

**CERTAIN PSYCHO-SOCIAL VARIABLES AS  
CORRELATES ON TEACHING COMPETENCIES  
OF  
MALAYALAM TEACHER TRAINEES OF KERALA**

**P. SREEMANUNNI**

*Thesis submitted for the Degree of*  
**DOCTOR OF PHILOSOPHY IN EDUCATION**

**DEPARTMENT OF ADULT EDUCATION  
&  
EXTENSION SERVICES**

**UNIVERSITY OF CALICUT**

**KERALA  
1999**

## DECLARATION

I, Sreemanunni. P. do hereby declare that this study "Certain Psycho-Social Variables as Correlates on Teaching Competencies of Malayalam Teacher Trainees of Kerala" has not been previously submitted by me for the award of a Degree, Diploma or Recognition.

C.U. Campus,  
30-09-1999.


  
P. SREEMANUNNI

**Dr. K. KARUNAKARAN,**  
HEAD,  
DEPARTMENT OF ADULT EDUCATION &  
EXTENSION SERVICES,  
UNIVERSITY OF CALICUT.

Calicut University,  
30-09-1999.

## **C E R T I F I C A T E**

I, Dr. K. Karunakaran, do hereby certify that this thesis entitled "Certain Psycho-Social Variables as Correlates on Teaching Competencies of Malayalam Teacher Trainees of Kerala" is a record of bonafide study and research carried out by Sri. Sreemanunni. P. under my supervision and guidance.

  
**Dr. K. KARUNAKARAN**  
(Supervising Teacher)

## **ACKNOWLEDGEMENT**

The investigator wishes to place on record his deep sense of gratitude and sincere thanks to Dr.K.Karunakaran, Head of Department, Adult Education and Extension Services, University of Calicut, whose guidance the study was conducted. The investigator is indebted to him for his inspiring guidance, kind treatment and encouragement shown to him during the course of this study.

The investigator gratefully acknowledges the facilities and suggestions provided by the Principals of Training Colleges, Assistant Directors of University Teacher Education Centres and the Teacher Educators of the concerned institutions. He is also grateful to the Heads of various schools in which he was allowed to observe the classes of the trainees during the period of practice teaching.

Sincere thanks and gratitude are expressed by the investigator to all those who have contributed directly or indirectly to make this study a success.

Calicut,  
30-09-1999.

  
P. SREEMANUNNI

## CONTENTS

LIST OF TABLES

LIST OF APPENDICES

| CHAPTER |   | Page No. |
|---------|---|----------|
| I       | INTRODUCTION                                    | 1-21     |
| II      | REVIEW OF RELATED LITERTURE                     | 22-61    |
| III     | METHODOLOGY                                     | 62-110   |
| IV      | ANALYSIS  | 111-229  |
| V       | CONCLUSIONS, SUGGESTIONS AND<br>RECOMMENDATIONS | 230-248  |

REFERENCES

## LIST OF TABLES

| Table No. | Title  | Page No. |
|-----------|--|----------|
| 1         | Details of Tools Used in the Study   | 64       |
| 2         | Distribution of Items according to the Level of Teaching Competency in the Categories of Teaching Skills | 65       |
| 3         | Details of Teaching Skills in each Category of Teaching Skills   | 66       |
| 4         | 't' Values of the Items of the Draft Scale   | 73       |
| 5         | Grade Classification   | 85       |
| 6         | Grade Classification of Teacher Trainees according to the Scores obtained in KITS                        | 86       |
| 7         | Distribution of Teacher Trainees included in the Study according to Educational Level of Parents         | 96       |
| 8         | Distribution of Teacher Trainees According to the Parental Occupation                                    | 97       |
| 9         | Distribution of Teacher Trainees according to the Estimated Annual Income of their Parents               | 98       |
| 10        | Distribution of Teacher Trainees Based on Socio-Economic Status  | 99       |
| 11        | Details of Teacher Training Institutions under the Universities of Kannur and Calicut                    | 101      |

|    |   |     |
|----|---|-----|
| 12 | Details of Teacher Trainees included for the Study  | 109 |
| 13 | Frequency Distribution of General Teaching Competency Scores of Total Sample  | 113 |
| 14 | Frequency Distribution of Attitude Scores of Teacher Trainers   | 116 |
| 15 | Frequency Distribution of Teacher Aptitude Scores   | 119 |
| 16 | Frequency Distribution of Teacher Trainees' Interest Scores on Total Sample   | 121 |
| 17 | Frequency Distribution of Teacher Trainees' Intelligence Scores on Total Sample   | 123 |
| 18 | Frequency Distribution of the Socio Economic Status Scores for Total Sample   | 125 |
| 19 | Details of Relationship Between General Teaching Competency and Attitude Towards Teaching Profession for the Whole Sample | 128 |
| 20 | Details of Relationship Between General Teaching Competency and Teaching Aptitude for the Whole Sample                    | 129 |
| 21 | Details of Relationship Between Interest in Teaching and Teaching Competency for the Total Sample                         | 130 |
| 22 | Details of Relationship Between General Teaching Competency and Intelligence for the Whole Sample                         | 131 |
| 23 | Relationship Between the Socio Economic Status and General Teaching Competency for the Total Sample                       | 132 |

|    |   |     |
|----|---|-----|
| 24 | Details of Relationship obtained Between Parental Education and General Teaching Competency for the Total Sample            | 133 |
| 25 | Details of Relationship obtained Between Parental Occupation and General Teaching Competency for the Total Sample           | 134 |
| 26 | Details of Relationship obtained Between Parental Income and Teaching Competency for Total Sample                           | 135 |
| 27 | Details of Relationship Between Attitude towards Teaching Profession and Teaching Competency for Male Trainees              | 136 |
| 28 | Details of Relationship between Attitude towards Teaching Profession and General Teaching Competency of the Female Trainees | 137 |
| 29 | Details of Relationship between Teaching Aptitude and General Teaching Competency for the Male Teacher Trainees             | 138 |
| 30 | Details of Relationship between Teaching Aptitude and General Teaching Competency of the Female Teacher Trainees            | 139 |
| 31 | Details of Relationship between Interest in Teaching and General Teaching Competency for Male Teacher Trainees              | 140 |
| 32 | Details of Relationship between Interest in Teaching and General Teaching Competency of the Female Trainees                 | 141 |
| 33 | Details of Relationship between Intelligence and General Teaching Competency for Male Trainees                              | 142 |
| 34 | Details of Relationship between Intelligence and General Teaching Competency for Female Trainees                            | 143 |

|    |   |     |
|----|---|-----|
| 35 | Details of Relationship between Socio Economic Status and Teaching Competency of the Male Teacher Trainees                  | 144 |
| 36 | Details of Relationship between Socio Economic Status and Teaching Competency of Female Trainees                            | 145 |
| 37 | Consolidated Table showing the Relationship between Independent Variables and Dependent Variable for Male-Female Sub-group  | 146 |
| 38 | Details of relationship between Attitude towards Teaching Profession and General Teaching Competency for the Urban Trainees | 147 |
| 39 | Details of Relationship between Attitude towards Teaching Profession and General Teaching Competency for Rural Students     | 148 |
| 40 | Details of Relationship between Teaching Aptitude and General Teaching Competency of Urban Trainees                         | 149 |
| 41 | Details of Relationship between Teaching Aptitude and General Teaching Competency for Rural Students                        | 150 |
| 42 | Details of Relationship between Intelligence and General Teaching Competency of Urban Trainees                              | 151 |
| 43 | Details of Relationship between Intelligence and General Teaching Competency of Rural Trainees                              | 152 |
| 44 | Details of Relationship between Interest in Teaching and General Teaching Competency for Urban Students                     | 153 |
| 45 | Details of Relationship between Interest in Teaching and General Teaching Competency for Rural Trainees                     | 154 |

|    |  |     |
|----|--|-----|
| 46 | Details of Relationship obtained between Socio Economic Status and General Teaching Competency for the Urban Trainees                            | 155 |
| 47 | Details of Relationship obtained between Socio Economic Status and General Teaching Competency for the Rural Trainees                            | 156 |
| 48 | Consolidated table showing the Relationship between the Independent Variables and Dependent Variable for the Urban-Rural Sub-group               | 157 |
| 49 | Details of Relationship between Attitude towards Teaching Profession and General Teaching Competency for Trainees Coming from Teacher Background | 158 |
| 50 | Details of relationship between Attitude towards Teaching Profession and General Teaching Competency for Trainees who have no Teacher Background | 159 |
| 51 | Details of Relationship between Teaching Aptitude and General Teaching Competency for Trainees Coming from Teacher Background                    | 160 |
| 52 | Details of Relationship between Teaching Aptitude and General Teaching Competency for Trainees who have no Teacher Background                    | 161 |
| 53 | Relationship between Interest and General Teaching Competency for Trainees coming from Teacher Background  | 162 |
| 54 | Details of Relationship between Interest and General Teaching Competency for Trainees who have no Teacher Background                             | 163 |

|    |  |     |
|----|--|-----|
| 55 | Details of Relationship obtained between Intelligence and General Teaching Competency for the Trainees coming from Teacher Background                            | 164 |
| 56 | Details of Relationship between Intelligence and General Teaching Competency for Trainees who have no Teacher Background   | 165 |
| 57 | Details of Relationship between Socio Economic Status and General Teaching Competency for Trainees coming from Teacher background                                | 166 |
| 58 | Details of Relationship between Socio-Economic Status and General Teaching Competency for Trainees who have no Teacher Background                                | 167 |
| 59 | Consolidated table showing the relationship between the Independent Variables and Dependent Variable for Teacher Background and Non-Teacher Background Sub-group | 169 |
| 60 | Details of Relationship between Attitude towards Teaching Profession and Major Aspects of Teacher Competency for the Total Sample                                | 170 |
| 61 | Details of Relationship between Teaching Aptitude and Major Aspects of Teaching Competency for the Total Sample  | 171 |
| 62 | Details of Relationship obtained between Interest in Teaching and the Major Aspects of Teaching Competency for the Total Sample                                  | 172 |
| 63 | Details of Relationship obtained between Intelligence and Major Aspects of Teaching Competency for the Total Sample  | 173 |

