CHAPTER - III

METHODOLOGY OF THE STUDY

3.1. INTRODUCTION

In order to carry out any type of investigation, data must be gathered to test the hypothesis. Many different methods and procedures have been developed to aid in the acquisition of data. They are the tools of data collection. These tools employ distinctive ways of describing and qualifying data. Each is appropriate, as John W. Best and James V. Khan (1992) say, in a given situation like the tools in the carpenter’s chest. These tools are administered on the selected sample. The selection of sample is described in this section. So as the reader can be able to understand exactly from where and how the sample was selected. The data gathering devices and the methods of analysis are also be described for further better understanding of the thesis. Therefore, the details of methodology namely the first section states the problem, objectives and hypotheses to be tested. The second section brings out the design of the study. The third section describes the selection of sample and content analysis. The fourth section furnishes details of instrumentation (details of the tool). The fifth one deals with the procedure of data collection and statistical techniques used in data analysis.
3.2. STATEMENT OF THE PROBLEM

The study mainly focuses on the practical aspects of secondary teacher education hence, the title of the research work is entitled as ‘A STUDY ON THE PERCEPTION OF TEACHER EDUCATORS ON THE PRACTICAL ASPECTS OF SECONDARY TEACHER EDUCATION’.

The common complaint is that theory dominates the curriculum where as practice teaching continues to suffer from inadequacies of different kinds like: practices follow a mechanical routine (observation, micro teaching, teaching practice and examination) and exhibit no variety or original thinking, rigid lesson plan format, lack of variety and context specificity in teaching, evaluation of student teaching in terms of number of lessons. No attempt towards comprehensive, qualitative evaluation covering professional attitudes, values, lack of provision for internship and total school experience, inadequate mentoring and supervision.

The investigator personally experienced and observed as teacher educator that there were a lot of lacks in the part of practical aspects such as micro teaching, demonstration, observation, preliminary visit and discipline, lesson plan, audio visual aids and technology, guide teacher and feedback after teaching practice, while imparting skills in
the field of teacher education. The self interested investigator has taken this problem in order to bridge the gap between the theory and practical and to direct the teacher educators to give more importance towards the practical aspects of secondary teacher education. The pivotal role of the teacher education is to develop the teaching competence and skill among the student teacher and to develop them as a skilled person.

3.3. OBJECTIVES OF THE STUDY
The objectives of the study are as follows:

1. To study the perception of teacher educators on the practical aspects of secondary teacher education in relation to gender, subject, locality, nature of institution, experience and educational qualification.
2. To study the perception of teacher educators on the various practical aspects of secondary teacher education in terms of practical components.
3. To analyze the perception of teacher educators towards the various practical components viz.,
   a. Microteaching
   b. Teaching demonstration
   c. Observation of Teaching
   d. Macro teaching
   e. Writing Lesson plans
   f. Using audio visual aids and technology
   g. Experiments and Reports with file
   h. Feed back after teaching practice
### 3.4. VARIABLES OF THE STUDY

Investigator selected the following independent and dependent variables for the study.

**INDEPENDENT VARIABLES SELECTED**

1. **GENDER**
   - A1 - Male
   - A2 - Female

2. **LOCALITY**
   - B1 - Urban
   - B2 - Rural

3. **SUBJECT**
   - C1 - Science
   - C2 - Arts

4. **TEACHING EXPERIENCE**
   - D1 - Above 3 years
   - D2 - Below 3 years

5. **TYPE OF INSTITUTIONS**
   - E1 - Government Colleges
   - E2 - Autonomous Colleges
   - E3 - University Colleges
   - E4 - Self Finance Colleges

6. **QUALIFICATION**
   - F1 - PG & M.Ed
   - F2 - PG, M.Ed & M.Phil
   - F3 - PG, M.Ed, M.Phil & Ph.D

**DEPENDENENT VARIABLE**: Perception of teacher educators
3.5. HYPOTHESES

The following hypotheses were formulated based on the objectives and variables of the study.

HYPOTHESIS: 1

Male and female teacher educators do not differ significantly in their perception towards the practical aspects of B. Ed degree course.

SUB HYPOTHESIS: 1a

Male and female teacher educators do not differ significantly in their perception towards the practical aspects viz.

a. Microteaching
b. Teaching demonstration
c. Observation of Teaching
d. Macro teaching
e. Writing Lesson plans
f. Using audio visual aids and technology
g. Experiments and Reports with file
h. Feedback after teaching practice.

