikia, Department of Education, Gauhati University and Dr. Jugal Bora, National Award Winning Rtd. School Principal of Dubia Higher Secondary School, Biswanath District for providing their expert views regarding relevance of items included in the schedule. Some modifications (addition/deletion) were made as per suggestion of experts in the interview schedule. Finally, out of 45 items 40 items were finalized by the investigator.

**Step-III:** The investigator also conducted a pilot study on a small group of Head Teachers of neighbourhood school and this interview schedules was applied in the pilot study. This Pilot study was conducted to get essential information about actual field situation as well as properness and validity of the tool. The findings of the pilot study were placed before the experts in the university during the presentation of six months progress work. As per suggestion of the experts presented in the presentation, two items were deleted from the interview schedule which they did not find much relevant for the study and accordingly 38 items were finalised. The continuation of further research work was done and information was collected from the target respondents using this schedule. It was found that the schedule prepared for the study could fulfil extract required information as per

objectives of the study and respondents actively participated during the interview taken for the study. The distribution of items as per dimensions is shown below in table- 3.4.

**Table-3.4**

**DISTRIBUTION OF ITEMS OF THE INTERVIEW SCHEDULE MEANT FOR HEAD  
TEACHER OF NEIGHBOURHOOD SCHOOL:**

<b>SN.</b>	<b>DIMENSIONS</b>	<b>ITEM NO</b>	<b>TOTAL NO. OF QUESTION</b>
1	General Information about Centre & Respondent	1,2,3,4,5,6	6
2	Age Appropriate Enrolment	7,8,9,10	4
3	Readiness for Special Training	11,12,13,14,15,16,17,17,18,19	10
4	Evaluation of Special Training learners	20,21,22,23,24	5
5	Monitoring and support	25,26,27,28,29	5
6	Retention of mainstreamed children	30,31,32,33,34,35,36,37,38	9
<b>Total</b>			<b>38</b>

**3.10 CONSTRUCTION OF THE INTERVIEW SCHEDULE FOR SMC PRESIDENTS:**

Self structured Interview schedule meant for the SMC president neighbourhood school was developed for the study. SMC is a statutory body and SMC is responsible for overall smooth functioning of school activities as per RTE Act, 2009. They are also responsible for identification of OoSC as well as smooth implementation of special training intervention in their respective jurisdiction. Like Interview schedule prepared for Education Volunteers and Head Teachers of Neighbourhood School, the investigator studied various study materials like Gazette of RTE Act, State RTE rule, Minutes of National Review meeting, National & State level guideline of Special Training and other research literature related to different dimensions of the interview schedule was minutely

studied and accordingly tool for SMC president was developed. A total of five (5) dimensions were identified and based on these five dimensions, the investigator prepared the self structured interview schedule for presidents of SMC. The details of these dimensions are stated below:

- i. The first dimension was about general information of the respondents. This dimension included 4 items.
- ii. The 2<sup>nd</sup> dimension related to Out of School children, RTE & Special Training and this dimension included 12 items.
- iii. The 3<sup>rd</sup> dimension about monitoring and support and this dimension included 7 items.
- iv. The 4<sup>th</sup> dimension related to linkage with regular school before mainstreaming and after mainstreaming and this dimension included 3 items.

### **3.11 VALIDITY OF THE INTERVIEW SCHEDULE FOR THE SMC PRESIDENTS:**

The investigator applied the similar steps followed for Education Volunteers and Head Teachers to know the validity of the Interview Schedule designed for the SMC president. **In step-I**, the investigator visited homes of few SMC presidents to get firsthand experience and collected some information on Special Training as per discussion with them. Based on experiences gathered from this group, the investigator designed draft interview schedule for SMC Presidents.

**In step-II**, the investigator prepared 30 items in the interview schedule of SMC president based on the dimensions mentioned above. The draft interview schedule was given to the 3 experts having familiarity on special training intervention (Dr. Chhaya Knowar, Education specialist UNICEF, Assam, Dr. Vijoy Kumar, Faculty of NIRD, Hyderabad and member of EC,SSA, MHRD and Nandita Medhi, State Programme Officer, Sarba Siksha Abhiyan, Assam). The draft interview schedule was also shared with Prof. Polee

Saikia, Department of Education, Gauhati University to give her expert views regarding relevancy of items included in the schedule. Some modifications (addition/deletion) were made as per suggestion of experts. Finally, out of 30 items 26 items were finalized by the investigator. These 26 items were taken for conducting interview with SMC Presidents.