|    |   |     |
|----|---|-----|
| 64 | Relationship obtained between Socio-Economic Status and major aspects of General Teaching Competency                                  | 174 |
| 65 | Relationship obtained between Attitude towards Teaching Profession and Major Aspects of General Teaching Competency for Male Trainees | 175 |
| 66 | Relationship obtained between Attitude and Aspects of Teaching Competency for Female Trainees   | 176 |
| 67 | Details of Relationship obtained between Teaching Aptitude and Major Aspects of Teaching Competency for Male Trainees                 | 177 |
| 68 | Relationship between Teaching Aptitude and Major Aspects of Teaching Competency of Female Trainees                                    | 178 |
| 69 | Relationship between Interest in Teaching and Aspects of Teaching Competency for Male Trainees  | 180 |
| 70 | Relationship between Interest in Teaching and Aspects of Teaching Competency for Female Trainees                                      | 181 |
| 71 | Relationship between Intelligence and Major Aspects of General Teaching Competency for Male Trainees                                  | 182 |
| 72 | Relationship between Intelligence and Aspects of Teaching Competency for the Female Teacher Trainees                                  | 183 |
| 73 | Relationship between Socio Economic Status and Aspects of Teaching Competency for Male Trainees                                       | 184 |
| 74 | Relationship between Socio Economic Status and Aspects of Teaching Competency for Female Trainees                                     | 185 |

|    |   |     |
|----|---|-----|
| 75 | Consolidated Table showing the Relationship between the Independent Variables and Major Aspects of the Dependent Variable for Male-Female Sub-group | 186 |
| 76 | Relationship between Attitude Towards Teaching Profession and Aspects of Teaching Competency for Urban Trainees                                     | 187 |
| 77 | Relationship between Attitude towards Teaching Profession and Aspects of Teaching Competency of Rural Trainees                                      | 188 |
| 78 | Relationship between Teaching Aptitude and Aspects of Teaching Competency of Urban Trainees   | 189 |
| 79 | Relationship between Teaching Aptitude and Aspects of Teaching Competency for Rural Trainees  | 190 |
| 80 | Relationship between Interest in Teaching and Aspects of Teaching Competency for Urban Trainees   | 191 |
| 81 | Details of Relationship obtained between Interest in Teaching and Aspects of Teaching Competency for Rural Students                                 | 192 |
| 82 | Relationship between the Intelligence and Aspects of Teaching Competency for Urban Trainees   | 193 |
| 83 | Details of Relationship between Intelligence and Aspects of Teaching Competency of Rural Trainees   | 194 |
| 84 | Relationship between Socio Economic Status and Aspects of Teaching Competency for Urban Trainees  | 195 |
| 85 | Relationship between Socio Economic Status and Aspects of Teaching Competency for Rural Trainees  | 196 |

|    |   |     |
|----|---|-----|
| 86 | Difference in the means scores on Attitude towards Teaching Profession  | 199 |
| 87 | Details of Association between Sex and Teaching Aptitude  | 200 |
| 88 | Difference in the Mean Scores on Interest in Teaching of Male and Female Trainees   | 200 |
| 89 | Difference in the Mean Scores on General Intelligence of Male and Female Teacher Trainees   | 201 |
| 90 | Difference in Means of Socio Economic Status Scores of Male and Female Teacher Trainees   | 202 |
| 91 | Difference in the mean scores on Attitude towards Teaching Profession for Urban and Rural Trainees  | 203 |
| 92 | Difference in the Mean Scores on Teaching Aptitude for Urban and Rural Trainees   | 203 |
| 93 | Difference in Mean Scores of Urban and Rural Trainees in the Interest in Teaching   | 204 |
| 94 | Difference in Mean in the Intelligence of Urban and Rural Teacher Trainees  | 205 |
| 95 | Difference in Mean in Scores of Socio Economic Status for Rural and Urban Trainees  | 206 |
| 96 | Difference in Mean Scores of General Teaching Competency of Trainees from Family of Teacher Background and Trainees from Non-Teacher Background | 206 |
| 97 | Comparison of 'r's between Attitude towards Teaching Profession and General Teaching Competency for Male and Female Trainees                    | 208 |

|     |   |     |
|-----|---|-----|
| 98  | Comparison of 'r's between Teaching Aptitude and General Teaching Competency for Male and Female Trainees   | 209 |
| 99  | Comparison of 'r's between Interest in Teaching and General Teaching Competency for Male and Female Trainees  | 209 |
| 100 | Comparison of 'r's between Intelligence and Teaching Competency for Male and Female Trainees  | 210 |
| 101 | Comparison of 'r's between Socio Economic Status and General Teaching Competency for Male and Female Trainees   | 210 |
| 102 | Comparison of 'r's between Attitude towards Teaching Profession and General Teaching Competency for Urban and Rural Trainees                                    | 211 |
| 103 | Comparison of 'r's between Teaching Aptitude and General Teaching Competency for Urban and Rural Trainees   | 211 |
| 104 | Comparison of 'r's between Interest in Teaching Profession and General Teaching Competency for Urban and Rural Trainees   | 212 |
| 105 | Comparison of 'r's between Intelligence and Teaching Competency for Urban and Rural Trainees  | 212 |
| 106 | Comparison of 'r's between Socio Economic Status and Teaching Competency for Urban and Rural Trainees   | 213 |
| 107 | Comparison of 'r's between Attitude towards Teaching Profession and General Teaching Competency for Trainees with Teacher Background and Non-Teacher Background | 213 |

|     |   |     |
|-----|---|-----|
| 98  | Comparison of 'r's between Teaching Aptitude and General Teaching Competency for Male and Female Trainees   | 209 |
| 99  | Comparison of 'r's between Interest in Teaching and General Teaching Competency for Male and Female Trainees  | 209 |
| 100 | Comparison of 'r's between Intelligence and Teaching Competency for Male and Female Trainees  | 210 |
| 101 | Comparison of 'r's between Socio Economic Status and General Teaching Competency for Male and Female Trainees   | 210 |
| 102 | Comparison of 'r's between Attitude towards Teaching Profession and General Teaching Competency for Urban and Rural Trainees                                    | 211 |
| 103 | Comparison of 'r's between Teaching Aptitude and General Teaching Competency for Urban and Rural Trainees   | 211 |
| 104 | Comparison of 'r's between Interest in Teaching Profession and General Teaching Competency for Urban and Rural Trainees   | 212 |
| 105 | Comparison of 'r's between Intelligence and Teaching Competency for Urban and Rural Trainees  | 212 |
| 106 | Comparison of 'r's between Socio Economic Status and Teaching Competency for Urban and Rural Trainees   | 213 |
| 107 | Comparison of 'r's between Attitude towards Teaching Profession and General Teaching Competency for Trainees with Teacher Background and Non-Teacher Background | 213 |

|     |  |     |
|-----|--|-----|
| 108 | Comparison of 'r's between Teaching Aptitude and General Teaching Competency for Trainees with Teacher Background and Non-Teacher Background     | 214 |
| 109 | Comparison of 'r's between Interest and General Teaching Competency for the Trainees with Teacher Background and Non-teacher Background          | 215 |
| 110 | Comparison of 'r's between Intelligence and General Teaching Competency for Trainees with Teacher Background and Non-Teacher Background          | 215 |
| 111 | Comparison of 'r's between Socio Economic Status and General Teaching Competency for Trainees with Teacher Background and Non-Teacher Background | 216 |
| 112 | Attitude and General Teaching Competency   | 218 |
| 113 | Teaching Aptitude and General Teaching Competency  | 219 |
| 114 | Interest in Teaching and Teaching Competency   | 220 |
| 115 | Intelligence and General Teaching Competency   | 221 |
| 116 | Socio Economic Status and Teaching Competency  | 222 |
| 117 | High Attitude and General Teaching Competency  | 223 |
| 118 | Average Attitude and General Teaching Competency   | 223 |
| 119 | High Teaching Aptitude and General Teaching Competency   | 224 |
| 120 | Average Teaching Aptitude and General Teaching Competency  | 224 |

|     |   |     |
|-----|---|-----|
| 121 | Interest in Teaching and General Teaching Competency  | 225 |
| 122 | Interest in Teaching and General Teaching Competency  | 225 |
| 123 | Interest in Teaching and General Teaching Competency  | 226 |
| 124 | Intelligence and General Teaching Competency          | 226 |
| 125 | Intelligence and General Teaching Competency          | 227 |
| 126 | Intelligence and General Teaching Competency          | 227 |
| 127 | Socio Economic Status and General Teaching Competency | 228 |
| 128 | Socio Economic Status and General Teaching Competency | 228 |
| 129 | Socio Economic Status and General Teaching Competency | 229 |

## LIST OF APPENDICES

### APPENDIX

- I General Teaching Competence Scale
- II Draft Scale of Attitude Towards Teaching Profession
- III Scale of Attitude Towards Teaching Profession
- IV Teaching Aptitude Test Battery and Response Sheet
- V Kakkar's Interest in Teaching Scale
- VI General Data Sheet and Socio Economic Scale

# INTRODUCTION

P. Sreemanunni “Certain psycho-social variables as correlates on teaching competencies of Malayalam teacher trainees of Kerala” Thesis. Department of Adult Education & Extension Services, University of Calicut, 1999

# INTRODUCTION

## INTRODUCTION

During the past few decades the world has witnessed unprecedented explosion in major areas of knowledge, population as well as aspirations. Rapid changes are taking place in every sphere of life. Science and technology have advanced much. In order to cope up with this advancement, a serious attempt on revamping educational set up is of great importance. In the existing circumstances, no individual or nation can remain unaffected by the happenings in any other part of the world.

Education from time immemorial has been looked upon in India not merely as a pursuit, but as a dedication wedded to service. The quality of education depends upon various factors. The teacher is, however, the most important factor for qualitative improvement. Teaching has been one of the oldest and most respected professions in the world. It has now acquired a status of 'profession' because the need for 'teacher' and his 'education and teaching' have been imperative all these days. Teaching is always a dynamic activity. It unfolds a world of knowledge and information, experience and erudition. The personality of the teacher is a significant variable in the classroom. The question 'who would teach' has always been a matter of major concern. The progress of a nation

squarely rests on the quality of teachers as they are the most important components of the educational process. Quality of teacher in turn depends upon the quality of teacher preparation programmes through which they are equipped for the same.

In ancient India, 'teacher' enjoyed special status and was held in high esteem by the society not only for the scholarship but also for the qualities of character. The selection of a teacher was done with much care. Max Muller quoting Rigveda describes how a teacher was selected. "Teacher must have passed through the recognised curriculum and have filled all duties of a Brahmachari before he was allowed to become a teacher. He was also to be spiritual. Only those persons who could come up to these standards could aspire to be teachers" (1994).

A teacher is not a person who transmits a bunch of information on his pupils. He has to fulfil many other roles in moulding the individual to become a responsible and dutiful citizen. Hence it is evident that the teacher is considered as a 'change agent' and not as a mere 'transmitter of knowledge and culture'. But according to many, the present teacher preparation programmes are not suited to inculcate the required qualities to be competent and resourceful teachers. That is why all committees and commissions on education have emphasised the importance of the

role of the teacher in education. The Education Commission in India (1964-66) rightly remarked that no education system can rise above the level of its teachers. The following words of the Commission is worth noting "Of all different factors which influence the quality of education and its contribution to national development, the quality, the competence and character of teachers are undoubtedly the most significant."