HYPOTHESIS: 2

Urban teacher educators and rural teacher educators do not differ significantly in their perception towards the practical aspects of B. Ed degree course.
SUB HYPOTHESIS: 2a

Urban teacher educators and rural teacher educators do not differ significantly in their perception towards the practical aspects viz.

a. Microteaching,
b. Teaching demonstration
c. Observation of Teaching
d. Macro teaching
e. Writing Lesson plans
f. Using audio visual aids and technology
g. Experiments and Reports with file
h. Feed back after teaching practice.

HYPOTHESIS: 3

Teacher educators of science education and teacher educators of arts education do not differ significantly in their perception towards the practical aspects of B. Ed degree course.

SUB HYPOTHESIS: 3a

Teacher educators of science education and teacher educators of arts education do not differ significantly in their perception towards the practical aspects viz.

a. Microteaching,
b. Teaching demonstration
c. Observation of Teaching
d. Macro teaching  
e. Writing Lesson plans  
f. Using audio visual aids and technology  
g. Experiments and Reports with file  
h. Feed back after teaching practice.

**HYPOTHESIS: 4**

Teacher educators with below 3 years experience do not differ significantly with teacher educators with more than 3 years experience in their perception towards the practical aspects of B. Ed degree course.

**SUB HYPOTHESIS: 4a**

Teacher educators with below 3 years experience do not differ significantly with teacher educators with more than 3 years experience in their perception towards the practical aspects viz.,

a. Microteaching,  
b. Teaching demonstration  
c. Observation of Teaching  
d. Macro teaching  
e. Writing Lesson plans  
f. Using audio visual aids and technology  
g. Experiments and Reports with file  
h. Feed back after teaching practice.
HYPOTHESIS: 5

Teacher educators working in different institutions such as Government/Autonomous/University and Private institutions do not differ significantly in their perception towards the practical aspects of B. Ed degree course.

SUB HYPOTHESIS: 5a

Teacher educators working in different institutions such as Government/Autonomous/University and Private institutions do not differ significantly in their perception towards the practical aspects viz.,

a. Microteaching,
b. Teaching demonstration
c. Observation of Teaching
d. Macro teaching
e. Writing Lesson plans
f. Using audio visual aids and technology
g. Experiments and Reports with file
h. Feed back after teaching practice.

HYPOTHESIS: 6

Teacher educators with different qualification such as PG, M. Ed, PG, M. Ed & M. Phil, PG, M.Ed, M. Phil & Ph.D do not differ in their perception towards the practical aspects of B. Ed degree course.
SUB HYPOTHESIS: 6a

Teacher educators with different qualification such as PG& M. Ed, PG & M. Ed & M. Phil, PG & M.Ed, M. Phil & Ph.D do not differ in their perception towards the practical aspects viz.

- Microteaching,
- Teaching demonstration
- Observation of Teaching
- Macro teaching
- Writing Lesson plans
- Using audio visual aids and technology
- Experiments and Reports with file
- Feed back after teaching practice.

3.6. METHOD OF STUDY

In the present study the investigator is intended to do find out the perception of teacher educators on the practical aspects of secondary teacher education. The investigator adopted normative survey to collect the data. Normative survey method is the best method for conducting the present research study. Normative survey method studies describe and interpret what exists at present. They are concerned with existing conditions or relations, prevailing practices, beliefs, attitudes etc. ongoing processes and the emerging trends. Such investigations were variously termed in research literature as descriptive survey, normative survey, status studies or trend analysis. The term “survey” and “status”
suggest the gathering of evidence relating to prevailing condition. The term “normative” implies the determination of normal or typical conditions or practices. Using normative survey method, the investigator gathered opinion of teacher educators towards practical aspects of secondary teacher education.

3.7. SAMPLE OF THE STUDY

The present study is normative survey type. The sample was chosen by using stratified random sampling technique. 300 teacher educators were selected as the sample. They represented all the selected independent variables namely gender, locality, subject, teaching experience, type of institutions and educational qualification.
The following table shows the distribution of samples according to various types of teacher education colleges in which the teacher educators were selected for the study.

