

CHAPTER-III

METHODOLOGY

3.0 Introduction

Methodology depicts the process and procedures adopted by the researcher to achieve the objectives during the entire research work. This chapter gives an overall picture of the design of the study, objectives of the study, steps involved in making the tools for data collection. It also refers to the description of procedure of data collection and data analysis techniques used for analysis of data from different data sources for interpretation of the results.

The present study on “A Study of English Writing Skills of Standard IX Students of Kodagu District, Karnataka” helps in understanding the academic achievement of students of standard IX in English writing skills. It also helps in understanding the influence of location, medium of instruction, types of school and types of writing tasks on the achievement of the students English writing skills. Further this study probes into the reasons that effected the students writing skills both positively and negatively.

This Chapter deals with the following sections.

- Methodology
- Design of the Study
- Population and Sample
- Tools and Techniques of Data Collection
- Techniques of Data Collection

3.1 Design of the Study

As per the objectives, **Descriptive Survey** and **Case Study** was used for the present study. As this study involved a big sample and large data sources, descriptive survey seemed to be the most appropriate method of study. To probe deeper into the problems faced by students and teachers in English writing skills case study was conducted.

The aim of the study was to gather information about the achievement of the students of grade

IX students in Kodagu district in English writing skills with respect to location of the school, medium of instruction and types of school. For this a survey was conducted and the data for the same was collected using the achievement test and a rubric for English writing skills. With the help of the derived data number of schools were found to be high achieving schools and a few were found to be low achieving. Hence to further probe deeper a case study was conducted by selecting four high performing schools and four low performing schools so as to identify the reasons for the disparity in the achievement level among the students in their English writing skills. Case study was conducted with the help of error analysis, questionnaires for teachers and students, interview schedule and class observation.

3.2. Population

The population of the present study includes of 95 secondary government and government aided schools of Kodagu district. A total number of 5,700 students of class IX constitute the population. A detail of Taluk wise total schools is shown in following table.

Table 3.1
Details of Population of the Study

Sl. No	Taluk	Government	Government-Aided
1.	Madikeri	11	18
2.	Somwarpet	23	15
3.	Virajpet	13	15
Total		47	48
Total No. Of Secondary Schools		95	

As the present study included school from three districts, which included both Kannada and English medium schools and government and government aided schools.

3.3. Sample

3.3.1 Sample for Survey

For the present study the researcher followed Multi-stage Sampling. The detailed description of Multi-stage Sampling is given below.

Stage 1: Out of Ninety five secondary schools, 35 percent schools, i.e. 33 secondary schools were selected randomly from each taluk of Kodagu District.

Stage 2: From each taluk i.e. Madikeri which will be called as T1, 10 schools were randomly selected. Similarly, from Virajpet taluk T2, 12 schools and Somwarpet taluk T3, 11 schools were randomly selected.

Stage 3: From each taluk, schools were randomly selected further based on school type. From T1, five government schools and five government aided schools were selected. From T2, six government and six government aided schools were selected. On the similar note from T3, five government and six aided schools were selected.

Stage 4: As a final stage, medium of instruction were considered. From T1 schools, seven Kannada medium and three English medium school were selected. Among the T2 schools, seven Kannada medium and five English medium schools were selected. Finally from T3 schools, six Kannada medium and five English medium schools were selected.

3.3.2 Sample for Case Study:

The sample for case study was derived with the help of the achievement test marks. A total number of eight schools were selected. Among the eight schools four schools were high performing schools and the other four were low performing schools.

The sample for the case study consisted of eight schools with eight English teachers, four teachers were from high performing schools and four from low performing schools. Total number of students involved in the case study was 364 students among which the students from high performing schools comprised of 161 students and 203 students from low performing schools.

3.4 Tool and Techniques

The most important part of the research is Data collection. Devising the appropriate tools and using suitable measuring techniques are the prerequisite of any data collection. As the present

study involved a survey and a case study the following tools and techniques were used for data collection.