More recently, the International Commission on Education (1996) in its recommendation has mentioned that 'the importance of the role of the teacher as an agent of change, promoting understanding and tolerance has never been more obvious than today.'

Teaching is an art; no doubt, a science and a skill as well (Pillai, 1985). It is an activity – unique, professional, social, rational and human – activity. Effective teaching is one that produces maximum learning outcomes. The ultimate goal of teaching is to attain allround development of the child. As Rabinḍranatha Tagore remarked "the main objective of teaching is not to explain the meaning, but to knock at the door of the mind."

The purpose of teaching is to maximise learning. Teaching is often thought of us something that comes rather naturally to people who know their subjects. As education is viewed as an instrument to develop the

cognitive faculty, tolerance and understanding among learners and prepare citizens to understand and face the realities of globalisation, the role of the teacher in the emerging society will definitely change from what it is today.

In the coming years the teacher shall be expected to be more of a catalytic agent initiating the process of a change, rather than exerting direct influence on the learners. On the one hand teachers shall have to develop the competencies to help the learners to accomplish their own potentials.

On the other hand, they shall be required to display greater firmness in relation to fundamental values that should influence the individual's life. As such, in the contemporary society teachers need to be thorough professionals fully equipped with both, high academic standards, pedagogical and practical skills and ethical values. But unfortunately teaching is still in a transitional stage and is experiencing serious occupational identity crisis.

The National Policy of Education (1986) has provided broad indications for the restructuring of all sectors of education. It has been recognised that without improving the quality of teacher education, the quality of education cannot be improved.

Competency in teaching is a must for teachers. How can we promote this competencies is the major problem. The teacher himself should be capable to meet the challenges in the classroom as well as the community. So a feeling that anybody can be selected for teaching is not a good practice. The right person should be selected for the teacher training programme. The candidate's academic achievement in the basic degree alone would not suffice. He/she should have favourable attitude towards the profession in which he/she is going to engage. His aptitude, interest and intelligence should also be taken into account. If we produce poor or incompetent teachers it is a ruin for the community and for the nation as a whole. Here it is to be reminded the words of Ananthamoorthy in a talk. "You can remove a bad Prime Minister after five years. But you cannot remove a bad teacher till he attains the age of 55."

Till recently teaching attracted better people than other profession. But a recent survey reveals that only 5.5 per cent of American University Students wants to take up teaching as a career. This is a very sharp drop from the 25 per cent reported in 1968 by a similar survey. 22 per cent of students who entered colleges in India in 1966 showed their inclination towards teaching profession. But the trend again came down due to various reasons. Along with this, there was a fall in standard of

attainment of prospective teachers. In India most of the candidates selected for B.Ed. course were third class graduates.

But now the scene has totally changed. The trainees are selected on the basis of their merit. The achievement acquired in the basic qualification is the only criterion for selection to the B.Ed. course.

A proper teacher preparation programme should enable the trainees to acquire the basic skills and competencies to be a good teacher such as the capacity to manage a class with pupils of varying abilities, to communicate ideas logically and with clarity, to use the technological devices to make teaching more effective, to organise educative experiences outside the class and to learn to work with community and help the pupils to do so. For this, psycho-social factors have greater influence in moulding the personality of the prospective teachers. But at present, the academic credits of the candidates are considered the only criterion for admission to B.Ed. course.

Academic excellence is not enough to become a good teacher. Certain studies have shown that academic qualifications at graduate and post-graduate level do not help to improve the efficacy of teaching calibre. Instead, studies have concluded that the attitude of teachers towards teaching profession has a significant relationship with efficacy in teaching profession. This indicates that those who are having higher academic

standards may not necessarily be very effective in the teaching profession. Krishna Bhattacharjee (1984) in his has thrown light in this regard and pleaded that the prospective teachers should be given admission only after assessing their attitude towards teaching profession. This warrants one of the reasons for the present study.

Interest in and aptitude for teaching are also the contributing factors for the success of teaching. A person without genuine interest in teaching may be a failure. Various studies conducted by Pillai (1985) and Kumar (1986) have substantiated this view. Intelligence of the student is not at all considered as a criterion for admission to B.Ed. course. So far, no attempt has been made to study the level of intelligence of candidates for admission to the course. Various studies conducted by Mutha (1950), Wangoo (1982) and Malik (1984) have proved that intelligence of prospective teachers has a positive influence on teaching. But Sharma (1982) found that interest and intelligence have no significant influence on teaching competency. The researcher is of the opinion that favourable attitude, aptitude in teaching, interest in the profession, and high intelligence are essential to become an efficient and competent teacher. Hence, he feels that a detailed examination is worthwhile to find out whether any relationship exists between the above factors and the efficacy of teaching profession.

## NEED AND SIGNIFICANCE OF THE STUDY

It is a fact that no technical device in the field of education can replace the teacher. He remains an integral part in the education process. Teacher is a 'friend, philosopher and guide'. So he should be ready to help the students at any time. His role now is behind the curtain. Now he is considered as a facilitator. As such his role is higher than that of any modern scientific equipment. In such a situation the teacher should be competent enough to discharge his duties satisfactorily. Hence those who are capable alone should be selected for teacher preparation programmes.

In most of the teacher education institutions in Kerala, a sound programme of teacher preparation is there in the B.Ed. course. But it is experienced that even after undergoing the course their competency in teaching is not up to the expectations.

In our Teacher Education Institutions, thousands of applications are received for admission to B.Ed. course every year. But only the top scorers in the basic Degree are selected for admission to the course. There are instances of even first class degree holders not getting admission. Those who are having academic excellence alone are selected to the course. After the completion of the course, most of the trainees come out with flying colours. But it has been noticed disappointedly that they have not

acquired the expected level of teaching competency. The reason, the researcher feels is that, it is not the right type of person who is selected to become the teacher. He who scored high marks in the concerned subject is selected to undergo the course. Whether he is fit for this profession, his aptitude in this field, his interest etc are not at all taken into account. Moreover, he is not given sufficient opportunities to develop his competencies. On the basis of experience of the investigator as a teacher educator in charge of the admission of students at B.Ed. level and an examiner for practical examination, he has felt that certain other factors in addition to the academic excellence may be responsible for the development of teaching competency.

It is evident that a large number of applicants for B.Ed. admission prefers the course for getting a job, and not based on genuine interest in this field. As the investigator has been a teacher and teacher educator for several years he has noticed that socio-economic status of the trainees also has positive relationship towards competency in teaching. Hence, the investigator has taken up this problem, with a view to find out the impact of socio-economic status on the efficacy of teaching.

This is a serious problem faced by the educationists and administrators, and it is to be investigated and solutions have to be evolved for moulding competent teachers. This may help to solve the

problem of indiscipline to a certain extent. Only a competent teacher can bring about desirable changes in the students and in the community and deserves to be called a 'nation builder'.

We have to equip our teachers with the ideas of change or the depths and dimensions of change. If schools do not change the economy of a country, they do not also alter the destinies of the people. "Change may be difficult as well as painful. But the change must be since the teacher is the key to success of education."<sup>5</sup>

After the National Policy on Education came into being, the NCTE has stressed the need of a qualitative teacher education programme. For the upliftment of the community as well as the nation a qualitative teacher education programme to evolve competent teachers is highly required. It is rightly said that the destiny of India is being shaped in her classrooms. As such, highly competent teachers are to be come out after undergoing the training programmes. The question here is that whether right type of persons are selected for the course to make them competent enough to meet the challenges in and outside the classroom. The persons who are having a favourable attitude towards the profession, and a genuine interest should be selected to the course. Their aptitude and intelligence are also to be taken into account.

As our nation is passing through a difficult situation both by internal and external challenges, a highly competent teacher community can only direct the future generation in the desirable way. Religious fundamentalism, casteism, parochialism, etc. are our present challenges. The teacher should be capable enough to meet all these challenges. So mere academic achievement should not be the only criterion for the selection to B.Ed. course. The investigator is of the opinion that certain other factors like attitude, aptitude, interest, intelligence, family teacher background, socio-economic status, etc. have very much influence on teaching competency. Hence he identified the problem to find out the relationship between the psychological and sociological variables and teaching competency.

Many studies have been conducted in this regard outside Kerala, but they are related mostly to teachers who are in service, that too before the National Education Policy came into being. As such the investigator feels a similar study on prospective teachers is highly warranted. He feels that the study will be helpful to select suitable candidates to undergo B.Ed. course so as to evolve a better teacher community in future.

If such highly competent teachers are to be evolved for the benefit of the coming generation and for the nation, the admission to teacher

preparation programmes should be based on something more, than academic achievement. Hence the investigator feels a thorough study of the relationship of psycho-social variables on the teaching competency of teacher trainees is essential for the improvement of the efficiency of education and training.

### **STATEMENT OF THE PROBLEM**

The study is titled as "Certain Psycho-Social Variables as Correlates on Teaching Competencies of Malayalam Teacher Trainees of Kerala".

### **DEFINITION OF KEY TERMS**

**Psycho-Social variable :-** In this term both psychological and social variables are included. Psychological variable refers to both cognitive and affective variable. In the present study, attitude towards teaching profession, teaching aptitude interest in teaching and general intelligence of the teacher trainees have been considered as psychological variables.

**Social Variables:-** This refers to a representative group of variables belonging to different dimensions which describes various aspects of an individual's status, relationship and interaction with different aspects of

his social and familial environments. Here socio-economic status of the trainees is considered as the major social variable.

**Correlates:-** The dictionary meaning of this term is 'either of two things so related that one implies the other or is complementary to it.' The word correlate is defined as 'a variable which is correlated with a specified variable' [Wolman, Benjamin, B. (Ed.) 1975]. In this study it indicates the relationship between certain variables with teaching competency.

**Competency:** Competency refers to 'the ability to apply to practical situations and the essential principles and techniques of a subject matter field.'<sup>6</sup> In actual sense, competency in teaching means subject matter competency, presentation competency, and decision making competency. However, the term denotes the capacity of the teacher trainees in transferring theoretical knowledge into actual practical situation. In classroom transaction the skills involved will come under 5 aspects preparation, planning, closing, evaluation and management as developed by Passi and others. In the present study the term competency has been equated with the skills in classroom transaction.

**Malayalam Teacher Trainees:-** Teacher Training is a general connotation for training of candidates for the courses such as B.Ed., T.T.C. etc. But, here, the teachers who are undergoing the B.Ed. course in various Teacher

Education Institutions during the year 1998-99 in Malayalam optional subject alone were considered for the study.