**Table 3.2**

**Teacher Education Colleges from which the Teacher Educators were Selected**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the Institution</th>
<th>No. of Teacher Educators Selected</th>
</tr>
</thead>
</table>
| 1.   | Government Colleges of Education, Orathanadu  
Government Colleges of Education, Coimbatore  
Government Colleges of Education, Kumarapalayam | 46 |
Sri Ramakrishna Mission Vidhalaya College of Education, Coimbatore  
N.K.T. National College of Education for Women, Chennai | 44 |
| 3.   | Periyar University, Salem  
Tamil University, Thanjavur  
Prist University, Thanjavur,  
Madurai Kamaraj University, Madurai  
Bharathidasan University, Tiruchirapalli | 60 |
| 4.   | Annai College of Education, Karur  
Christ College of Education, Vallam  
Gnanamani College of Education, Pachal | 150 |
<table>
<thead>
<tr>
<th>Institution</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>K.M.G. College of Education, Coimbatore</td>
<td>Coimbatore</td>
</tr>
<tr>
<td>Kasthuribai College of Education, Rasipuram</td>
<td>Rasipuram</td>
</tr>
<tr>
<td>Kings College of Education, Namakkal</td>
<td>Namakkal</td>
</tr>
<tr>
<td>Kongu Nadu College of Education, Salem</td>
<td>Salem</td>
</tr>
<tr>
<td>Mahendra College of Education, Kallipatti</td>
<td>Kallipatti</td>
</tr>
<tr>
<td>Maruthupandiyar College of Education, Thanjavur</td>
<td>Thanjavur</td>
</tr>
<tr>
<td>Nandha College of Education, Erode</td>
<td>Erode</td>
</tr>
<tr>
<td>P.S.G. College of Education, Salem</td>
<td>Salem</td>
</tr>
<tr>
<td>Pachamuthu College of Education, Dharmapuri</td>
<td>Dharmapuri</td>
</tr>
<tr>
<td>Paramveer College of Education, Dharmapuri</td>
<td>Dharmapuri</td>
</tr>
<tr>
<td>RVS College of Education, Sulur, Coimbatore</td>
<td>Coimbatore</td>
</tr>
<tr>
<td>S.P.M College of Education, Palayamkottai</td>
<td>Palayamkottai</td>
</tr>
<tr>
<td>Sri Vasavi College of Education, Erode</td>
<td>Erode</td>
</tr>
<tr>
<td>Sri Vijay Vidyalaya College of Education, Dharmapuri</td>
<td>Dharmapuri</td>
</tr>
<tr>
<td>St.John De Brito College of Education, Thanjavur</td>
<td>Thanjavur</td>
</tr>
<tr>
<td>Tagore College of Education, Attur</td>
<td>Attur</td>
</tr>
<tr>
<td>Tagore College of Education, Salem</td>
<td>Salem</td>
</tr>
<tr>
<td>Uma Mahesnaranar College of Education, Thanjavur</td>
<td>Thanjavur</td>
</tr>
<tr>
<td>Vellalar College of Education, Erode</td>
<td>Erode</td>
</tr>
<tr>
<td>Vidhya Vikas College of Education, Thiruchengode</td>
<td>Thiruchengode</td>
</tr>
<tr>
<td>Vivekanandha College of Education for Women, Elayampalayam.</td>
<td>Elayampalayam.</td>
</tr>
</tbody>
</table>

| **Total** | 300 |
3.9. TOOL USED FOR THE STUDY

RATING SCALE

Rating is a term applied to express opinion or judgment or perception regarding some situation. Opinion / attitude are usually expressed on a scale or values. For the purpose of analyzing the data, 5 point scale has been selected for this research. The range of the rating scale is from 5 to 1. 5 is the highest value and 1 is the lowest value for positive items and 1 is highest value and 5 is the lowest value for negative items.

The present investigation follows normative survey method. The views of teacher educators were to be collected regarding various components of practical aspects of secondary teacher education. The nature of questions or items and the nature of responses to be elicited were considered and the investigator decided to construct questionnaire for the purpose. To shape, the details and format of the questionnaire, the review of the earlier studies of the similar nature was very useful. The researcher also had a detailed discussion with experts, her guide and an informal interaction with co-teacher educators. For the different parts of the questionnaire suitable instruction of responding were formulated. Educators felt that the instruction and wording of the items were easy to follow and to answer.
The investigator used Scale of Perception of Teacher Educators on the Practical Aspects of Secondary Teacher Education (SPTEPASTE) (2009) was constructed and validated by the investigator as a tool for this study because it covers the most of the components of practical aspects of secondary teacher education, and it will be easy to get appropriate answer for each statement from the teacher educator.

