

Chapter III

Methodology

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The thematic framework (Chapter I) and review of related literature (Chapter II) provided some pointers to address the research questions. These have helped in evolving methodology for the present study in terms of objectives, sample, tools for data collection, process of data analysis and interpretation. Chapter III titled methodology presents these under headings: objectives of the study, research design, data collection process and the procedure of the data analysis.

3.0 Statement of the Research Problem

Understanding the Nature of Participation of Learners in Elementary Education in
Municipal Schools of Surendranagar

3.1 Objectives of the study

In view of the research questions raised, the objectives of the study are stated as follows:

- To study the background of learners who have completed primary education in municipal schools of Surendranagar city in terms of:
 - Growth indicators of learners
 - Profile of learners
 - Family profile of learners
 - House profile of learners
- To study the school profile of municipal schools of Surendranagar city in terms of:
 - Facilities in school
 - Learning engagement with respect to

- Teaching learning
- Teacher learner relationship
- Discerning participation of learners in elementary education as an interplay of; background of learners - growth indicators of learners, profile of learners, family, house and school profile

3.2 Explanation of Terms

The terms used are explained in the specific context of the study.

Nature of participation of learners in school: Participation refers to interplay between learners and school environment. More specifically it refers to (i) attending school regularly (ii) attend full working day in school regularly (iii) get involved in academic and other activities of school –teaching learning process, interaction with peers and teachers asking questions freely within and outside classroom formally and informally and academic performance.

Learning engagement: Learning engagement is explained in terms of teaching learning process and teacher learner relationship as perceived by teachers, learners, principals and parents.

3.3 Hypothesis

Nature of participation of learners at elementary school level is dependent upon learner's background as well as school environment.

3.4 Research Design

The present study is descriptive study and details are presented below.

3.5 Variables of the study

Independent variable

Profile of learners, growth indicators of learners, family profile of learners, house profile of learners, facilities and learning engagement in school

Dependent variable

Nature of participation of learners in school

3.6 Nature of data

The nature of data for the present study is described below.

- The data related to background of learners and facilities in school were descriptive and numerical.
- The data related to learning engagement were in verbal form.

3.7 Sources of data

The sources of data for the present study are described below:

- The data related to background of learners were obtained from learners and school documents.
- The data related to facilities available in school were obtained from principals as well as teachers.
- The data related to learning engagement in school were obtained from learners, teachers as well as principals.

3.8 Population

The population of the study comprised the following:

- All the learners enrolled in municipal elementary schools of Surendranagar district.

- All the teachers of the learners of standard VIII of municipal elementary schools in Surendranagar district
- All the principals of the municipal elementary schools of Surendranagar district.
- All the parents of learners enrolled in municipal elementary schools of Surendranagar district.

3.9 Sample

There were 22 municipal elementary schools in Surendranagar city which had classes I to VIII. All the 22 schools having classes I to VIII were selected as sample.

The study required the information regarding the learners and their experiences during elementary education. For this, it was essential that learners' stay in school was long enough for them to form a fairly clear perception of their school experiences. Therefore, the focus was on learners who had completed their elementary education in the same school in Surendranagar city specifically. And so, it was appropriate to select all the learners who enrolled in the year 2010 – 11 in Class I and were in class VIII in 2017-18, for the present study. Thus, there are 490 learners who were in class VIII without dropping out and completed their elementary education in the same school. All the 490 learners formed sample.

The teachers, who had taught the learners taken as sample, were the ones who had interacted with the learners during school hours. The teachers, who had minimum eight years of experience with the sample learners, not only interacted with them but also had been witness to their participation during the eight years of elementary education. These teachers have taught learners who are currently in class VIII and also have experience of

teaching in the same school for a minimum eight years. Thus, there were 63 teachers across 22 municipal elementary schools who have taught the learners are taken as sample; having experience of teaching for more than eight years in the same school. Out of 22 municipal schools, School G and School K did not have teachers who taught for continuous period of eight years in the same municipal school.

All the principals of the 22 municipal elementary schools were selected as they could provide information regarding administration which could influence the learners' completion of elementary education.

Parents were identified as sample based on the academic achievement of the top five percent of learners in class VII from each school. In this way, 35 parents of learners were identified as sample.