**In step-III**, the investigator conducted a pilot study and this interview schedules was applied in the pilot study conducted on a small group of SMC Presidents. The Pilot study was conducted to get essential information about actual field situation as well as properness and validity of the schedule prepared for SMC President. The pilot study showed that this schedule was appropriate to achieve the objective of the study which was intended by investigator to measure. The findings of the pilot study were placed before the experts in the university during the presentation of six months progress work. The continuation of further research work was done and information was collected from the target respondents as per suggestion of experts. It was found that the scheduled prepared for the study could fulfil the objectives of the study and respondents were actively participated during the interview taken for the study. The distribution of items as per dimensions is shown below in the table 3.5

**Table-3.5**  
**DISTRIBUTION OF ITEMS OF THE INTERVIEW SCHEDULE MEANT FOR SMC PRESIDENT:**

SN	DIMENSIONS	ITEM NO	TOTAL NO. OF QUESTION
1	General Information on Respondent	1,2,3,4	4
2	Information on identification of Out of School children	5,6,7,8,9,10,11,12,13,14, 15,16	12
3	Monitoring and support	17,14,16,17,18,19,20,21,22,23	7
4	Linkage with regular school before mainstreaming and after mainstreaming	24,25,26	3
		<b>Total</b>	<b>26</b>



### 3.12 CONSTRUCTION & ADMINISTRATION OF ACHIEVEMENT TEST FOR SPECIAL TRAINING LEARNERS:

#### 3.12.1 DESIGNING OF TEST:

One of the important aspects of the present study was to assess the academic achievement of special training learners. To know the achievement/performance level of learners, the investigator constructed self structured separate tools/ Questionnaires for Language-I (Assamese) and Mathematics subject for class- III & VI . The performance level of the learners was examined through administering test. The Language test consisted of both written & oral part. The class wise numbers of items included in the achievement test was as follows:

**Table-3.6**

**TOTAL NUMBER OF ITEMS & SUB-ITEMS FOR ACHIEVEMENT TEST OF THE LEARNERS**

Class	Number of Items/Sub-Items				
	Language-I (Assamese)			Mathematics	
	Writing		Reading (Para with five sentences)		
	Items	Sub-Items		Items	Sub-Items
III	9	28	1	10	28
VI	9	20	1	10	32

The total mark of the test was as follows:

**Table-3.7**

**TOTAL MARKS FOR ACHIEVEMENT TEST OF THE LEARNERS**

Class	Subject	Total Marks
III	Language-1 (Assamese)	50
	Maths	50
VI	Language-1 (Assamese)	50
	Maths	50

Subject wise coverage of competencies/learning points in the achievement test was as follows:

**a) Language – 1:**

Children’s achievement in Language-1 was assessed through reading and writing tests.

- **For Reading:** A small paragraph with five sentences was used for assessing reading skill. Parameters like proper pronunciation (identification of proper alphabet), reading pace, use of punctuations; proper intonations etc. were used while assessing reading skill.
- **For Writing:** Writing items were prepared as per class wise learning indicators. Class wise nature of items for writing was as follows:

**Table-3.8**

**CLASS WISE NATURE OF ITEMS FOR WRITING**

SN	Class	Items
1	III	Word construction, use of vowels symbols, sentence construction, synonyms, opposite words, expression in one word, conjunct letter, writing about himself/herself etc.
2	VI	Conjunct letter, sentence construction, use of singular & plural form, tense, synonyms, opposite words, expression in one word, word meaning, dates of important days etc.

**b) Mathematics:**

For assessment of performance in Mathematics, items were developed to assess the ability of the students to deal with number knowledge, concept of shape and pattern, operation of numbers like addition, subtraction, multiplication, fraction, decimal , measurement of length, concept of weight, problem solving etc. The items were prepared as per grade wise learning indicators.

### **3.12.2 PROCESS OF CONSTRUCTION OF TEST ITEMS:**

The test items were prepared as per competencies/learning indicators of the sample class of special training centres. As the medium of instruction of learners of sample centres was Assamese, the tools of achievement test were constructed in Assamese language. Provision was made to answer the items in the question paper itself.

### **3.12.3 PROCESS OF ADMINISTRATION OF THE TEST:**

The investigator personally visited all sample Special Training Centers and administered the test. Before conducting the test, congenial environment was created and necessary instructions were given. The total time given for the test was 1<sup>1</sup>/<sub>2</sub> hours.

### **3.12.4 SCORING OF THE TEST:**

The items of the test were of different nature. For writing test, each item had different number of sub-items ranging from 2 to 5. The marks were allotted against each sub item for writing test. The achievement score against different numbers of items (sub-item wise) were given as per correct responses of the respondents. For each correct answer full marks and for wrong answer zero mark was given. The item-wise percentage (%) of the score of the respondents was calculated accordingly.

For reading test, a paragraph having five sentences was used and marks were allotted against each sentence. Full mark was given if able to read properly and fluently, half mark was given if partially able to read and zero mark was given if not able to read.