Tools for Survey

- i. Achievement Test
- ii. Rubric

Tools for Case Study

- i. Questionnaire for Teachers
- ii. Questionnaire for Students
- iii. Semi-structured interview for Teachers
- iv. Field Diary
- v. Error Analysis Sheet

The above mentioned tools were prepared by researcher and validated by the experts (*Appendix XI*). With the help of the feedback from the experts and valid suggestions from the guide the tools were finalized. The detailed description of the tools are presented as follows:

3.4.1 Tools for Survey

3.4.1.1 Achievement Test

The writing activities incorporated in the grade IX textbook was considered the base for the Achievement test. The main purpose behind the preparation of this Achievement test was

- To measure the achievement of the students of grade IX in English writing skills.
- To identify and analyse the errors made by the students in their writing tasks.

Steps for preparing for Achievement Test

For the preparation of the achievement test the basic principles suggested by **Gronlund (1968)** was considered.

- **Step one: Expected Learning Outcomes**

According to Gronlund, Achievement test should measure clearly defined learning outcomes that are in harmony with the instructional objectives. In the present study

the test items were selected based on the Learning Standards in English language Education in schools in Karnataka (2012-2013) that were set for standard IX.

- **Step Two: Selection of the types of writing topics**

The second step mentioned was that the achievement test should measure an adequate sample of the learning outcomes and subject-matter content included in the instruction. In the Grade IX text book six types of writing activity were found. The writing activities are Dialogue writing, paragraph writing, letter writing, story writing, essay writing and summary writing.

- **Step Three: Preparation of Draft 1**

Further the achievement test was supposed to include the types of test items which are most appropriate for measuring the desired learning outcomes. Considering this part, the three types of writing tasks were selected which were considered as ones that could help the researcher in determining the writing ability of the students. Among the six writing activities dialogue writing, paragraph writing, letter writing, 2 story writing and an essay writing were included for the first draft (*Appendix II*). These writing task topics were randomly selected and rubric was used for making the test reliable.

- **Step Four: Pilot Study**

As the fourth step included designing of the achievement test in such a manner that the results would fit the particular uses. The present achievement test prepared was in fact result oriented and the results were considered to help the investigator to identify the area of difficulty in the writing task. For this the tool was implemented on a sample of 30 students of class IX . These students were not the part of the 1373 students selected for the final implementation. With the help of the pilot study the test item and the time of the test was reduced.

- **Step Five: Validation of the Tools**

The fifth step involved achievement test to be made as reliable as possible and should

then be interpreted with caution. So the tools were given to the experts for validation. For the scholarly construction of the tool, six Experts in English and three experts from the field of education were consulted for the validation of the tool. The experts gave suggestions regarding length and time taken for the test.

Suggestions Given By Experts For Modification In The Achievement Test

- Reduce the number of writing task
- Story writing topics are repeated
- Reduce marks from 100 to 50 or 60
- Change the dialogue writing topic

The suggestions of the experts were considered and required changes were made and the final draft of the achievement test was prepared. Out of six writing tasks only three were considered in the final draft which consisted of a letter writing, story writing and an essay writing (*Appendix – III*).

Table: 3.2
Format of Final Draft of the Achievement Test

Sl. No.	Type of Writing Task	Marks Allotted
1.	letter writing	20
2.	story writing	20
3.	essay writing	20
Total		60

3.4.1.2 Rubrics

Description of the Rubric Scale Used

There are a varied number of analytic rating scales that have been used to evaluate writing ability in EFL academic contexts. Among them the most well-known and widely used scale is ‘ESL Composition Profile’ recommended by Jacobs et al. (1981). In the present research, to assess the writing ability of the students a modified version of the ‘ESL Composition Profile’ was used. The basic concept and components of the ‘ESL Composition Profile’ was

used without any changes. However, the descriptors and marking scheme were modified in accordance to the need of the present study. The components of this composition profile is divided into five major writing components:

- Content
- Organization
- Vocabulary
- Language
- Mechanics

Each component in a level has clear descriptors of the writing proficiency and a numerical scale to evaluate the writing task of the students.

This rubric helps analysing the purpose of learning and the degree of its achievement. This rubric not only helps teachers but also the parents and learners alike. Rubrics is an evaluation tool that depicts the criteria for performances at various levels and is a performance based assessment process that accurately reflects exact skills, work habits and learning results.

Steps for preparing Rubrics

For the preparation of the rubrics for writing skills the basic principles suggested by Mertler (2001) was considered.

Step one: Examine the learning objectives to match the scoring guide with the objectives and actual instruction. In the present study the learning objectives for the writing skills were re-examined and was matched with the scoring guide.