### **OBJECTIVES OF THE STUDY**

- 1) To examine the level of teacher trainees with regard to each of the psycho-social variables namely (i) Attitude towards Teaching Profession, (ii) Teaching Aptitude, (iii) Interest in Teaching, (iv) Intelligence and (v) Socio-Economic Status.
- 2) To categorise the Teacher Trainees in regard to their General Teaching Competency.
- 3) To locate the level of Teacher Trainees who come from the family of teachers in regard to both of the independent and dependent variables.
- 4) To understand whether the psycho-social variables viz., Attitude towards Teaching Profession, Teaching Aptitude, Interest in Teaching and Intelligence have significant relationship with General Teaching Competency of the Teacher Trainees.
- 5) To find out whether the socio-economic status of the teacher trainees has significant relationship with Teaching Competency.

- 6) To estimate whether there is any significant difference in Teaching Competency between trainees who come from families of teachers and who are not.
- 7) To ascertain the extent of relationship of each of the psycho-social variables listed above with each of the major aspects of Teaching Competency viz., Planning, Presentation, Closing, Evaluation and Managerial.
- 8) To compare the relationship of each of the psycho-social variables with Teaching Competency of (i) male and female teacher trainees, (ii) teacher trainees coming from rural and urban areas and (iii) teacher trainees who come from the family of teachers and who are not.
- 9) To find out the grouping pattern among teacher trainees when categorised in relation to high, average and low groups with each of the psycho-social variables mentioned above.

## **HYPOTHESES**

The hypotheses formulated in the present study are:

- 1) There exists significant positive relationship between each of the psychological variables, viz.,

- i) Attitude towards Teaching Profession
- ii) Aptitude for Teaching
- iii) Interest in Teaching and
- iv) General Intelligence

possessed by the teacher trainees and their general teaching competency

- 2) There exists significant relationship between socio-economic status of the teacher trainees and their General Teaching Competency.
- 3) There is significant positive relationship between each of the four psychological variables listed above and each of the major aspects of Teaching Competency, viz., Planning, Presentation, Closing, Evaluation and Managerial.
- 4) There is significant positive relationship between Socio-Economic Status and major aspects of teaching competencies mentioned above, when they are correlated in pairs.
- 5) There exists positive relationship between each of the components of socio-economic status viz., Parental education, Parental Occupation and Parental annual income and Teaching Competencies of Teacher Trainees.

- 6) There is significant difference in Teaching Competency between the group of trainees who have teacher background and those who have not.
- 7) There exists significant sex difference in the correlation between each of the psycho-social variables considered and Teaching Competency.
- 8) There exists significant difference in the correlation between each of the psycho social variables considered and Teaching Competency in the case of teacher trainees coming from rural and urban areas.
- 9) There is significant difference in the correlation between trainees coming from family of teachers and who have no such background with regard to their teaching competencies.
- 10) There exists significant difference in the percentages with respect to each of the psycho social variables and General Teaching Competency when the trainees are classified into 3 sub groups viz., High, Average and Low.

## **METHODOLOGY**

### **1. Sample**

B.Ed. trainees from the Teacher Education Institutions from Kasargod, Wayanad, Kannur, Kozhikode, Malappuram districts were

selected for the study. The sample was chosen from 10 Teacher Education Institutions from among those who are specialising in the teaching of Malayalam as optional subject. The institutions included in the study are Government Colleges, Aided Colleges, Unaided Colleges and Self Financing Teacher Education Centres run by Universities.

Male-Female, Urban-Rural, Trainees of teacher background-Not having teacher background were considered as sub samples.

## 2. Tools

The following tools are used for the collection of data.

- 1) Socio-Economic Status Scale developed by Kuppusamy and modified by the investigator
- 2) Teacher Attitude Scale constructed by the investigator.
- 3) Teacher Aptitude Test Battery (TATB) developed by Shamin and Dixit (1986)
- 4) Kakkar's Interest in Teaching Scale (KITS) adapted by the investigator (1985)
- 5) Raven's Standard Progressive Matrices (SPM).

- 6) General Teaching Competency Scale developed by Passi (1979) adapted by the investigator.

The personal data were collected using a General Data Sheet form. The attitude scale constructed by the investigator was used to measure the attitude of teacher trainees towards teaching profession. Standardised tools were used to measure the other variables such as aptitude, interest and intelligence. Teaching competency was measured using the General Teaching Competency Scale adapted by the investigator.

### Techniques of Analysis

The collected data were analysed using the following Statistical Techniques.

- 1) Preliminary analysis of Test Scores such as Arithmetic mean, median, mode, standard deviation, skewness, kurtosis, etc.
- 2) Correlation analysis using Pearson's Product Moment Coefficient of Correlation ( $r$ )
- 3) Comparison of relevant groups using the Test of significance for Mean difference.

- 4) Test of significance for difference between 'r's.
- 5) Chi-square Test.

## **SCOPE AND LIMITATIONS OF THE STUDY**

The investigator is aware of certain limitations in the present study.

- 1) The sample selected for the study is not a statewide one. It is confined to Kasargod, Kannur, Kozhikode, Wayanad and Malappuram Districts which come under the jurisdiction of both Kannur and Calicut Universities. Limitations of time, money and other facilities imposed this restriction. However, the area selected is a good cross section of the population.
- 2) The study was limited in Malayalam optional subject, since it was not practical to observe the classes in other subjects by the investigator himself.
- 3) Only certain psycho-social variables are considered for the present study variables such as level of aspiration of parents, area of backwardness, multi-lingual areas, etc. have not been considered for the present study. However, it is felt that these won't affect the findings of the study.

## **ORGANISATION OF THE REPORT**

The study has been reported in five chapters.

Chapter I: Introduction emphasising the need and significance, definition of key terms, objectives, hypotheses, sample used, tools, techniques of analysis and scope and limitations of the study.

Chapter 2: Description and findings of related literature and studies.

Chapter 3: Methodology and Procedure adopted for the study.

Chapter 4: Details of analysis of the data followed by the interpretation of the results.

Chapter 5: A short resume of the study, major findings, and suggestions for further research.

Bibliography, tools, etc., are appended.

# REVIEW OF RELATED LITERATURE

P. Sreemanunni “Certain psycho-social variables as correlates on teaching competencies of Malayalam teacher trainees of Kerala” Thesis. Department of Adult Education & Extension Services, University of Calicut, 1999

CHAPTER II

REVIEW OF RELATED LITERATURE

## REVIEW OF RELATED LITERATURE

A review of related literature is of vital importance to any investigation. It must be conversant with relevant theories in the field reports and records as also all other relevant literature. Knowledge of prior studies give a good footing and direction for a research worker in the field of his investigation. According to Best (1990) "Knowing what data are available often serves to narrow the problem itself as well as the techniques that might be used. Only those studies that are plainly relevant, competently executed and clearly reported should be included."

The problem under study is "Certain Psycho-Social Variables as Correlates on Teaching Competencies of Malayalam Teacher Trainees of Kerala." It is attempted to have a brief survey of similar studies conducted on teachers to find out the relation between teaching competency and other variables such as Attitude, Aptitude, Intelligence, Socio Economic Status and Sex difference. This is done in the hope that it will throw light on the problem under investigation and help to interpret the results with greater confidence and objectivity.

### Teaching Competencies

Teaching competence is defined by various authors. It refers to the set of knowledge, abilities and beliefs a teacher possesses and brings to the teaching situation (Mitzel, 1969). Some others perceive teacher competence as teacher behaviour that produce intended effects (Medley and Mitzel, 1963). Rama (1979) defines teaching competency "as the ability of a teacher manifested through a set of overt classroom behaviour which is the resultant of the interaction between presage and product variables of teaching within a social setting."

Buch (1975) and Sharma and Malhotra (1979) opined about the general teaching competency in the following words. "There were the times when it was believed that teachers are inborn and nothing can be done to improve teaching abilities of a person. But technology of teaching has altered this belief and has presented a clear-cut possibility of further development in the teaching abilities of any person of any teaching ability level. Considering the possibilities of further development in the teaching abilities, a large number of so-called teacher training institutions were established which are producing a large number of trained teachers. But in spite of all these attempts, the teacher training institutions could not meet the desired end of producing effective teachers."

Regarding the concept, definition and scope of teaching competency there prevails a confusion among researchers. Teacher effectiveness, teacher efficiency, teaching success, characteristics of a teacher, ability to teach etc. have been used to mean the same concept. To have a clear idea about this some of the following definitions may be helpful.

“Successful teaching is teaching that brings about effectiveness learning. The decisive question is not what methods or procedures are employed, or whether they are old-fashioned or modern, time tested experimental conventional or progressive” (James, 1954).

“The possessions of a teacher, his knowledge, skills, attitude, personality configuration and the like are referred to as competencies, they lend the character dimension to teaching” (Haskew, 1956).

“The competency of a teacher is defined as the average success of all his behaviours in achieving their intended effects” (Medley and Mitzel, 1963).

“Teaching competency is one of more abilities of a teacher to produce agreed upon educational effects” (Bidley, 1964).

“Teaching competency is those skills, concepts and attitudes needed by teachers for the act of instructing in an educational institutions” (Good, 1973).

From the above definitions, it is clear that there is no consensus among the educationists regarding the concept of teaching competency.

### **Concept of Attitude towards Teaching Profession**

According to Gordon Allport, attitude is a kind of mental set which represents a predisposition to form certain opinions and forming a behaviour towards something. It is considered to be a mental and rural set of readiness existing a directive dynamic influence upon individual's response to all objects and situations with which it is related. According to Yung, "Attitude is a learned and more or less generalised and effective tendency to respond in a persistent and characteristic manner usually, positively or negatively to some situations, ideas, values or material object."

Attitudes are formed through experiences which means that they are learned. Once a person has developed a particular attitude, it may be difficult for him to determine how he acquired it. The attitude of people tend to be relatively stable, but they can be modified to some extent.

In any educational institutions teachers should have positive attitudes to the effective functioning of the institutions and to obtain optimum results. Teachers who possesses negative attitude towards their

profession will have low morale. Some teachers are their profession only as a means for their livelihood and takes no pleasure on it. Those who possess negative attitude towards their profession become maladjusted and this will hamper the progress of the pupils Attitude of teachers really is an important factor to determine the organisational climate of institutions discipline and results.

### Studies on Attitude

Edwards (1957) had reviewed the techniques of scale construction for attitude measurement and disused in detail the merits and demerits of these techniques on the basis of research done on them. The Munnesota Teacher Attitude Inventory (MTAI) and the Survey of Study Habits and Attitudes have been extensively used in research on teachers' and students' attitude )Traverse, 1973). Several studies have been done using the MTAI.