3.10. CONSTRUCTION OF THE TOOL

Investigator prepared the tool step by step in three different stages. These stages are as follows

- Planning
- Preparing and
- Validating

Planning

Investigator has a wide range of experience on various practical aspects viz., micro teaching, teaching demonstration, observation of teaching, macro teaching, writing of lesson plans, using audio visual aids and technology, psychology experiment and feedback after teaching practice. The investigator observed the practice of practical aspects and listed down the key activities and listed out all practical activities in a systematic form. In planning, the investigator observed, the activities and listed them as enquiries without missing any details. Investigator
listed out all practical events in statement form as perceived by teacher educators. By interacting and discussing with other experienced teacher educators the statement were listed out. These statements were categorized under 8 sub themes. Each sub theme denoted one practical activity.

**Preparing**

The sub themes were listed as follows,

a. Microteaching,
b. Teaching demonstration
c. Observation of Teaching
d. Macro teaching
e. Writing Lesson plans
f. Using audio visual aids and Technology
g. Experiments and Reports with file
h. Feed back after teaching practice.

**MICROTEACHING**

<table>
<thead>
<tr>
<th>POSITIVE STATEMENTS</th>
<th>1,2,3,4,6,7,8,9,10,12,13,14,16</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEGATIVE STATEMENTS</td>
<td>5,11,15</td>
</tr>
</tbody>
</table>

**TEACHING DEMONSTRATION**

<table>
<thead>
<tr>
<th>POSITIVE STATEMENTS</th>
<th>17,18,20,21,22</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEGATIVE STATEMENTS</td>
<td>19</td>
</tr>
</tbody>
</table>
### OBSERVATION OF TEACHING

<table>
<thead>
<tr>
<th>POSITIVE STATEMENTS</th>
<th>23, 24, 25, 28,</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEGATIVE STATEMENTS</td>
<td>26, 27,</td>
</tr>
</tbody>
</table>

### MACRO TEACHING

<table>
<thead>
<tr>
<th>POSITIVE STATEMENTS</th>
<th>29, 30, 31, 33, 35, 36, 37,</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEGATIVE STATEMENTS</td>
<td>32, 34,</td>
</tr>
</tbody>
</table>

### WRITING LESSON PLANS

<table>
<thead>
<tr>
<th>POSITIVE STATEMENTS</th>
<th>38, 39, 40, 42, 43, 44, 45, 46, 47, 48, 49, 51, 52, 53, 54, 56, 58, 59, 61, 62, 63, 65, 66, 67, 69</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEGATIVE STATEMENTS</td>
<td>41, 50, 55, 57, 60, 64, 68,</td>
</tr>
</tbody>
</table>

### USING AUDIO VISUAL AIDS AND TECHNOLOGY

<table>
<thead>
<tr>
<th>POSITIVE STATEMENTS</th>
<th>70, 71, 72, 73, 74, 76, 77, 78, 79, 81, 82, 83, 84, 85</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEGATIVE STATEMENTS</td>
<td>75, 80,</td>
</tr>
</tbody>
</table>

### EXPERIMENTS AND REPORTS WITH FILE

<table>
<thead>
<tr>
<th>POSITIVE STATEMENTS</th>
<th>86, 89, 91, 92, 93, 94, 95, 96, 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEGATIVE STATEMENTS</td>
<td>87, 88, 90, 97,</td>
</tr>
</tbody>
</table>

### FEEDBACK AFTER TEACHING PRACTICE

<table>
<thead>
<tr>
<th>POSITIVE STATEMENTS</th>
<th>100, 101, 103, 104, 105, 107</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEGATIVE STATEMENTS</td>
<td>99, 102, 106</td>
</tr>
</tbody>
</table>
All positive statements in each sub theme will be scored as follows, Strongly agree 5 marks, Agree 4 marks, Undecided 3 marks, Disagree 2 marks, Strongly disagree 1 mark. In negative statements strongly agree will be given 1 mark, Agree 2 marks, Undecided 3 marks, Disagree 4 marks, strongly disagree 5 marks.

3.11. PILOT STUDY

To test the effectiveness of the tools and to determine the deficiency a pilot study was conducted. The pilot study respondents include 30 teacher educators. They took 1 hour to fill the tool. This was helpful in revealing the discrepancies of the tool. Necessary modification was carefully done before compiling the final tool.