Thus, the sample comprised:

- 22 municipal elementary schools
- 490 learners studying Class VIII
- 63 teachers who had taught sample learners during LP and UP levels
- 22 principals of the municipal elementary schools and
- 35 parents of learners

The list of 22 municipal elementary schools, a list of teachers, a list of 22 principals and a list of learners whose parents were interacted, are given in Appendix F.

3.10 Tools of data collection

In view of the nature of data and sample, the tools were developed.

The data related to background of learners required data related to learners' participation in school, learners' family and house. As the source of data was learners, it was important to develop a tool which the learners could understand and provide their responses accordingly. A composite Proforma was developed for background of learners in terms of growth indicators and profiles of learners, family and house. The Proforma was developed such that it was easy and convenient for the learners to give information. It required the learners to put a tick mark as response for the required information. A team comprising 5 experts helped in the task of ascertaining content validity of the Proforma. The proforma was also administered on 124 learners of municipal elementary schools of Surendranagar city as pilot study on learners of class VIII in the academic year 2016-17 who had continued in school for eight years but with the aim of keeping the sample of pilot study different from the sample of the present study. After getting experts' feedback and discussion, items were modified accordingly and the options were provided to items in such way that learners could answer all items easily and final proforma was prepared. A copy of the composite Proforma is presented in Appendix G

A Check-list was prepared for obtaining data about the facilities in school. This was done on the basis of the official documents specifying facilities to be provided in elementary schools under the current schemes and consultation with a team of 5 experts. The Check list was administered in three municipal elementary schools of Surendranagar city as pilot study in the academic year 2016-2017. After discussion and experts' feedback, items were finalised. The final checklist was prepared. A copy of the Check-list is given in Appendix G.

The data for learner engagement in school required details about teaching learning and learner participation in it. Besides, it was also necessary to focus on the nature of teacher learner relationship as perceived by teachers, learners and principal. These data were in form of verbal expressions about perceptions of different sources about learners' learning engagement. As the responses of each source would be essentially based on persisting memories, it was necessary to provide several probing pointers to aid it. Hence, informal interactions were held with learners, teachers, principal and parents. Informal interaction was used for collecting data on learning engagement as perceived by learners, teachers, principals. These interactions were broadly guided by two questions: 1) What was the nature of learner engagement in all school activities particularly teaching learning? 2) What could be reasons for learners coming to school and for continuing in the school for eight years?

As the researcher needed some initial exercise in carrying on informal interactions in a focused manner, it was tried on ten learners, one teacher of Municipal elementary school Surendranagar city and two principals of municipal elementary schools of Vadodara city. After discussion with experts and receiving their feedback, the manner of asking questions and the framing of the questions were appropriately modified. The list of questions used in informal interactions is attached in Appendix G.

In short, the tools for data collection used for the present study were:

- Proforma for background of learners in terms of 1) Growth indicators of learners, 2) Profile of learners, 3) Family Profile and 4) House Profile
- Check list for facilities in school

- Informal interaction with learners, teachers, principals and parents for learning engagement in terms of teaching learning and teacher learner relationship

3.11 Collection of data

The data have been collected as follows.

Background of learners

The data of background of learners were collected through Proforma in terms of receiving information related to Growth Indicators of learners, Profile of Learners, Profile of Family and Profile of House.

The data for background of learners were gathered by distributing Proforma among sampled learners identified from each school. The learners were given proper instructions on how to fill the Proforma and purpose of sharing this information. They were asked to fill up the information in Proforma with the help of parents and/or teachers. The learners were asked to bring the filled in Proforma the next day. The learners who submitted forms with incomplete information were returned to them and were asked to complete. These learners were asked to take help of either teachers or investigator. The learners who were not present on the day were approached the day they were present, and the data related to their background were collected. The data related to age, regularity and academic performance of learners were gathered from school documents provided by principals and recorded. The data related to growth indicators, family and house were received from learners. The learners sought help of their parents to provide information related to family. As the data were collected from schools, the investigator visited each school two to five times and spent a minimum of three hours per visit depending upon the number of learners and as per the time given by the principal. Complete data of academic

performance and attendance of the learners of all Grades from Grade I to Grade VII were not available either at school level or at the block level. The data for academic performance and attendance of learners of only Grade VII, that is, academic year 2017-18 are taken. This, it is contended, represents the total accumulated learning of learners.