A study was conducted by NCERT (1969-70) on attitudes. The major objective was whether attitudes of teachers towards teaching profession are affected by the management of school, location of the school, tenure of service, sex, marital status, age, experience, academic and professional qualifications. The findings include that sex, age and experience do not affect significantly, the attitude of teachers.

Samanth Roy (1971) studied teacher attitude and its relationship with teaching efficiency. The results showed that the teachers with favourable attitude had superior efficiency. But Debnath (1971) found that knowledge of the subject matter, academic qualifications, sympathetic attitude towards students, mastery of the methods of teaching, sincerity in teaching, proper use of teaching aids and appliances in teaching and the art of questioning are important correlates of teaching efficiency.

Singh (1974) found no difference in attitude due to age, education and training of teachers but reports that female teachers expressed a more favourable attitude towards teaching profession than male teachers.

Saran (1975) conducted a study to find out the teachers' attitude towards teaching profession with a sample of 1000 teachers from Western districts of Uttar Pradesh and found that the attitude towards teaching profession is not positively related to experience in teaching as well as age.

Chhabra (1975) studied certain psychological variables relating to teachers' morale at secondary and college levels. The investigation was conducted with a view (i) to make a comparative survey of a sample of secondary and college teachers of Meerut District relating to variables like morale, teachers' adjustment, study habits and values; and (ii) to

explore differences on above variables relating to sex, length of teaching experience and level of academic attainment. The study proposed to test the hypotheses of positive relationship between morale and adjustment, morale and study habits, study habits and theoretical values, study habits and vocational adjustment, and hypotheses of negative relationship between aesthetic values and study habits and social values and social adjustment.

The sample comprised 410 teachers. The tools used in the study were (I) the Purdue Teachers' Morale Inventory (Indian adaptation), (ii) Bell's Adjustment Inventory (adult form) (iii) An Adaptation of the Jain's study Habits of Inventory, and (iv) Kulshrestha's Study of Values. The statistics used included means, standard deviation, and coefficients of correlation.

Some of the findings were (i) female teachers possessed higher morale than male teachers (ii) level of academic attainment had no bearing on teachers' morale, (iii) There was a positive and significant correlation between morale and study habits, morale and adjustment (iv) Teachers' adjustment had no relationship with their professional experience.

A study based on the opinion of senior pupils regarding the qualities of a good teacher was conducted by Thakkur (1976) and established that a teacher who did not let down pupils was loved by all. Most significant

educational implication of his study is that having known the qualities of a good teaching, it would be for the concerned authority, to recruit good teachers, and also make the effectiveness of in-service teachers.

Job (1976) tried to find out the relationship between socio economic status and the role perception of secondary school teachers and found high significance with reference to the goal of secondary education.

Misra (1977) in his study conducted that the caste effected the attitude towards the teaching process. Shudras had significantly higher mean than Vysyas in attitude towards teaching profession. There were sex differences in attitude towards teaching, male teachers scoring significantly higher than female teachers.

In a survey conducted by Ghosh (1977) revealed that teacher education programme in India needs dynamism, innovation and reform from time to time.

Singh (1978) studied the relationship of teachers' personality, success in teaching and impact on students behaviour and proved that the theoretical and social values were positively related to teaching success but the economic and aesthetic values are negatively related. Further he showed that highly successful teachers were better adjusted

than the average and low teachers. The highly successful teachers possessed better intellectual capacity and efficiency.

In a study Lakshmikutty Amma (1978) analysed the major roles expected of teachers as viewed by teachers, parents and students. Her major findings were (i) Teachers should try to eliminate illiteracy, (ii) They should be thorough in the subject matter (iii) They should cooperate with staff to maintain discipline and (iv) They should be social agents, they should work for communal harmony.

Sharma (1979) tried to identify the factors of teacher competency among the student teachers of training colleges of Rajasthan. He identified integration, consideration control, responsibility openness, innovation attractiveness and pupil behaviour are the contributing factors in teacher competency.

Pathak (1979) studied the quality of teacher education in eastern Uttar Pradesh and found that the infrastructure facilities of teacher training institutes are very poor. At the same time, Attitude of Teacher Educators towards the profession was by and large unfavourable. But most dominant factor in entering teaching profession due to ample awareness for life long education. The other viable motives were the opportunity to work honestly. However, the weakest motive was the

opportunity to give a new direction to the society.

“Teacher Training as a catalyst of change in professional attitudes of student teachers’ was the study of Varma (1979) and made the following conclusions.

- (i) The validity of the teacher Attitude Inventory constructed by the investigator was 0.69 by correlating it with the teacher effectiveness score.
- (ii) The teacher training programme was a catalyst of change in the professional attitudes of teacher trainees
- (iii) Sex, age, marital status, caste, income of the family, parental education and academic qualification of the trainees were not correlated with their attitudinal change.
- (iv) Pre-training teaching experience, place of graduation and the teacher training institution attended by the teacher trainees were significantly correlated with the attitudinal change.

Yesodhara (1979) conducted a study of some Attitudinal and Proficiency Changes achieved through Education. It was designed to find out the changes in the selected attitudes and proficiency brought about

in student-teachers through the pre-service education programme, the extent to which intelligence, social intelligence, subject scholarship and sex affect the changes in respect of attitudes and proficiencies. The study revealed (1) The student teachers made significant gains in each of four attitudes and three proficiencies in all the 6 colleges of education, (2) there was significant positive relationship between the initial and final positions of the student teachers on each of the attitudes and proficiencies. (3) Intelligence was significantly related to the final attitude towards school in general and towards school work; but not to the attitude towards teaching as a profession.

Kushwaha (1979) took up a study entitled "An investigation into the Attitudes and Role Perceptions of Secondary School Teachers." The objective of the study were (i) to measure the attitude of secondary school teachers towards children and school work (ii) to collect teachers' personal data regarding their academic qualification, sex, teaching experience and subject taught, (iii) to find out the relationship between their attitudes and the five types of role perception. The findings of the study were (i) Teachers' quality was inversely related to the referrer role, (ii) Teachers' quality point was inversely related to the disciplinarian role (iii) There was no relationship between teaching experience and the motivation role and (iv) Teachers' attitude was inversely related to the

advisor role, referee role, motivation role and disciplinarian role.

Jaleel and Pillai (1979) established that the age and experience of college teachers appears to have definite positive relationship with their attitude towards teaching programme.

A study of effectiveness of teacher training programme in the colleges affiliated to Avadh University was conducted by Mohan (1980) and found that the majority of respondents were not satisfied with efficiency of training programmes.

Mutha (1980) identified the factors of teacher effectiveness such as sex, professional training, nature of schooling and income level of teachers, etc. The effective teachers had significantly higher scores on intelligence than ineffective ones.

In another study made by George and Anand (1980) the effect of micro teaching on teaching Self concept and teaching competence of student teachers was investigated. The sample consisted of 20 student teachers from a training college in Shillong. They were divided into 2 groups of 10 each as control and experimental group. The matching was done based on intelligence, sex, age, qualification and teaching experience. For equating them on intelligence, the culture fair intelligence

test (Scale 3) was used. Indore Teaching Competence Scale (ITCS) was used for finding out the teaching competence of student teachers in terms of integration of teaching skills. Observation schedules and rating scales relating to the 5 basic skills - skills of probing questions. Stimulus variations, reinforcement, explaining and illustrating with examples was utilised for giving feedback during Micro teaching treatment. A self rating Teaching Self Concept Scale was used for measuring Teaching Self Concept of Student Teachers. The following were the major findings.

- (i) There was significant difference between pre-test and post-test mean teaching self concept scores of the control group of student teachers.
- (ii) There was significant difference between the mean gain scores in teaching competence of the control group and experimental group of student teachers.
- (iii) Micro teaching proved effective in improving of teaching competence of student teachers.

A study on The Impact of Teacher Education Programme on the Professional Efficiency of Teachers was conducted by Sinha (1980). His major objectives were to find out the impact of teacher education

programme on (i) the effectiveness in classroom teaching (ii) teachers' competence to perform non-teaching roles, and (iii) the attitudes of teachers toward teaching and teacher-pupil relationship. The main findings of the study were: In the sphere of professional efficiency, the trained teachers were better than untrained teachers in the knowledge of subjects, preparation of teaching etc. (i) There was no significant difference in the competence of the two groups of teachers to manage the classroom discipline and the maintain a congenial climate for the teaching learning activity.

Srivastava (1980) conducted a study on Functional Utility of Method of Selection for Admission to the B.Ed. Classes of the Colleges affiliated to Gorakhpur University. The main objective of the study was to have a critical education of the procedure for selection of students for admission to the B.Ed. Classes of the colleges affiliated to Gorakhpur University and to suggest a suitable method for such selection. The main findings of the study were (1) By limiting the number of seats and fixing the teacher pupil ratio in the colleges, the quality of training had improved (2) Malpractices in admission had been reduced (3) Emphasis on academic record had led to the selection of better candidates. There was over emphasis on academic achievement and other characteristics that could be helpful for teaching were ignored.

In another study Mutha (1980) identified the factors attitudinal, motivational, and personality which differentiated effective teachers from ineffective ones and found that sex, professional training, nature of schooling and income level were significantly associated with the teacher effectiveness.

Wadhawan (1980) studied the "Relationship between the Social background and professionalisation." The objective of the study were (i) to find out the socio-economic and cultural background of higher secondary school teachers (ii) to find out the degree of their professionalisation. The study revealed that the academic and professional achievements of the teachers were generally of mediocre intellectual status (2) 40 per cent of teachers considered teaching more satisfying than most other careers. (3) There was positive and significant relationship between profession and general environment of the school and the degree of job satisfaction.

A study was conducted by Vyas (1982) with a sample of 300 B.Ed. Trainees to examine the relationship of certain factors such as age, academic achievement, self perception, attitude towards teaching, teaching aptitude and socio-economic status of the prospective teachers in Rajasthan, such as supervisors rating, self rating, university practical

mark etc. Age, academic achievement, non verbal intelligence and attitude towards teaching were found to contribute to the prediction of total assessment in the case of total sample.

Wera Chiasrisook (1982) studied the attitude of secondary school teachers of Thailand region towards their teaching profession and found that professional attitude of urban teachers were more favourable than that of rural teachers and the attitude of Government school teachers were more favourable than that of private school teachers.

In a study to examine the progress and problems of Teacher Education in India, Sharma (1982) observed that even after a lapse of 15 years of Education Commission Report of 1966, Teacher Education Programme had not undergone any marked improvement. He opined that if education was to meet the education of our time and of coming decades, the organisation, content and methods of teacher education must be constantly improved.

