CHAPTER - III METHODOLOGY

3.1 Introduction

This chapter deals with the methodological process adopted by the investigator in the present study. The main focus of the research was to study the teaching and learning of English at secondary schools of Andhra Pradesh. The investigator reviewed adequate related studies which had been conducted within India and outside the country. The implications of related literature for the current study have been presented in the previous chapter. The present chapter provides comprehensive explanation of research design, population, sample, tools, techniques, data collection procedure and data analysis process of the study.

3.2 Methodology

The research design adopted for the present study is Descriptive Survey method. To realize the proposed objectives of the study, the investigator considered the adopted methodology which was more appropriate to procure data from selected geographical area under the study.

3.3 **Population**

The state of Andhra Pradesh basically consisted of three geographical regions, viz. Telangana, Rayalaseema and Costal. Each region has got slightly variety of dialect of Telugu language. After the formation of Telangana State, Andhra Pradesh was left with 13 Districts viz. East Godavari, West Godavari, Guntur, Prakasam, Nellore, Srikakulam, Vizianagaram, Visakhapatnam, Kurnool, Chittoor, Kadapa, Anantapur and Krishna. The population of the study consisted of only standard IX students studying in Telugu medium Zilla Praja Parishad High Schools of Andhra Pradesh during the academic year 2013 - 2014. The English subject teachers also have been included for the study.

3.4 Sample

Andhra Pradesh State consists of thirteen Districts, out of which, the Krishna District had been selected as the sample for the study. The investigator used the random sampling technique to select the students and schools thereof. The Krishna District has total of fifty Mandals, the name and Location of each have been given in the Map 3.1.





Note. Retrieved from http://krishna.nic.in/district-map.aspx

There are total of 296 Zilla Praja Parishad High Schools spread over fifty Mandals of the Krishna District. Each Mandal consists of minimum of two and maximum of ten Zilla Praja Parishad High Schools having Telugu medium of instruction. The Table 3.1 shows total schools mandal wise and the details of Zilla Praja Parishad High Schools selected from each Mandal.

S.No.	Name of Mandal	No. of Private School	No. of Govt. School	No. of Zilla Praja Parishad Schools	Total Schools	Name of Zilla Praja Parishad School Selected	School Code
1.	A. Konduru	1	1	06	08	Kambhanpadu Village, A. Konduru Mandal	0611602
2.	Agiripalli	1	-	05	06	Adavinekkalam Post, Agiripalli Mandal,	0622604
3.	Avanigadda	5	3	02	10	7th Ward, Avanigadda , Krishna District.,	0634601
4.	Bantumilli	1	1	09	11	Malaparajugudem, Vutukuru, Post, Krishna District,	0645602
5.	Bapulapadu	2	-	07	09	Veleru Village,Veeravalli Post, Krishna District	0626602
6.	Challapalle	6	1	05	12	Mangalapuram Post, Challapalli Mandal	0632604
7.	Chandarlapadu	-	-	08	08	Chadarlapadu Mandal	0605602
8.	Chatrai	-	-	07	07	Chinnampeta, Chatrai Mandal,	0624603
9.	G. Konduru	-	1	05	06	Kavuluru, Viakondapalli	0609604
10.	Gampalagudem	3	1	07	11	Nemali Post And Village, Gampalagudem Mandal ,	0612601
11.	Gannavaram	1	1	05	07	Vedurupavuluru Mustabad Post, Krishna District	0621603
12.	Ghantasala	-	-	07	07	Ghantasala, Ghantasala Mandal	0631606
13.	Gudiavalleru	1	3	05	09	Kavutaram Village, Gudlavalleru Mandal, A.P.	0643604
14.	Gudivada	16	2	03	21	Gangadharapuram, At Billapadu, Gudivada Mandal	0642602