Facilities in school

Facilities in school in terms of learning support, physical space, health and sanitation were collected with Checklist.

Along with the data collection for background of learners, second phase of data collection was to collect data for facilities in school. The investigator recorded the facilities available in school by checking personally as per the facilities listed in Checklist. This was further confirmed with either the principal or the teachers wherever required. The investigator has sought help of principal as well as teachers for the items such as library books, TLM, sports equipment and musical instruments. The data related to facilities in school were collected along with the data of background of learners. The investigator visited each school for one full working day.

Learners' Learning engagement in School

The data for learners' learning engagement in school in terms of teaching learning and teacher learner relationship were collected from learners, teachers, principal and parents. The data from different sources have been collected and presented hereunder separately.

First, the data were collected from learners of all schools through informal interactions in a group of six to eight learners. School principals of some schools recommended to collect data from boys and girls in separate groups. The learners who were absent on the day of interaction were approached on the day they were present in the school. The

learners who did not interact much were approached a second time with the permission of the principal. The responses of the learners were recorded in written form and in some of the schools, it was also recorded in audio form with the permission of principals. The investigator visited each school for a minimum of seven times and spent time of minimum two to five hours a day interacting with learners.

After having completed interactions with learners of all the schools, the teachers of each school were interacted with in person. The interaction with teachers was initiated strictly after obtaining the permission of the principal first and appointment given by teachers. The interaction with teachers was for minimum two times and for a minimum one to two and half hours.

Afterwards, the interaction with school principal was initiated in person about the learning engagement of learners. This generally was for a minimum period of one and half hour with each principal. The perception of teachers and principals towards the learning engagement was recorded in written form and in some cases also recorded as audio form after the permission of principals.

In the end, interaction with the parents was conducted in school and in some cases at their residence. Principal and teachers provided help to investigator in approaching parents. The interactions with parents have been recorded in written form and in some cases in form of audio recording. The interaction with parents required minimum half an hour at one visit in most cases.

3.12 Data Analysis and interpretation

The data collected from various sources were analyzed in phases.

Phase I

The procedure followed for developing the background of learner and facilities in school is given below.

All the schools, learners, teachers, principal, teachers and parents were given codes. Each 22 school is given Codes in alphabets from A to V. The initial letter of teachers' code is 'code of school' followed with 'T' and number given to the teacher in the end based on the total number of teachers in specific school. For Example, AT1 refers to teacher 1 of School A, AT2 refers to teacher 2 of School A and BT1 refers to teacher 1 of School B. The initial letter of Principal's code in 'P' is followed by code of the specific school. That is PA refers to Principal of School A and PB refers to Principal of School B.

Here after, each learner, teacher, principal and parent have been referred to by their code number. Lists of schools with their codes, list of teachers with their codes, list of principals with their codes and list of learners whose parents were interacted, with their codes are given in Appendix A. The code of parents is code of learners' whose parents were interacted.

With respect to the background of learners, for each variable – Growth Indicators of Learners, Family Profile, House Profile and Learners' Profile, there was learner wise data obtained from each school. The Growth Indicators of learners, as already stated, has been seen in respect of gender, age, height and weight of learners. The Growth Indicators of learners, as already stated, have been seen in respect of gender, age, height and weight of learners. Data regarding age of learners showed that they could be grouped into three years, viz., 12 years, 13 years and 14 years or more. Similarly, learners could be divided into three groups in terms of their height in centimetres and three groups in terms of their

weight in kilograms. Height of the learners has been observed through the class intervals in centimetres (cms). Weight of learners has been observed through four class intervals in kilograms (kgs). The data of height and weight of learners have been collated as class intervals.

The Family Profile, as already stated, is seen in terms of religion, caste, type of family, number of family members, number of siblings, number of earning members, income of mother, father and other member, occupation of mother, father and other member as well as education of father and mother. The number of family members, number of siblings and income were clustered into class intervals whereas religion, caste, type of family, occupation and education were taken as they were. The House Profile of learners has been considered in terms of kind of house, space availability in house, resources available at home as well as availability of electronic equipment and vehicles. Kind of house was defined in the form of categories such as own house, rented house, pucca house and kuchha house. Space availability in house in terms of number of rooms was converted into class intervals. Space availability in house in respect of separate kitchen in house, bathroom and toilet; resources at home in terms of water availability, individual source of water and availability of electricity have been seen for the availability only. Electronic equipments such as television, refrigerators, Air cooler, mobile, computer, internet, fan and radio have been recorded as to their availability. Availability of vehicles are seen in respect of bicycle, two wheelers, four wheelers and other, if any.