The investigator also calculated percentage of achievement of learning competencies sub-item wise. The percentage (%) of number of correct sub-items was calculated as (a) all sub-items (b) only one sub-item (c) none.

### **3.13 STANDARDIZATION OF THE ACHIEVEMENT TEST:**

#### **3.13.1 RELIABILITY OF THE ACHIEVEMENT TEST:**

A test is called reliable when we have reasons for believing the score to be stable and trustworthy (Garrett, 1981). Reliability further refers accuracy in measurement or consistency of scores which defers same result in repeated test/assessments.

In the present study, the reliability of the test was determined by using test-retest method. Since in test-retest reliability, the same test is to be administered twice on the same group of respondents with a reasonable time gap, the investigator administered the tools on the same group of respondents after a period of 2 months. The responses of the second test were compared with the responses of the first test. This was done using the Pearson Product-Moment Correlation Coefficient ( $r$ ). The reliability of the test (class & subject wise) was found as below:

**Table:3.9**  
**RELIABILITY OF THE TEST (CLASS & SUBJECT WISE)**

<b>Class</b>	<b>Subject</b>	<b>Reliability</b>
<b>III</b>	Language(Assamese)	0.74 to 1.00
	Mathematics	0.99 to 1.00
<b>VI</b>	Language(Assamese)	1.00
	Mathematics	1.00

Thus, the result of the test showed that the test is highly reliable.

#### **3.13.2 VALIDITY OF THE ACHIEVEMENT TEST:**

For content validity of the achievement test, the investigator thoroughly studied the academic package (condensed materials) of special training centres. The draft question papers constructed for measuring achievement of learners were shared with the five experts (L.K. Das, faculty of SCERT, Assam who was involved in preparation of

Condensed book, learning materials etc. of Special Training Intervention, Dr. Jutiphul Baruah, Lecturer, SCERT, Assam, Haren Pathak, Rtd. faculty of DIET, Barpeta, Prof. Polee Saikia, Deptt. of Education of Gauhati University and Dr. Chhaya Konwar, Education Specialist, UNICEF, Assam) for their expert views regarding relevance of items included in the question papers. Some modifications (addition/deletion) were made as per suggestion of experts.

As per suggestions of experts, continuation of further research work was done and information was collected from the target respondents. It was found that question papers prepared for the achievement test were as per the specific objective of the study and respondents actively participated during the test taken for the study. The distribution of these items according to various skills of the questionnaire is shown below in table 3.10:

**Table -3.10**  
**SUBJECT & SKILL QUESTIONS**

SI	Class	Subject	Skill	QUESTION NO.	TOTAL NO. OF QUESTION
1	III	Language-1(Assamese)	Writing	1,2,3,4,5,6,7,8,9	09
			Reading (one para)	10	01
		Mathematics	Mathematical operations	1,2,3,4,5,6,7,8,9,10	10
2	VI	Language-1(Assamese)	Writing	1,2,3,4,5,6,7,8,9	09
			Reading	10	01
		Mathematics	Mathematical operations	1,2,3,4,5,6,7,8,9,10	10

**3.14. CONSTRUCTION OF THE OBSERVATION SCHEDULE FOR SPECIAL TRAINING:**

In the present study, the investigator also used an observation schedule in order to get valid and reliable information on different aspects of special training intervention under RTE Act, 2009. The major areas of observation schedule were overall classroom functioning, environment, participation of students, age appropriate enrolment and

teaching, TLP, Attendance of learners, evaluation process of special training, use and maintain of IEP, use and transaction of academic package, mainstreaming & retention of children, etc. Observation was done through classroom observation & checking of records of special training.

The observation schedule is attached as Appendix - D.

### **3.15 VALIDATION OF THE OBSERVATION SCHEDULE FOR SPECIAL TRAINING CENTRES:**

On the basis of first hand experiences from the field, literature analysis and meticulous consultation with guide and experts, the investigator prepared an Observation Schedule to collect the information on implementation of activities of special training intervention. This schedule was also applied in the pilot study conducted in the district. Findings of observation were recorded during pilot study and placed before the experts in the university during the presentation of progress work. As per suggestions of experts, continuation of further research work was done and information was collected from the target respondents using same observation schedule.

### **3.16 STATISTICAL TECHNIQUE USED FOR ANALYSIS OF DATA.**

Editing, coding, classification and tabulation of the data are main part of data analysis. In present study, the data collected from Education Volunteers, Head Teachers, School Management Committee Presidents and children was summarized and presented in the tabular form. For the present study, both qualitative and quantitative analysis was done. Quantitative analysis was done using proper simple statistical technique like percentage etc. Quantitative interpretation was done through Bar Diagram, Pie diagram, charts etc. The investigator made an attempt to give a detailed analysis of data collected through interview, observation and achievement level of learners. The details of which are given in the subsequent chapters.