Step two: Identifying specific, observable attributes to see the student's demonstration in their product, process, or performance. Here the researcher identified the specific attributes especially the characteristics that the researcher will be looking for.

Step three: Deciding with the characteristics that describe each attribute and Identifying ways to describe above average, average, and below average performance for each observable

attribute identified in Step two. For the present rubric the attributes such as Excellent, Good, Fair, adequate and Unacceptable.

Step four: Furnishing with narrative descriptors for excellent work and poor work for each individual attribute. Describe the highest and lowest levels of performance using the descriptors for each attribute separately. The researcher based on the type of writing formulated the descriptors for the highest and lowest levels of performance

Step five: completing the other levels on the continuum that ranges from excellent to poor work for each attribute. Write descriptions for all intermediate levels of performance for each attribute separately. On a similar note descriptors were formulated for all levels ranging from Excellent to Unsatisfactory and also the scores were decided for each level ranging from zero (unacceptable) to four (Excellent)

Step six: Collect samples of student work and revise the rubric, as necessary. Be prepared to reflect on the effectiveness of the rubric and revise it prior to its next implementation. For this the rubrics were used in the pilot study and relevant changes were made which was further validated by the experts. (*Appendix-IV*)

Suggestions Given By Experts For Modification of Rubrics

- The descriptors for organisation lacks clarity.
- Under the fair criteria vocabulary lacks clarity
- Descriptions for mechanics should include descriptors on handwriting.

Based on the suggestion the second draft of the rubrics was prepared. (*Appendix-V*)

3.4.2 Case Study

As the second part of the present study, case study was taken up. The objective of the case study was to probe deeper to identify the reasons for the varied differences in the achievement of students in different schools.

3.4.2.1 Purpose of Case Study

The aim of the case study was to probe deeper to identify the reasons for the disparity in the

achievement level among the students in their English writing skills in different schools. To get a clear picture of the reasons for the differences four high performing schools and four low performing schools were selected for Case study. To cross check the derived data and to elicit maximum responses from the students and the teachers error analysis, questionnaires for teachers and students, interview schedule and class observation.

3.4.2.2 Steps involved in Case study

The following are the steps involved in case study

Step one: Identify intent and the type of design

As the first part of the step of case study the investigator felt the need of conducting a case study to probe deeper to know more about the English writing skills of the students. The achievement test which was the first part of the research barely gave an idea about the level of achievement of the students and the investigator felt the need to know the reasons for the disparity in achievement in writing skills of the students in different types of school and medium.

Step Two: Approval and Access consideration

For the present study the schools for case study was selected based on the achievement results. schools which had the mean score under Q1 and four schools which had the mean score above Q3 were selected for case study. To conduct the case study in these schools the approval was taken from the institutional head. The school was also guaranteed less disturbance and following of ethical values by guaranteeing privacy and anonymity.

Step Three: Using appropriate data collection procedures

To collect the data for the case study appropriate tools were prepared and used. For the purpose of case study, the following tools were prepared and administered

- Error analysis using the achievement test data
- Questionnaire for teachers
- Questionnaire for students

- Semi- structured Interview schedule for Teachers
- Class observation

Step Four: Analyze and interpret data within a design

To get a better picture of the reasons for the disparity in the achievement in different types of schools the data was tabulated. All the tools prepared was analyzed separately and then a cross case analyses and interpretation was done.

Step Five: Write the report consistent with the design

The results of the study is enriches the knowledge about the reasons that contributed for high or low performance of the students in English writing skills. Moreover, the report discusses the critical issue that initiated the study and the benefits of the study.

For the purpose of case study with the help of the achievement test marks eight schools were selected. Among the eight schools four schools were high performing schools and the other four were low performing schools.

Among the 33 schools seven schools fell below the range of Q1 and were considered as Low achieving schools in English writing skills. From the seven low achieving schools four schools with the lowest mean were selected for case study. The schools with the mean score of 13.9,15.9, 14.2 and15.6 i.e the schools such as S7, S8, S11 and S25 schools were simultaneously selected.

Similarly, there were seven schools whose scores ranged above the Q3 range and these schools were considered as high achieving schools in English writing skills. From the seven high achieving schools four schools such as S20, S21, S22, S33 with the mean score of 45.2, 34.9, 35.6, 38. 0 were selected for the case study.