Table 3.1 Details of Zilla Praja Parishad High Schools selected for Study

15.	Guduru	-	-	07	07	Guduru , Guduru Post, Krishna District	0638604
16.	Ibrahimpatnam	2	1	04	07	Kondapalli, Kondapalli Post, Krishna District	0608603
17.	Jaggayyapeta	4	1	09	14	Chillakallu, Jaggayyapet Mandalm Krishna District	0601603
18.	Kaikalur	1	1	07	09	Tamarakollu Village & Post, Krishna District	0648606
19.	Kalidindi	-	-	06	06	Kalidindi Post, Mandal Krishna District	0649604
20.	Kanchikacherla	2	-	07	09	Paritala Post, Kanchikacherla Mandal, Krishna District	0606606
21.	Kankipadu	2	-	09	11	Kgkcm, Edupugallu , Post, Kankipadu Mandal, Krishna District	0620603
22.	Koduru	1	-	05	06	Lingareddipalem Village & Post, Koduru Mandal, Krishna District	0636606
23.	Kruthivennu	-	-	10	10	Matlam Post, Kruthivennu Mandal, Krishna District	0650606
24.	Machilipatnam	28	4	08	40	Tapsipuddi, Manginipudi Post, Machilipatnam, Krishna District	0637603
25.	Mandavalli	-	-	05	05	Main Road, Mandavalli Village & Post, Krishna District	0647602
26.	Mopidevi	1	1	05	07	Beside Subramanyeswara Swamy Temple, Main Road, Mopidevi Post & Mandal, Krishna District	0633603
27.	Movva	2	-	08	10	Nidumolu, Nidumolu Village, Movva Mandal, Krishna District	0630604
28.	Mudinepalle	4	-	08	12	Pedapalaparru, Village,Mudinepalle Mandal, Krishna District	0646603
29.	Musunuru	-	1	06	07	Ramankkapet Post & Village, Musunuru Mandal, Krishna District	0625601
30.	Mylavaram	3	1	05	09	Mylavaram Post & Mandal Krishna District	0610603
31.	Nagayalanka	-	1	04	05	Nagayalanka, Nagayalanka Post & Mandal, Krishna District	0635601
32.	Nandigama	7	2	09	18	Ithavaram Village, Nadigama Mandal, Krishna District	0604609

33.	Nandivada	-	-	05	05	Nandivada Post, Mandal, Krishna District	0641602
34.	Nuzvid	4	1	07	12	Annavaram Village, Nuzvid Mandal, Krishna District	0623602
35.	Pamarru	4	-	07	11	Kanumuru Village, Pamarru Mandal, Krishna District	0639601
36.	Pamidimukkal	-	-	08	05	Pamidimukkala post,Pamidimukkal Mandal, Krishna District	0629605
37.	Pedana	-	1	04	05	Bramhapuram Street, Pedana Mandal	0644603
38.	Pedaparupudi	-	-	05	05	Pedaparupudi Village, Post, Krishna District	0640604
39.	Penamuluru	7	-	06	06	Penamuluru, Post, Mandal, Krishna District	0618603
40.	Penuganchiprolu	-	-	05	05	Anigandlapadu, Post, Penuganchiprolu Mandal Krishna District	0603603
41.	Redigudem	-	1	03	04	Reddigudem Post, Mandal, Krishna District	0615603
42.	Thotlavalluru	-	-	04	04	Northvalluru, Thotlavalluru Post, Mandal, Krishna District	0619602
43.	Tiruvuru	3	2	03	05	Munukulla Village, Tiruvuru Mandal, Krishna District	0613608
44.	Unguturu	1	-	08	09	Atkur Post, Unguturu Mandal, Krishna District	0627601
45.	Vatsavai	-	-	07	07	Gopinenipalem Post, Vatsavai Mandal, Krishna District	0602607
46.	Veerullapadu	-	-	06	06	Jujjuru Post, Veerullapadu Mandal, Krishna District	0607604
47.	Vijayawada (Rural)	3	-	04	07	Nunna Post, Nunna Village	0616602
48.	Vijayawada (Urban)	92	13	02	107	High school Road, Patamata, Vijayawada, Krishna District	0617602
49.	Vissannapeta	4	1	04	09	Vissannapet Post & Mandal, Krishna District	0614603
50.	Vuyyuru	8	1	05	14	Peda Ogirala Village & Post, Vuyyuru Mandal, Krishna District	0628601
Total	50	218	46	296	550	50	