Sinha (1982) in his study entitled "an Evaluation Study of Teacher Education in Bihar" highlighted that at primary level, 60 per cent of teacher educators were trained graduates and their performance was not satisfactory. Recent innovation in teacher education had not been incorporated into the system.

✓ A study of classroom behaviour pattern of teachers in relation to their attitude towards teaching profession was conducted by Jain (1982). His main objectives were to find out the relationship between (1) the teachers attitude towards profession and the classroom behaviour pattern of teachers (2) the teachers' morale and the attitude towards profession (3) the teachers' values and the teachers' attitude towards profession. His findings were (i) teachers with a positive attitude towards teaching profession, classroom teaching, frequently created and emotional climate in the classroom (ii) Pupils interacted more in the classes of teachers having a positive attitude towards teaching profession (iii) there was significant negative relationship between the teaching experience and the teachers' attitude to class room teaching.

A study of "Teaching Competency of Secondary School Teachers" was conducted by Passi and Sharma (1982). Their findings were (1) The competency which was identified shared a total variance of 76.8 per cent (2) The male and female language teachers did not differ in their competency, (3) There was no significant relationship of the attitude of the language teachers towards teaching. Intelligence and interest with teaching competency.

Sidhu (1983) found that probationer teachers were superior to novice teachers in terms of development of general teaching competence. In his

study it was also revealed that there was significant interaction effect due to training and teaching experience on the attitudes of teachers towards teaching.

In a study Hemambujam (1983) reminds that the quality of Teacher Education Programme, the Co-Operating Schools and Teacher Education Colleges should work in harmony for success.

In a similar study undertaken by Mohanty (1984) proved that co-operation with Teacher Education colleges and schools were poor in almost all the institutions under investigation. He also revealed that in all respects, the functioning of Government institutions was better than that of private ones.

Sam (1984) found that female teachers tended to be higher than males in their attitude towards teaching and pupils.

Gopalacharyalu (1984) conducted a study of relationship between certain psycho-sociological factors and achievement of student teachers in Teacher Training Institutes of Andhra Pradesh with a sample of 450 student teachers. He found that socio-economic status and caste are influenced in all achievement variables viz., theory practical and total achievement. It further revealed that locality of student teachers and

age were found to have significant influence on the theory and total achievement.

Goyal *et al.* (1984) conducted a study with the following objectives (i) To identify factors that might help in the selection of prospective Teachers and (ii) To study the relationship of these factors with the achievement of student teachers in the B.Ed. Examination. His findings were (i) All the six groups of student teachers- Male-Female, Married-Unmarried, Rural-Urban, Graduate-Post-Graduate, Science-Arts, Experienced-Unexperienced differed significantly from each other with regard to previous academic record (2) Intelligence, Attitude and Personality were found to be the best predictors of student teacher performance in the B.Ed. Examination.

Malik (1984) found that some personality factors were significantly related with teaching success which was positively correlated with intelligence, emotional stability, tender mindedness, suspiciousness, self sufficiency and relatedness.

Natarajan (1984) through his study proved that the teacher education programme could be made more effective through a competency based approach.

It was the opinion of Wangoo (1984) based on his study that personality adjustment, democratic leadership, high degree of intelligence and emotional control were the main characteristics for teacher effectiveness.

In another study Patil (1984) tried to find out the effect of sex, previous academic excellence, experience etc on the level of teaching competency among teacher trainees with a sample of 500 B.Ed. students and made the following conclusions: (i) There was no significant difference between the achievement of male and female, graduate and post graduate and experienced and inexperienced pupil teachers in four compulsory subjects, (ii) there was a significant difference between the scores of male and female, experienced and inexperienced pupil teachers in respect of intelligence, but no significant difference in intelligence was found between graduate and postgraduate teachers.

In a similar study conducted by Kaur (1985) showed that the sex and socio economic status of teachers were not found to be associated with his or her effectiveness in teaching.

Pillai (1985) conducted a study on "Why Graduates choose to teach" and found that the main motivations to choose teaching were liking for working with young people, opportunity of service to mankind and

teaching considered as a noble and dignified profession. It is also revealed that neither sex nor level of education had any significant impact on factors which influenced people in choosing to teach.

Les'verne (1985) conducted a study with a sample of 210 B.Ed. Students randomly selected from four educational institutions in Lucknow. It was designed to compare high, medium and low creative teachers on three dimensions of creativity in terms of certain personality variables - sex, teaching competency and achievement level. He proved that creativity is related with teaching competency.

In an investigation Rao (1986) found that in total and upper-lower socio-economic status groups, the male teacher trainees had a significantly favourable attitude towards teaching profession. There were sex difference in the attitude towards teaching; male teachers scoring significantly higher than that of female teachers.

Shah (1986) surveyed the admission criteria of teacher training institutions in Bihar. In his study, a majority of institutions favoured the objectives of development of competence in trainees to teach on the basis of accepted principles of learning and teaching. The minimum admission criteria of half of the institutions were second class at graduate level in any school subject and the rest insisted on post-graduation.

It was reported by Kumar (1986) in his study that the teachers were motivated for teaching because of their liking for it and ambition to become teachers. The high esteem given to the teaching profession by the community and for earning a livelihood were also found as other reasons.

Srivastava (1986) investigated the job satisfaction and professional honesty of primary school teachers and found that female teachers as compared to male teachers, unmarried teachers compared to married teachers, urban teachers as compared to rural teachers were significantly higher in job satisfaction and professional honesty. Caste was not found to have a significant effect on either of the two. The major factors conducive to professional honesty in primary teachers were the teachers' strong and good character, the teachers' sincerity towards work, recognition and appreciation of teachers' good work, a healthy and open environment in the school, the teachers' mental health etc.

Shah (186) surveyed the objectives of strict teaching programmes and the admission criteria by taking a sample of 46 secondary school teacher training colleges of 13 states of the country. According to his study a majority of the institutions favoured the objectives of development of competence in trainees to teach on the basis of accepted principles of

learning and teaching. The minimum admission criteria of half of the institutions were second class in any school subject and graduate level. The rest of insisted on post-graduation. In most of the institutions interviews were conducted for selecting the students for admission.

An attempt was made by Singh (1987) to compare teacher effectiveness of male and female teachers of urban and rural areas and proved that there was no significant difference in the mean scores of male and female teachers in their effectiveness. The difference in the mean scores of urban male and female teachers was found to be not significant on the socio economic status.

Rajameenashi (1988) tried to identify the factors affecting teaching competency of B.Ed., trainees in teaching Physical Science. The major objectives of the study were (1) to identify the factors that affected the teaching competence of B.Ed. trainees (ii) to assess the teaching competencies of B.Ed. students using appropriate tools and to (iii) make differential and correlational studies between competence and various factors. A survey was conducted on 610 students of College of Education in Tamil Nadu under the category of Physical Science and 1500 school pupils. She established that the type of management, the time of admission to the B.Ed. course and the teacher-pupil ratio were the factors that

affected the mean teaching competence of B.Ed. trainees in almost all colleges of Education in Tamil Nadu. It was also revealed that Teacher trainees with higher socio economic status scores significantly higher in teaching competency than others.

Mora (1988) examined the relationship between teaching effectiveness, teaching aptitude and personality traits. On the basis of research findings it was revealed that only 6 factors out of 16 factors of personality (Cattel) were found to be positively correlated with teaching effectiveness, of which intelligence was the most important. Teaching effectiveness and teaching ability have positive correlation and the total personality of the teacher is found to be influencing effective teaching and ineffective teaching. The study attempted to bring an improvement in the criteria for admission to the teacher preparation programmes (B.Ed. training for secondary teachers).

Kaur. (1988) found that inservice education and training of teachers had significantly contributed to development of professional competency in Punjab and the process and structure variables had a positive bearing on the product variables.

Singh (1988) attempted to establish a relationship between teaching efficiency and job satisfaction as also with socio-economic status and

found a positive relationship.

Teaching efficiency was studied by Agarwal. (1988) on a sample of female teachers of primary schools and concluded that more effective teachers had problems of adjustment due to social factors while with less effective teachers emotional problems were dominant.

Bhasin (1988) found a positive correlation between attitude towards teaching and teaching efficiency.

A study conducted by Mathur (1980) on 600 teachers in the pre higher secondary, higher secondary and post-higher secondary revealed that by and large teachers of pre-higher secondary and post-higher secondary stages tended to have favourable attitude towards creative learning and unfavourable attitude towards creative teaching. Further, he proved that age, sex, teaching experience and academic discipline did not affect the attitude of teachers.

Mishra (1989) conducted a study on conceptual difference among students regarding an ideal teacher at two levels of education - Junior High School, Intermediate. She revealed that the characteristics of students in terms of needs and concepts constituted the basis for working out a strategy for developing a teacher education programme. But in

another study Maurya (1990) revealed that teaching attitude and achievement had no bearing on teaching efficiency.

Attitudes of pupil teachers from rural areas were studied by Mohanty (1990) and established the relationship between attitudes and teaching efficiency.

Raty (1990) established the relationship among teachers' attitude towards pupils' mental health and job satisfactions.

Saxena (1990) while studying a sample of higher secondary school teachers in Madhya Pradesh did not find any difference due to gender, stream (science or arts), experience and other variables on job satisfactions. Attitudes of school teachers towards their profession in relation to certain selected context variables were studied by Tapodhan (1991). In another study, the teaching aptitude and attitude towards teaching with reference to sex, age, faculty and category of teachers were studied by Reddy (1991). In both studies significant relationship has been established between these variables.

Shabharwal (1991) studied prediction of the Student Teacher Education Programme and the findings revealed that selected context variables have emerged as significant prediction of student teacher

performance on 'TAT'.

Rama Mohan Babu (1992) found that less experience, favourable attitude towards teaching and efficiency of teaching corresponded with higher job satisfaction.

Kukreti (1992) attempted to find out the relationship between job motivation and teacher competency. His major findings are as follows: (1) The competent teachers have formed the teaching profession because they regard teaching as a prestigious job. They believe that teaching profession can provide them reasonable salary, security, opportunity of social service, to establish human relations and to enhance their knowledge. They have chosen teaching profession because they have interested in teaching and because of what that can cultivate their creativity and maintain punctuality. (2) Incompetent teachers entered the teaching profession because they thought that through this profession they can get fame, personal freedom, influence, opportunity and enough leisure with little burden of work. They have chosen teaching as a profession because they believed that there is an easy entrance, greater opportunity of leadership, association with students and self expression.