3.4.3 Tools for Case Study

3.4.3.1 Questionnaire for Teachers

The questionnaire for the teachers was prepared to know more about the investigate the

problems faced by teachers and students in English writing skills. The teacher's questionnaire was prepared the steps mentioned by **Mouly (1970)**.

Step 1: Identification of the area of study:

The **first step** in preparation of questionnaire is to attain a through grasp of the field, the objectives of the study and the nature of the data needed. For the present study the investigator examined English text book of standard IX, articles and books related to English writing skills so as to have an in-depth knowledge about the area of study.

Step Two: Finalisation of the questions to be included:

In step two preparation of questions items for the questionnaire was to be finalized. With the help of the studies related to English writing skills the components to be covered under each objective of the study was finalized. The aspects such as the personal details of the teachers, teaching of English writing skills in the classroom, writing skills in the English textbook, training and orientation, purpose of writing skill, resources available in the school, different types of learning strategies used for writing skills, pre writing, during –Writing, post writing, student response, modes of writing, examination pattern followed in the school, factors influencing writing, difficulties faced by teachers and students, opinions were considered to be the factors that might have helped or hindered the performance of the students. Lastly, collecting few suggestions from the teachers to know about their perspective of where the problem persisted was also decided. Under each of these component there were further some aspects were also considered. The components of the questionnaire is given below.

Step Three: Determining and limiting the aspects to be involved:

Limiting the questions and making it reasonable for the respondents: In this step the investigator included only those questions which seemed appropriate and that which would give a clear picture of what the questionnaire was meant to find. The different aspects related to English writing skills were carefully listed for the teachers to respond that were considered reasonable enough for the respondents to respond.

Table 3.3
Aspects Related to English Writing Skills

Sl.No	Name of the components	Aspect under the components
1.	Personal Details of the Teachers and Students	<ul style="list-style-type: none"> • Academic qualification of the teachers • Position/ Status of the teacher • Total Teaching Experience • Medium Teachers Studied • Medium Students Studied
2.	Learning And Teaching in the Classroom	<ul style="list-style-type: none"> • Medium of instruction • Strength of the classroom • Time spent on teaching writing skill • Number of Periods Spent on Writing Skills • Students Proficiency in Grammar, Vocabulary etc. • Difficulties faced by students
3.	English Textbook	<ul style="list-style-type: none"> • Weightage given to Writing Skills in the Present Text Book • Text book and Examination • Attitude towards the Topics in Text Book • Usage of Reference Materials • Enriching knowledge from other resources • Standard Level of the Given Writing Activity • Activities used to Practice Writing Skills
4.	Training And Orientation	<ul style="list-style-type: none"> • Courses Undertaken for Writing Skills • Update Knowledge by Reading • Refresher and Orientation Courses Attended
5.	Purpose of Writing Skill	<ul style="list-style-type: none"> ▪ Techniques that Improving Writing Skills
6.	Resources available in the School	<ul style="list-style-type: none"> • Availability of the Resources
7.	Different types of training strategies	<ul style="list-style-type: none"> • Types of learning strategies
8.	Pre Writing.	<ul style="list-style-type: none"> • Pre – Writing

		<ul style="list-style-type: none"> • Ways of Initiating Discussion • Class Discussion for Pre-Writing Task • Students Learning Preferences • Importance of Pre- Writing Task • Aspects of Pre- writing Task • Use of Rubrics During Pre-Writing Task • Use of Model and Discussion During Pre-writing Task
9.	During -Writing	<ul style="list-style-type: none"> • Teachers Role during Writing • Teachers Response in Correcting Errors • Students Helped During Writing
10.	Post Writing	<ul style="list-style-type: none"> • Importance of Feedback • Correction and Feedback • Feedback From Teachers
11.	Students Response	<ul style="list-style-type: none"> • Classroom Practices • Students Interest in Writing Activity
12.	Modes of Writing	<ul style="list-style-type: none"> • Types of Writing Task Taught • Writing Activity and Exam Pattern
13.	Examination Pattern Followed in the School.	<ul style="list-style-type: none"> • Examination Pattern
14.	Factors Influencing Writing	<ul style="list-style-type: none"> • Factors Influencing Writing
15.	Difficulties Faced By Teachers And Students	<ul style="list-style-type: none"> • Difficulties faced by Students • Difficulty in Expression • Difficulties Faced by Teachers • Teachers Interest in Teaching Writing Skills
16.	Suggestions from the teachers	<ul style="list-style-type: none"> • Suggestions to Improve Writing Skills of Students

Step Four: Length of the questionnaire:

The fourth step involved ensuring the length of the questionnaire. The investigator made sure to include only those questions in the questionnaire that would give the clear picture about

the concerns in English writing skills. The questions that could be included in the interview, which would collect detail information were removed.