Facilities in school are presented in terms of availability of physical space, learning resources, health and sanitation facilities. The physical space in school is seen in terms of availability of pucca building, computer lab, separate classrooms for each class,

playground and boundary wall. Learning resources in the school are seen in the form of number of computers, fan, tubelights, chalkboard, chalk, duster, furniture (cupboard, table and chairs), library and TLMs. Health and sanitation facilities have been seen in respect of the availability of separate kitchen, separate toilets for boys and girls, water supply, hand wash facility and drinking water.

For analysis, frequency tables for each school were prepared variable wise. The frequency tables were separated and presented as per specific variable covered under each of the 3 Profiles of background of learners. Finally, Growth Indicators of learners, Profile of Learners, Profile of Family and Profile of House were developed. The tables presenting school wise data for background of learners consisting of growth indicator of learners, family profile, house profile and profile of learners are presented in Appendix A, Appendix B and Appendix C. Frequency Tables for background of learners and facilities in schools are made in order to describe the distribution of sub variables across sample. As the data deals with the frequency of occurrences, frequency tables were appropriate to analyse the data.

Phase II

The data were collected from the sources such as students, teachers and principals through informal interactions. From this, the data on learning engagement related to teaching learning and teacher learner relationship have been separated.

There were total 63 teachers taken as sample from 22 elementary schools who taught learners during their elementary years. Out of 63 teachers, 31 teachers taught at lower primary (LP) level, 25 teachers taught at upper primary (UP) level and 7 teachers taught at both LP and UP levels. These teachers dealt with one or more subjects at each class level as well as across classes. All the responses related to teaching learning in respect of

the subjects they dealt with and teacher learner relationship were listed teacher wise, for the sample learners. Their responses were consolidated in terms of teaching learning they adopted irrespective of any subject for lower primary (LP) and upper primary (UP) and teacher learner relationship in respect of each of the 22 sampled schools.

There were 490 learners in 22 municipal elementary schools in Surendranagar who have continued elementary education in same school from 2010-11 to 2017-18. Each learner was asked questions on teaching learning and teacher learner relationship through prolonged interaction with them in the group of eight to ten learners. The focus of the interaction was limited to teaching learning and teacher learner relationship as perceived by learners. Their responses were recorded in writing. All the responses related to teaching learning and teacher learner relationship were separately listed school wise.

Each Principal was asked question on various things through prolonged interaction with them and responses were recorded and listed down in written. All the responses related towards teaching learning method were listed Principal wise for the kind of initiatives schools had been taken to improve teaching learning in the school. The responses were consolidated in terms of teaching learning across all principal of 22 sampled schools.

The parents of the learners were asked questions about learning engagement of learners in school during elementary education. All responses were recorded and listed down in written. All the responses of parents were listed parents wise. The data were consolidated in terms of learners' learning engagement of sampled learners.

The procedure followed for this was that data from each source were first scrutinised through content analysis. The data from each source were collated into clusters of similar

perceptions and were grouped together as categories identified from the data. After this, the frequencies of each response from each source were tallied separately. Frequencies of responses across all these categories were added and tables were prepared for each source separately. After this, data from each source were cross collated for each category or cluster. This was done to discern possible areas of concurrence in the perceptions of different stakeholders about the process as well as learner participation.

Phase III

In order to discern the nature of participation of learners, the data for Objective 1 and Objective 2 were collated and attempt has been made to arrive at a composite view and is presented at appropriate places. Data received for learners' profile and school profile have been placed together with the opinions received from students, teachers, principals and parents. The purpose of collating these data was to identify different kinds of combinations that emerge revealing a co existence of particular aspects in case of learners completing eight years of elementary education.

Data as per above description are presented in detail and analysed in Chapter IV. Attempt has been made to interpret data which are analysed and search for answers to the research questions raised earlier.