The selection of one sample school had been made randomly by lottery method from each Mandal of Krishna District. Thus total 50 of Telugu medium Zilla Praja Parishad High Schools have been selected randomly for the study (*Appendix* - X). A group of 16 students comprising 8 boys and 8 girls of each of these 50 schools had been selected randomly. Thus total 800 students: 400 girls and 400 boys had been drawn as a sample.

As given in Table 3.1, there are total of 588 English teachers are working in 296 Zilla Praja Parishad High Schools of the Krishna District. However only 50 schools had been selected randomly for the study. The total of 94 English teachers working in these schools had also been constituted as sample for the study.

3.5 Tools and Techniques used for Data Collection

In the present study four tools have been developed such as, Teachers' questionnaire, Teachers perception scale, Students' questionnaire, Students' attitude scale. Moreover two techniques viz. classroom observation and interview schedule with teachers also have been used. The detailed description about the tools employed and techniques used for data collection have been given in this section.

3.5.1 Questionnaire for Teacher

The investigator prepared a semi- structured questionnaire for collecting data related to the problems encountered by the teachers in teaching English. The questionnaire had focused on different areas under seven dimensions: Methods and Approaches, Activities, Teaching aids, Evaluation, Interaction between Teacher and Students and Strength of Class, Syllabus and Skills improvement and Reference Material. The first draft of questionnaire was comprised 22 questions which was given to experts, teachers and scholars at Centre of Advanced Study in Education for content and face validity. Based on their suggestions, the questionnaire had been modified to 17 questions having both open ended and closed ended items. The Table 3.2 presents dimensions wise question numbers of the teachers' questionnaire.

S. No.	Dimension	Question Number		
1.	Methods and approaches	1, 2		
2.	Activities	3		
3.	Teaching aids	4, 5, 6		
4.	Evaluation	7, 8		
5.	Interaction between teacher and students, Strength of class	9, 10		
6.	Syllabus and skills improvement	11, 12, 13, 14, 15		
7.	Reference material	16, 17		
Total	Dimensions :7	Total Questions : 17		
Note Pafer Appendix W				

Table 3.2 Dimensions wise Questions of Teachers' Questionnaire

Note. Refer Appendix - IV.

3.5.2 Five point Likert type Perception Scale for English Teachers

The investigator constructed the five point Likert type perception scale to achieve the objective IV. The construction of perception scale was initiated by reviewing various tools which are related to perception of teachers and employed in doctoral studies by researchers. For construction of the perception scale, the investigator reviewed Lee (2009), Khurshid et al. (2013), Rizi et al. (2014), Bahanshal (2013), Kaçani and Mangelli (2013), Hussein (2012), Kang'ahi et al. (2012), Douglas et al. (2008), & Hafeez and Asif (2010) research tools. The perception scale based on these studies had been constructed under seven dimensions.

The seven dimensions of the perception scale were methods and approaches of teaching English, medium of instruction, teaching aids, activities, strength of the classroom, syllabus and content of English and students and their participation. The first draft of perception scale was prepared with 70 statements. It was referred to experts to verify the content and face validity of tool. In turn their recommendations had been included and the final perception scale had been prepared with total of 51 statements under seven dimensions. The negative statements had been also used in the scale. The Table 3.3 includes details of the perception scale.

S. No.	Dimension	Total statements	Positive statements	Negative statements
1.	Methods and Approaches of teaching English	11	1, 4, 5, 7, 8, 10	2, 3, 6, 9, 11
2.	Medium of Instruction	5	12, 15, 16	13, 14
3.	Teaching Aids	5	17, 18, 20, 21	19
4.	Activities	4	22, 24, 25	23
5.	Strength of the classroom	3	26	27, 28
6.	Syllabus and Content of English	9	30, 31, 33, 35, 36	29, 32, 34, 37
7.	Students and their participation	14	38, 39, 41, 42, 44, 45, 46, 47,49, 50, 51	40, 43, 48,
	Total : 7	51	33	18

Table 3.3 Dimensions of Teacher Perception Scale

Note. Refer Appendix - V.