Dubey and Sushama (1993) conducted a study to compare the scientific attitude of college teachers with teachers of Saraswathi Bala

Mandir. The sample comprised 32 college teachers attending orientation course of 3 weeks and 24 Saraswathi Bala Mandir teachers attending special course of 5 months. The relevant data were collected using N.N. Srivastava's Scientific Attitude Scale. The major findings of the study are (1) There was no significant difference between mean scores of college teachers and Saraswathi Bal Mandir Teachers on their Scientific attitude (2) The male and female teachers did not differ significantly on their scientific attitude, (3) Teachers below 30 years did not differ significantly from teachers above 30 years on their scientific attitude.

Patil and Deshmukh (1993) conducted a study to find out that relationship between aptitude in teaching and teaching efficiency of pupil teachers. He came to the conclusion that the male and female pupil teachers differed significantly on their teaching aptitude in favour of female pupil teachers, (2) The graduate and post-graduate pupil teachers also differed significantly on teaching aptitude in favour of post graduate pupil teachers (3) The experienced and inexperienced pupil teachers also differed significantly in favour of experienced pupil teachers. It was also found that the co-efficient of correlation between the scores of aptitude in teaching and teaching efficiency were positive and significant.

Pandya (1993) examined the teaching aptitude of secondary school teachers of Gujarat State in relation to selected Psycho-Social Variables. His findings were these: (i) Reliability of the test by test-re test, split-half and K.R. Methods came to be 0.74, 0.80 and 0.90 respectively, (2) Female trainees were found to obtain significantly higher scores than their male counterparts. There was no significant difference between the urban and rural trainees.

Patted (1993) examined the impact of secondary teacher education programme on educational perceptions of student teachers and relative contributions of components of educational perceptions to the changes in those perceptions. The study was conducted with a sample of 207 students-teachers undergoing B.Ed. course in Kumta and Belgaum teacher education colleges. The tools used to collect the relevant data include Instructional Goals Perception Scale (IGPS) by Patted, Instructional Role Perception Scale (IRPS), Learning Process Perceptions Scale (LPPS) by Jayappa, Evaluation Process Perception Scale (EPPS) and University Theory and Practical Examination marks. The collected data were treated using mean, S.D. 'T' test and Multiple Regression Analysis. Major findings of the study are: (1) The B.Ed. course as a whole has brought about desirable changes among student teachers (2) Relationship between achievement in theory papers and teaching practicum were positively

and significantly correlated. (3) About 282 per cent of variance by Education in India, 4.67 per cent of variance by psychological foundation and 13.86 per cent of variance by the practicum in teaching was seen in the gain in IGP which was the first criterion variable. As regards the other criterion variables substantial variance has been seen.

A study on Teacher Effectiveness in relation to their sex, area and adjustment was carried out by Singh 1993). He established that there is significant difference between male and female teachers in their adjustment in favour of male teachers (2) The coefficient of correlation between teachers effectiveness scores and adjustment of the rural teacher was not significant.

Shubhada (1994) in a study examined the stress among teachers at different levels from a psycho-social perspective. The sample for the study comprised 30 teachers each at primary level, secondary level, junior college senior college and university level adding up to 150. The tools used in the study include Personal History Questionnaire, Organisational Role Stress Scale by Udai Pareek, Attitude towards Teaching Profession by Shalim Bhogle, Self Esteem Scale by R.K. Naidu, Locus of Control by Roma Paul, Job Involvement Scale by Rita Kapoor and A.P. Singh and Organisational Atmosphere Questionnaire by Jayalaxmi Indiresan. The

collected data were treated using ANOVA, coefficient of correlation and 't' test.

Major findings of the study are (i) The amount of role stress varied at different levels. The nature and type of role stresses also differed at different professional levels. As the level of teaching profession increased, the role stress decreased. It was highest among primary and middle level teachers. (2) There was no relationship among the gender, marital status and role stress, (3) Attitude towards teaching profession was significantly and negatively correlated with role stress (4) Self esteem was not found to be significantly related to role stress (5) Locus of Control did not have any relationship with the role stress (6) Job involvement did not have any effect on role stress (7) The organisational climate was significantly and negatively correlated with role stress.

Naseema (1994) carried out a study to examine the teaching competence of physical science teachers in relation to their satisfaction in teaching. She took a sample of 150 physical science teachers in secondary schools in Kerala. The tools for the study were Teaching Competency Rating Scale, General Teaching Competency Scale, Job Satisfaction Questionnaire for Physical Science Teachers, and School Organisational Climate Description Questionnaire. The collected data

were treated using percentages, Biserial Coefficient of Correlation, Chi-square, Pearsons' Product Moment of Correlation and Multiple Regression Analysis. The findings of the study were (2) More than 30 per cent of Physical Science teachers differed in perceived teaching competence which can be attributed to work (0.01), rewards (1.73), context of work (0.87), self (0.61), others (0.56) and total satisfaction (27.15) (2) 26.89 per cent of physical science teachers differed in observed teaching competence which can be attributed to work (0.86), rewards (0.003), context of work (1.5) self )2.32), others (1.91) and total satisfaction (20.3).

A study was conducted by Ganeswara (1995) on teacher effectiveness in relation to creativity and interpersonal relationships. No significant relation was found between teacher effectiveness and income or years of service of the teachers. Significant relations were found between teacher effectiveness, creativity and interpersonal relationships.

Kishore Battacharjee (1996) noted that 22.29 per cent of teachers have selected the teaching profession because no other job was available to them, while 27.11 per cent joined in this profession due to extreme poverty. Such persons have a poor attitude towards teaching. The results of the study indicate that there should be a change in the recruitment policy of teachers. Prior to admission to the course, he further opined that, an

attitude assessment is highly desirable to ensure a serious and sincere attitude towards teaching profession in prospective teachers.

In a study conducted by Radha Mohan (1998) on Teaching effectiveness made the following findings:

(i) In the screening and selection of candidates for admission into the undergraduate education course, the faculty of education should consider the introduction of an aptitude test for prospective education students.

(ii) Students teachers need good classroom communication abilities. They need to develop effective interpersonal skills, as they seem to be an important aspects of Teacher Performance.

(iii) The design and production of materials could be included in the curriculum of undergraduate education programme because teacher effectiveness can be enhanced significantly with good audio visual aids.

## **STUDIES ABROAD**

The study conducted by Garland-Peter (1990) explores the state role in enhancing teaching and learning in colleges and universities and to initiate activities to define, measure and fund quality in education.

Walker-Linda (1992) tried to determine whether there was a significant difference in the perceptions of student teachers' efficacy as measured by themselves, their co-operating teachers, and their university supervisors. The sample consisted of 24 student teachers, 25 class room teachers and 8 university supervisors. One way analysis of variance showed significant differences among the three types for the following items: using a variety of teaching methods, attending to routine tasks, demonstration of warmth and friendliness, evaluation of pupil progress.

Piel-John (1992) in his study attempted to answer the following questions (1) To what extent are pre-service elementary teachers interested in learning subject matter content? and (2) what extent do they believe understanding this subject matter areas is an important educational goal? Data suggest that education majors' attitude reflect generalised ambivalence toward important subject areas taught in elementary school, with significantly more positive attitudes displayed toward reading and literature.

A study conducted by Figge-Fred (1993) was designed to test the developmental hypothesis that teachers' sense of efficacy would increase during their successful progression through preservice training and inservice teaching. The sample consisted of highly successful teachers (N = 225) and of

high-potential prospective teachers (N = 65) at the commencement of teacher preparation stages. Findings indicated that the four groups of outstanding preservice and inservice teachers did not report statistically significant different senses of teaching efficacy.

Walker-Linda (1993) studied the changing perceptions of Efficacy from student teachers to First year teachers. This study was conducted to examine the changes in the self perceived efficacy of teacher education majors who were surveyed first as student teachers in 1952 and again as first year teachers in 1993. The instrument used was a survey of 30 items related to the Mississippi Teacher Assessment Instrument Competencies and Indicators. Data analysis indicated significant differences in the following areas. Class room management and interaction, utilisation of audio visual equipment, effective teaching of reading languages.

Guyton-Edith (1994) assessed the educational attitudes and performance of preservice teachers and revealed that (1) having a teacher-centred attitude had a negative relationship with personal teaching efficacy and (2) having a student-centred attitude was not a predictor of performance.

Chiang-Linda (1994) in his study examined the attitudes of prospective teachers towards social diversity. Students were selected from

teacher education programmes at two different universities. The group of prospective teachers from one university received instruction in multicultural education, the other group did not. One hundred thirty four pre-post responses could be matched for comparison. Findings indicated that at the beginning of students' professional semester there was no significant difference between the two groups. Both reported positive attitudes towards social diversity.

Canter-Lee (1994) in his book entitled 'The High Performing Teacher' shows teachers how to empower themselves to face the challenges of teaching, avoid burnout and maintain their enthusiasm for the profession. Based on common characteristics of many high performing teachers, each chapter explores one of these attitudes and shows how each of these can be learned and acquired. High performing teachers (1) have mission and a knowledge of exactly what they want to accomplish every day in the classroom (2) have positive beliefs in their ability to work successfully with students and to make a difference in their lives (3) have skills to build positive relationships with students of all type, (4) maintain a positive attitude.

Prater-Grey *et al.* (1995) examined the perception of Native American Students regarding effective practices of non-native teachers through a

paper on effective teachers. The survey consisted of open-ended question regarding what kind of teacher students learned the most from, what students would do in the classroom if they were teachers, qualities of ideal teachers, what teachers do in the classroom that discourages learning. Results revealed that students learn more from hands-on projects and teachers who encourages varied means of learning. Students felt that the most important teacher qualities were respect, kindness, positive attitude, patience and sense of humour.

A study was conducted by Stahler-Theresa (1996) on Middle Level Teaching - Developing an attitude. He look a sample of 34 student teachers. Results of analysis showed that the student teachers with special middle school preparation background knew more about early adolescents, were familiar with the literature, prepared lesson plans that included more practices appropriate for middle level learners, taught more highly rated lessons, and had a better attitude towards middle level teaching than those who had been prepared in a more general programme.

Strychasz, Gloria and Arredondo Mary (1996) surveyed the existing staff development programmes for teachers. It was mainly to estimate the validity of the competence sub-scale of the Teacher Staff Development

Survey (TSDS) as a measure of the teacher efficiency construct. Results from regular education elementary school teachers (N = 296) revealed a sub-scale structure of the TSDS that differed from the sub-scale structure originally designed by the Tempe School District. Specifically, six independent factors (i.e. Sub-scales) were revealed: (1) Teacher efficacy (2) Organisation efficacy (3) Inclusion (4) Resources (5) Teaming and (6) Self evaluation.

Calvery, Robert and others (1996) analysed the teacher characteristics valued by Arkansas Public School Administrators and identified the teacher characteristics most valued by Arkansas Public School administrators. Data were gathered through a survey of 40 area school administrators who were asked to rate teacher-evaluation criteria in the following five areas: teacher abilities, school management, personal qualities, professional and social traits, and verification of information. Administrators most valued human relations with peers, attitude, dependability, appearance and professional knowledge.