3.12. RELIABILITY OF THE TOOL

The reliability of the tool was established by split half method (consistency) by Spearman-Brown prophecy formula. The Rating scale was administered to 30 members of the sample, which included teacher educators from various B.Ed colleges.
The ‘r’ values are presented below

Table 3.3

SPLIT HALF RELIABILITY CO EFFICIENT OF CORRELATION FOR THE SUB THEMES OF THE RATING SCALE OF TEACHER EDUCATORS ON THE PRACTICAL ASPECTS OF SECONDARY TEACHER EDUCATION

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>‘r’ VALUE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microteaching</td>
<td>0.86</td>
<td>Selected</td>
</tr>
<tr>
<td>Link lesson</td>
<td>0.05</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Teaching of Demonstration</td>
<td>0.37</td>
<td>Selected</td>
</tr>
<tr>
<td>Observation of Teaching</td>
<td>0.64</td>
<td>Selected</td>
</tr>
<tr>
<td>Macro teaching</td>
<td>0.63</td>
<td>Selected</td>
</tr>
<tr>
<td>Writing Lesson plans</td>
<td>0.80</td>
<td>Selected</td>
</tr>
<tr>
<td>Using Audiovisual aids and Technology</td>
<td>0.76</td>
<td>Selected</td>
</tr>
<tr>
<td>Experiment and reports with file</td>
<td>0.65</td>
<td>Selected</td>
</tr>
<tr>
<td>Head master</td>
<td>0.05</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Feed back After teaching practice</td>
<td>0.61</td>
<td>Selected</td>
</tr>
</tbody>
</table>

Two sub themes were not selected since the correlation value of those subthemes were not reliable. Hence these two sub themes were not included in the tool.
3.13. VALIDITY OF THE TOOL

The experienced research guides, educational officers and senior teacher educators went through the objectives of the study and each part of the questionnaire and expressed the opinion that the Rating scale measures what it is intended to a very high degree of satisfaction. Thus the validity of the tool was established. The questionnaire covered all the items suggested in Tamil Nadu Teachers Education University syllabus. Hence it had the content validity.

3.14. ADMINISTRATION OF THE TOOL

The investigator administered the tool to the teacher educators of the B. Ed colleges (Government /Autonomous/University/Self finance). The investigator visited the selected B. Ed colleges to collect responses from Teacher Educators. It took 3 months to collect data from the respondents. Finally the investigator got 300 filled up Rating scale from respondents.

3.15. METHOD OF SCORING

The tool consists of 107 items and the each statement is set against a five point scale such as “Strongly agree”, “Agree”, “Undecided”, Disagree”, “Strongly disagree” and weighs 5,4,3,2,and 1 for positive items and 1,2,3,4,5 for negative items. An individual’s score is the sum of all the scores for the 107 items.
The investigator evaluated the items with the help of the key. The strongly agree response of the favorable statement should be assigned with a score of 5, agree response with a score of 4, undecided with a score of 3, disagree with 2, and strongly disagree with 1. The respondents were asked to read each item carefully and put a (√) mark in the cell provided. The investigator computed all the scores for the items for each respondent. The total score of all the items were calculated and finalized as the individual’s score.

3.16. INTERVIEW METHOD

Other than Rating Scale investigator used also to collect more details to defend the selected research problem. The views of teacher educators on the components of various practical aspects of secondary teacher education were collected using interview. The nature of questions and the nature of response to be elicited were considered and the investigator decided to construct questions for the purpose. The shape the details and format of the questions were fixed on the basis of the review of the earlier studies of the similar nature. Investigator had a detailed discussion with her guide and an informal interaction with her co-teacher educators.
To conduct the interview investigator selected nearly 25 teacher educators who work in different colleges of education in and around Salem and Namakkal district. Nearly 20 questions were prepared regarding the practical aspects of secondary teacher education and the direct interview method was adopted. Investigator directly interviewed the teacher educators and asked questions to each and every teacher educator and got the opinion from the teacher educators in an informal way.

3.17. STATISTICAL TECHNIQUES USED

Mean and standard deviation were calculated to study the distribution of the data collected for the study. ‘t’ test and ‘F’ test were calculated to find out the difference between the means of different groups considered for this study. One way ANOVA was applied to find whether significant different exists among the groups or not.

3.18. CONCLUSION

This chapter is a detailed discussion on the sampling technique, sample distribution, tool used for the study and scoring method related to practical aspects of secondary teacher education. And also it mentioned scoring, consolidation and statistical treatment employed in the study. The details of the analysis, interpretation of data and discussion of results are presented in the next chapter.