3.5.3 Questionnaire for Student

The investigator developed a semi- structured questionnaire to find out the problems faced by students in learning English. The questionnaire consisted of both open ended and closed ended items. The student questionnaire comprised a total of 21 questions with focus on different areas. The developed questionnaire had been given to experts for the content validity. The various suggestions given by them had been incorporated, then the English version tool was translated into Telugu language with the help of specialists in field of Telugu. The final version of Telugu questionnaire had been employed to collect data from students. The Table 3.4 shows the details of students' questionnaire.

Table 3.4 Dimension wis	question Number	of Students'	Questionnaire
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S. No.	Dimensions	Question Number
1.	English teacher motivation and encouragement	1, 2, 3
2.	Teaching and learning of English	4, 5, 6, 7, 8, 9, 10, 11
3.	Interaction	12, 13, 14, 15,
4.	Activities	16 (i), 16 (ii), 16 (iii)
5.	Teaching aids	17 (i), 17 (ii), 18
6.	Facilities / Opportunities for learning of English	19, 20 (i), (ii), 21
	Total Dimensions : 6	Total Questions : 21

Note. Refer Appendix - VI.

3.5.4 Attitude Scale for Student

The investigator also constructed the five point Likert type attitude scale to know the attitude of students towards learning the English language. Before preparation of the tool, the investigator referred attitude scales pertaining to learning English and also books related to the measurement of attitude and questionnaire design. The investigator referred tools and books for construction of attitude scale such as Oppenheim (1968), Thurstone, and Chave, (1970), Ngidi, (2007), Yin (2008), Abdullah et al. (2012), Kamtchi and Begum (2013), and Noursi (2013). The first draft of attitude scale consisted of 102 statements. After validation of scale (content and face validity) by experts, it was modified. The final attitude scale was prepared after receiving suggestions with regard to statements, structure, grammar and vocabulary. The attitude scale had been prepared with 5 dimensions and 50 statements. The Table 3.5 shows details of attitude scale.

S. No	Dimension	Positive Statements	Negative Statements	Total Statements
1.	General attitude towards English language	1, 2, 3, 4, 5	-	5
2.	Cognitive domain	6, 8, 10	7, 9, 11, 12, 13	8
3.	Affective domain	14, 16, 18, 22, 24, 25, 27	15, 17, 19, 20, 21, 23, 26	14
4.	Conative domain	28, 29, 31, 32, 34, 36, 37, 38	30, 33, 35, 39	12
5.	Interest and anxiety in English	41, 42, 43, 44, 45, 46, 47, 48, 50	40, 49	11
Total	5	32	18	50

 Table 3.5 Dimensions of Student Attitude Scale

The final version of attitude scale was truly translated in to Telugu (Mother tongue of students) with assistance of experts in the field of Telugu language. Finally, the Telugu version of Attitude scale was administered for collecting data from students (*Appendix* - VII).

3.5.5 Observation Schedule

The observation schedule covered the aspects like approaches and methods used for teaching English language, interaction between teacher and students while teaching, activities conducted and usage of audio-visual aids. The investigator employed notebook to observe classroom teaching - learning process. The strength of students in the class was also recorded.

3.5.6 Interview Schedule for English Teacher

Along with a questionnaire, interview schedule had been also used to find out the problems faced by teachers for teaching the English language. A total of 9 questions had been asked in interview schedule. These questions had been framed to aim to examine the problems faced by teachers while developing Listening, Speaking, Reading and Writing skills (four questions), use of teaching aids (one question), accessibility of resources (one question), use of vernacular language (one question), best method and approach (one question) and satisfaction for prescribed syllabus of the English subject (one question). Along with these questions, a few of probing questions had also been asked under each question to draw the response of teachers towards challenges faced in teaching the subject (*Appendix* - VIII).