Step Five: Preparation of the first draft:

In this step the investigator made the first draft of the questionnaire. Questions under the fifteen components (*Appendix-VI*) were prepared. In the first draft the questionnaire consisted of 97 questions. The questions were both close ended and open ended.

Step Six: Organisation of the questionnaire:

In the sixth step length and organisation of the questionnaire was taken into consideration. The questions that aimed at collecting the general information of the teachers were placed at the beginning of the questionnaire and the detail and specific questions towards the end of the questionnaire. The questions were sequenced in order connecting each component to the other.

Step Seven: Discussion with the guide:

In the step the prepared questionnaire was discussed with the guide and based on the suggestions modifications were made.

Step Eight: Validation and finalisation of the tool :

The eighth step constituted for validating the tool. Realizing the importance of the scholarly construction of the tool 4 professors in English and 3 experts from the field of education were consulted for the validation of the tool. The experts gave suggestions regarding the clarity and correctness of the questions, adequacy in covering the components of writing skills and understandability of the questions.

Suggestions Given By Experts For Modification In The Questionnaire

- Few modifications in questions like 5,9,17,25,29 were suggested.
- Question 24 was considered too lengthy
- Question 15 was considered incomplete
- Question to be added on types of writing

- Include the thoughts of students on rubrics
- Reaction of teachers should be included.

The suggestions of the experts were considered and required changes were made and the final draft of the questionnaire was prepared. The number of questions in the final draft was reduced from 97 to 82. (*Appendix VII*)

3.4.3.2 Questionnaire for Students

The questionnaire for the students was prepared using the steps mentioned by **Mouly (1970)**.

Step 1: Identification of the area of study:

A thorough grasp of the field, the objectives of the study and the nature of the data needed was identified. For the present study the investigator examined English text book of standard IX, articles and books related to English writing skills so as to have an in-depth knowledge about the area of study.

Step Two: Finalisation of the questions to be included:

In step two preparation of question items for the questionnaire was finalized. With the help of the studies related to English writing skills the components to be covered under each objective of the study was finalized. The aspects such as the personal details of the students and students, teaching and learning of English writing skills in the classroom, writing skills in the English textbook, resources available in the school, examination pattern followed in the school, difficulties faced by students.

Step Three: Determining and limiting the aspects to be involved:

As the data was to be collected from the students, the investigator delimited the questionnaire so as to gather reasonable answers from the students of Class IX.

Step Four: Length of the questionnaire:

Length of the questionnaire: The fourth step involved ensuring the length of the questionnaire. The investigator made sure to have a limited number of questions and that which could cover all the area of writing skills.

Step Five: Preparation of the first draft:

Preparation of the first draft: In this step the investigator made the first draft of the questionnaire. In the first draft the questionnaire consisted of 42 questions. The questions were both close ended and open ended. (*Appendix VIII*)

Step Six: Organisation of the questionnaire:

The sixth step involved considering the length and organisation of the questionnaire. Questions that aimed at collecting the general information of the students were placed at the beginning of the questionnaire and the detail and specific questions towards the end of the questionnaire. The questions were sequenced in order connecting each component to the other.

Step Seven: Discussion with the guide:

In the step the prepared questionnaire was discussed with the guide and based on the suggestions modifications were made.

Step Eight: Validation and finalisation of the tool :

The eighth step constituted for validating the tool. Realizing the importance of the scholarly construction of the tool four professors in English and 3 experts from the field of education were consulted for the validation of the tool. The experts gave suggestions regarding the clarity and correctness of the questions, adequacy in covering the components of writing skills and understandability of the questions. The suggestions of the experts were considered and required changes were made and the final draft of the questionnaire was prepared. The final draft consisted of there were 39 questions. The tool was also translated to Kannada language to help the Kannada medium school students. (*Appendix IX*)

3.4.3.3. Semi-structured interview for the Teachers

A semi-structured interview schedule with both close ended and open ended questions was developed to probe deep into the aspects of English writing skills.