3.6 Validation of Tools

The developed scales and questionnaires were given to the teachers at CASE, Scholars and Experts for validating them. All the tools were modified with the suggestions of experts in final version of tools (*Appendices* - II & III letter for tool validation and list of experts).

3.7 Pilot Testing

The investigator had chosen three Zilla Praja Parishad High Schools from three Mandal of Krishna District as sample to try out with research tools. The Pilot Testing was conducted to examine the feasibility of instruments, relevance of the tools and identifying the language difficulties/confusions. The investigator collected data from standard IX students and English teachers of these selected schools. The investigator had also discussion with students and English teachers on tools with respect to responding questionnaires and scales. The reflections of students and English teachers were recorded and tools were modified in the final version of research tools of the study on the merits of their response.

3.8 Sources of Data

The investigator obtained the data through various tools such as questionnaires, perception scale and attitude scale from the samples of the study. The data was also collected about teaching learning process with the help of face to face interview and observation schedule. The main sources of the data were 800 students (400 boys and 400 girls) of standard IX and 94 English teachers of various schools. The data also had been supplemented with 35 interviews and 32 classroom observations.

3.9 Data Collection

Before commencement of data collection, the investigator obtained permission from District Educational Officer (DEO) at District Head Court of Krishna (*Appendix* - I). The investigator explained the DEO about the significance and nature of the study to be carried out in the Zilla Praja Parishad High Schools of Krishna District. Prior to data collection, the investigator had preliminary talk with English teachers and students and explained the nature of the study. Then, the investigator started the actual data collection in the sampled schools.

The investigator began the data collection from students and teachers in the month of July, 2013. With help of permission letter, the investigator met the Mandal Educational Officer (MEO) of each mandal and obtained the list of Zilla Praja Parishad High Schools in the mandal. Then, the investigator prepared a schedule to visit each of the selected school. As per the schedule the investigator visited to a designated school, first met the Headmaster/Headmistress and explained the purpose of the study. There after he also met the teachers and the students and explained them about the work. He requested them to provide vide information and assured them the confidentiality of the information. The investigator first administered the questionnaire, followed by attitude scale and perception scale and the classroom observation (two per schools). Finally, 35 English language teachers were interviewed

as per interview schedule. Before the interview, the teachers were given explanation about the main aim of conducting interview and focused areas. The investigator had recorded responses with the help of voice recorder in case of teachers who gave consent. However investigator also noted down the responses in written form in case of who did permit to record their voices. This entire process had been carried out in each school to collect data for the study.

3.10 Data Analysis Procedure

After collecting data through questionnaires, and scales from sample, data coding was done and then entered in to computer by using Statistical Package for Social Science Software. The data collected through observation schedule had been analyzed with the help of content analysis. The data obtained through questionnaires had been analyzed with the help of frequency and percentage count and content analysis, the data gathered through perception and attitude scale was analyzed with the help of frequency and percentage obtained through interview schedule had been analyzed with the help of content analysis. The oral responses obtained through interview schedule had been analyzed with the help of content analysis. The Table 3.5 shows tools and techniques used for data analysis.

Objectives	Tools and Techniques used for Data collection	Techniques adopted for Analysis of Data
1.	Classroom Observation	Content analysis (quantitatively)
2.	Questionnaire and Interview Schedule	Frequency & Percentage count and Content analysis
3.	Questionnaire	Frequency & Percentage count and Content analysis
4.	Five Point Likert type Perception Scale	Frequency & Percentage count
5.	Five Point Likert type Attitude Scale	Frequency & Percentage count

Table 3.6 Tools and Techniques Employed for Data Analysis Objective Wise

This chapter has presented about methodology of study, tools and data analysis techniques employed elaborately. The setting of the study in detail has been discussed in the next chapter.