For the present study the investigator designed a Semi- structured interview schedule for the

teachers who had been selected for the case study. This interview schedule was prepared with the help of the steps given by Turney and Robb (1971).

Step one: Finalisation of the aspects to be involved:

As the part of the first step the investigator decided about the kind of data the interview should yield. For this the data collected from the questionnaire was analysed and based on the responses of the questionnaire the investigator structured the interview questions where an in depth detail was considered essential.

Step Two: Selection of type of interview procedure to be followed

In the second step the investigator decided whether structured, unstructured or semi-structured procedure will be more useful. The investigator felt that a semi structured interview schedule would be better so that as it would help in probe deeper into the subject discussed. Hence a semi- structured interview procedure was decided upon.

Step Three: Drawing of a rough outline of the interview schedule:

Recording the results of the interview is one of the main part of conducting an interview hence in the third step the investigator decided to note down the responses simultaneously with the interview and for using this technique successfully investigator practiced it. Along with this investigator made the rough outline of the interview schedule. Questions on the subtopic were grouped and finally twenty five questions were formulated. The length of the interview schedule was taken into consideration. With the suggestion of the guide two more questions were added. The final draft of the interview schedule consisted of 27 questions (*Appendix X*)

3.4.3.4. Field Diary

To provide a temporal dimensions of the data, the field diary is used wherein the investigator records the observation of event, behaviour in the field. In the present study the field diary was used for observing the classroom teaching with regard to English writing skills.

For the present study the observations of classes included all the eight schools which were selected for the case study. The eight schools comprised of four low performing schools and

four high performing schools. Only classes wherein the English teachers taught English writing activities to the students were observed. A total number of five class of each teacher were observed. Hence a total number of forty classes were observed. The researcher followed a non-participant procedure to observe these classes.

Components of Observation:

The Observation Schedule for the present study comprised of the following major dimensions:

- Learning and Teaching in the Classroom
- Teaching methods used by the teachers
- Usage of teaching aids
- Pre Writing strategies used
- During Writing strategies used
- Post Writing strategies used
- Evaluation methods used for evaluating writing activities
- Feedback and students responses

All the above mentioned criteria were observed by the researcher. Observations were delimited to only classes where the teachers taught English writing activities. As the teachers did not spend much time in teaching writing activities, only five classes of each teacher was observed.

3.4.3.5 Error Analysis Sheet

Error analysis is described as a set of procedures to identify, describe and explain learners' errors (Ellis & Barkhuizen, 2005). In the present study Error Analysis not only deals with identifying and detecting errors but also analysing and identifying the reasons for occurrence of errors. For the purpose of data analysis, steps of error analysis specified by Corder (1974) were followed.

Step One:

The written work attempted by the students in the achievement test were marked by the researcher. Every sentence written by the learner was examined and the errors were recorded according to its type.

Table 3. 4
List of Common Errors Selected for Error Analysis

Sl.No.	Types of Error
1.	Error in Tenses
2.	Error in Punctuation
3.	Error in Capitalisation
4.	Error in Prepositions
5.	Error in S-V Agreement
6.	Error in Articles
7.	Syntactical Errors
8.	Errors in Spelling

Step two:

The number of errors were counted, further it was converted into percentage to examine the occurrence.

Step Three

Based on the questionnaire for students and teachers and interviews conducted, the sources that led to errors made by students were identified.

Step four :

The information obtained from Stage 2 and Stage 3 was later interpreted and analyzed to identify the sources of the errors found in their writing.

3.5 Sources of Data

The data sources for the present study was gathered from the primary sources. The data

sources for this study were results of the achievement test, students, teachers and classroom observations. The details of the data sources are given as follows objective wise

Table No. 3. 5
Data sources for the all the Objectives of the Study

Sl. No.	Objectives	Data Sources
1.	To study the level of English writing skills of the standard IX students of Kodagu District.	Students- achievement test
2.	To analyse the achievement of the English writing skills of standard IX students of Kodagu District with respect to its sub skills- Content, Organization, Vocabulary, Grammar, Mechanics	Students- achievement test
3.	To compare the English writing skills of standard IX students of Kodagu District with respect to- Types of school, Location of the school and Medium of instruction	Students - achievement test
4.	To compare the English writing skills of standard IX students of Kodagu District with respect to	Students- achievement test
5.	To study in depth the highest performing school of Kodagu District with respect to their English writing skills	Teacher, Students- Questionnaire, interview schedule, field diary
6.	To study in depth the lowest performing school of Kodagu District with respect to their English writing skills	Teacher, Students- Questionnaire, interview schedule, field diary

3.6 Collection of data

To conduct the achievement test the permission from the DEO, Kodagu district was taken. With the help of the permission from the DEO data was collected personally by the investigator from thirty three schools in two different phases; which is as presented under **Phase I:** In the first phase the investigator personally visited the selected secondary schools of Kodagu district explained the purpose of the study to the head of the particular institution. A schedule of data collection was worked out as per the convenience of the school authority.

With the prior approval of the head of the institution the investigator administered the achievement test in all the selected schools. In a day the achievement test was administered in two or three schools and thus within a month all thirty three schools were covered by keeping in mind the variation of maturity of the students. During the test the students were oriented about the procedure of answering the test and necessary instructions were given.

Phase II: During the second phase, based on the results of the achievement test, eight schools were selected among which four was low performing schools and four high performing schools. With the prior permission of the head of the institutions, the questionnaire for teachers and students were administered and all the eight teachers were interviewed using the semi-structured interview schedule. To study more about the students problems in writing skills, the commonly occurring errors by students in English writing skills were analysed with the help of the achievement test papers. Class observation was also conducted for all the eight schools especially when the teachers conducted some writing activity.

Table No. 3.6
Time period for collection of the data using various tools & techniques

Objective	Data source	Time Period
1-IV	Achievement test	July- September 2017
V-VI	Teacher, Students- Questionnaire,	October 2017
V-VI	interview schedule, class observation	October 2017- January 2018

3.7 Data Analysis

Data analysis was carried out using computer (SPSS software). Data collected with the help of different tools were analysed through appropriate data analysis methods. The data collected by Achievement test were calculated and analysed with the help of Mean, Median, Standard Deviation and ANOVA and post hoc test such as Tukey test. Analysis of variance is a

parametric test. It requires certain assumptions to be taken care of. In the present study, sampling was done with randomization. Also score available was in interval scale. The nature of distribution was almost normal; so ANOVA was applied. To know the nature of distribution skewness was also computed and frequency curve was also plotted.

The post-hoc Tukey Test also called Tukey's Honest Significant Difference test is based on the studentized range distribution. The ANOVA test can only tell if the results are significant overall but cannot tell where those differences lie. To understand where those differences lie and which specific group's means (compared with each other) are different, a Tukey's HSD was run. The test helped in comparing all possible pairs of means.

The responses of the teacher questionnaire, student questionnaire, teacher interview were analysed using content analysis. The percentage based on the frequency was calculated for each aspect of the different components of questionnaires. Similarly the frequency and percentage was calculated for each aspect of the classroom observations and error analysis.

To make presenting data easier the researcher set some norms such as

- **None:** Zero percent.
- **Few:** one (1 percent) to 49.99 percent
- **Most:** Fifty (50 percent) percent to 65.99 percent.
- **Majority:** Sixty Six (66 percent) percent to 99.99 percent.
- **All:** Hundred (100 percent) percent.

The data which was analysed using content analysis were triangulated to find out the consistencies of the data collected from different data sources. According to Denzin, (1988) (as cited in Flick,2011). Triangulation of data means to visualise the research issue from at least two or more view points and triangulation of data combines data drawn from at least two different data sources about the same aspect.

Since this study consists of at least two data sources for each of the aspect under each component, the triangulation of data was conducted to interpret the data. Basically the data

from different data sources were triangulated and those responses from different data sources which had consensus or were aligned in the same direction were considered valid for the findings. Each data source had responses or the facts based on the type of data source it was either questionnaire & interview responses or class observation. The data after content analysis were categorized for similar responses, i.e. the data from similar categories of different data sources were categorised and used for triangulation. Further percentage and frequency was calculated to interpret the analysed data.