Elett *et al.* (1977) studied the relationship between elements of the school professional learning environment and dimensions of caring and efficacy motivation among teachers. The Sample consisted 1009 elementary and secondary teachers from 29 schools in two suburban

district in a south-eastern state. The results showed that measures of the professional learning environments of schools, human caring and efficacy motivation can be determined with reasonable reliability, that positive relationships exist between elements of the professional learning environment of schools and teacher levels of efficacy motivation related to goal persistence and response to failure.

The study conducted by Gaith (1997) investigated relationships among teacher experience, efficacy and attitude towards implementation of instructional innovation. The study revealed that experience was negatively correlated, personal teaching efficacy positively correlated and general teaching efficacy not correlated with teachers' attitudes towards implementing new instructional practices.

Marse Ronald and Pigge-Fred (1998) examined whether 540 teacher candidates who failed to or who successfully made the transition into teaching 7 years after commencement of teacher preparation differed in anxiety about teaching, attitude towards a teaching career, and self perceived effectiveness as future teachers. Results revealed differences between candidates who graduated but not become certified as teachers, who became part time teachers, and who became full-time teachers. There were relationships between candidate's gender, initial degree of assurance

about becoming teachers, extent of successful transition from student to teachers, and three affective measures. Findings support the hypothesis that attrition during teacher preparation and the early years of teaching experience does not necessarily reduce the quality of the affective characteristics of those remaining in teaching.

## CONCLUSION

The investigator tried to review the survey of studies to a great extent. It is assumed that the general trend shown by these studies can be considered as a conclusion with regard to the extent of relationship of the variables under this study. Majority of the studies have proved that teaching competencies is influenced by the attitude towards teaching, intelligence and interest. But almost all studies have been conducted on teachers and not on student-teachers. Hence the investigator felt that a study of the relationship between the psycho-social variables and teaching competency of prospective teachers will be a significant one and that will lead to make some suggestions on the criteria for admission to B.Ed.course.

# METHODOLOGY

P. Sreemanunni “Certain psycho-social variables as correlates on teaching competencies of Malayalam teacher trainees of Kerala” Thesis. Department of Adult Education & Extension Services, University of Calicut, 1999

CHAPTER III

METHODOLOGY

## METHODOLOGY

The present study is intended to find out the nature and extent of relationship of teaching competencies of teacher trainees with certain psycho-social variables. The variables selected for the study, tools employed for the collection of data, description of tools, selection of the sample, data collection procedure and statistical techniques used are described in this chapter.

### (a) VARIABLES OF THE STUDY

The present study is a descriptive one. It describes recording, analysing and interpreting conditions that exist. It involves various types of comparisons, contrasts and attempts for finding out relationships between non-manipulated variables. In the present investigation different categories of variables have been used to find out the relationship between teaching competency of teacher trainees with certain psycho social variables. Details of the variables of the study are given below:

- 1) Attitude towards teaching profession
- 2) Teaching aptitude
- 3) Interest in teaching
- 4) Intelligence
- 5) Socio-Economic Status.

Out of these five variables, the first four belongs to psychological variables and the last one belongs to sociological variable.

### **Criteria For Selecting Independent Variables**

The investigator was of the opinion that certain variables such as attitude towards teaching profession, teaching aptitude, interest in teaching, intelligence and socio-economic status do have some relationship to teaching competency of the teacher trainees. Hence he decided to take the above psycho social variables related to teaching competency as independent variable to conduct his study in depth. General Teaching Competency was identified to the dependent variable.

### **(b) TOOLS EMPLOYED FOR COLLECTION OF DATA**

Selection of appropriate tools for collecting the data was the main task. Only standardised tools were used in the present study. The investigator constructed and standardised the tool for measuring the attitude of the teacher trainees towards teaching profession. All other tools used in the study were constructed by various research scholars and experts. The details of the tools used are presented in the following table.

TABLE 1

## Details of the Tools Used in the Study

| Sl. No. | Name of the Tool                           | Variable Measured                    | No. of Items | Time Limit |
|---------|--|--------------------------------------|--------------|------------|
| 1       | General Teaching Competency Scale (GTCS)   | Teaching Competency                  | 21           | No limit   |
| 2       | Attitude Scale                             | Attitude towards Teaching Profession | 40           | No limit   |
| 3       | Teaching Aptitude Test Battery (TATB)      | Teaching Aptitude                    | 80           | No limit   |
| 4       | Kakkar's Interest in Teaching Scale (KITS) | Teaching Interest                    | 27           | 20 Mts.    |
| 5       | Standard Progressive Matrices (SPM)        | General Intelligence                 | 60           | 30 Mts.    |
| 6       | Socio-Economic Status Scale (SES)          | Socio-Economic Status                | 5            | No limit   |

## DESCRIPTION OF TOOLS

## 1) General Teaching Competency Scale (GTCS)

GTCS is a class room observation schedule prepared by Passi and Lalitha (1979) for ascertaining teaching competency of teachers. Its

measurement involves identifying all the teaching skills constituted the entire teaching task and making observation regarding the effectiveness of performance of each of the teaching skills is shown in Table 2.

TABLE 2

Distribution of Items according to the Level of Teaching Competency in the Categories of Teaching Skills

| Sl. No. | Categories of Teaching Skill | No. of items | Sl. No. of item included in the questionnaire |
|---------|------------------------------|--------------|---|
| 1       | Planning                     | 4 ↗          | 1 to 4  |
| 2       | Presentation                 | 11           | 5 to 15                                       |
| 3       | Closing                      | 23           | 16 to 17                                      |
| 4       | Evaluation                   | 2            | 18 to 19                                      |
| 5       | Management                   | 2            | 20 to 21                                      |
|         |                              | 21`          |   |

There are 21 items pertaining to 21 teaching skills related to 5 major aspects of classroom teaching. They are planning, presentation, closing evaluation and management. It is a seven point rating scale in the use of the skill by the trainee in the classroom corresponding to each item ranging from

'0' for 'not at all' to '6' for 'Excellent'. The General Teaching Competency Scale is presented as Appendix I.

The various teaching skills related to five categories of teaching are presented in Table 3

TABLE 3

Details of teaching skills in each category of teaching skills

| Sl.No. | Category     | Teaching Skill  |
|--------|--------------|---|
| 1      | Planning     | Objective of the lesson, content selection, content organisation, selection of audio visual materials (4 skills)  |
| 2      | Presentation | Introducing the lesson, fluency of questions, use of probing questions, explaining, illustrating with examples. Stimulus variation, use of silence and non verbal cues increasing pupil participation, use of verbal and non verbal cues, use of blackboard (11 skills) |
| 3      | Closing      | Achieving closure, giving assignments (2 skills)  |
| 4      | Evaluation   | Classroom evaluation, diagnosis of pupil difficulties (2 skills)  |
| 5      | Managerial   | Recognising attending behaviour, maintaining classroom discipline (2 skills)  |

### **Validity of the Scale**

The scale has content validity. The factorial validity of the scale was established by Rama (1979) in her doctoral study on factorial structure of teaching competencies among secondary school teachers. Scott's coefficient of inter-observer agreement ranging from 0.78 to 0.82 was obtained while observing teachers on the process variables chosen by Passi (1977).

### **Reliability of the Scale**

Since the scale is an observation tool the more appropriate type of reliability is the inter-observer reliability. The reported inter-observer reliability ranges from 0.25 to 0.91 (Passi, 1977 and Joshy, 1977).

Passi's scale was developed in Hindi in the State of Madhya Pradesh in the year 1979. There exists cultural differences between the state which the sample was selected and that of Kerala. So it was felt necessary to adopt the tool to suit the local conditions of Kerala State.

The tool was subjected to scrutiny by a number of experts in the field of Teacher Education. The researcher has rich experience in this field as he uses a similar tool to rate the classroom observation during the period of practice teaching. Hence the researcher was convinced of

the usefulness of the tool and he again tried out for a small sample. Validity and reliability were established. (Validity 0.63; Reliability 0.72).

High reliability and validity coefficients of the general teaching competency scale proves to be an efficient tool for measuring observed teaching competency of the teacher trainees for the present study.

### Procedure

The G.T.C. scale was used for measuring teaching competence of B.Ed students individually by the investigator by means of direct observation of his/her classroom behaviour for the entire teaching period. He observed two classes each of a student at an interval of 3 months. The observer by sitting at the back of the classroom marked frequencies against each item.

### Scoring

The sum of the ratings against all the 21 items constitutes the score on general teaching competency of the teacher trainees being observed. The maximum possible score is 126. In the observation of two classes a variation of scores was noticed. Hence the investigator found out the mean difference of the test scores and it was found to be insignificant. So he took the average scores of the observed classes.

## 2) Teacher Attitude Scale

A scale of attitude towards teaching profession was constructed and standardised by the investigator.

The investigator decided to develop a five point Likert type scale to measure the attitude of teacher trainees towards teaching profession. The scale included such statements as to elicit the trainees' mastery over the subject matter, innovation of teaching, interaction with pupils and community, interaction with management and authority, service mentality, professional ethics, knowledge of pedagogy, career enrichment programmes and social status of teachers.

First, the investigator prepared 120 statements regarding the attitude of teachers towards teaching profession by referring to books, journals and research reports on teacher education. Then he contacted certain experts in the field of teacher education and discussed the matter in detail and obtained their remarks. On the basis of the discussion the investigator prepared a draft scale with a view to get their reaction pertaining to various components involved in the statements. Accordingly 96 statements were selected. Then the investigator contacted 14 teacher educators in Kerala. According to their opinion certain statements were deleted/modified and finalised. Thus altogether 55 statements (28

positive and 27 negative) were available in the draft scale. Equal weightage was given to both positive and negative statements.

### Mode of Answering

Five categories of responses were given against each statement. The teachers were asked to encircle any one of the responses to show their degree of acceptance or rejection of the statement.. The teachers' agreement towards a positive statement indicates his/her favourable attitude towards teaching profession and the agreement towards a negative statement indicates the unfavourable attitude. The scoring procedure of the scale is on the basis of weightage assigned to each response category. Details of the weightage given to each category of responses are as shown below.

| <u>Positive Item</u>   | <u>Points</u> | <u>Negative item</u>   | <u>Points</u> |
|------------------------|---------------|------------------------|---------------|
| Strongly Agree (SA)    | 5             | Strongly Agree (SA)    | 1             |
| Agree (A)              | 4             | Agree (A)              | 2             |
| Undecided (U)          | 3             | Undecided (U)          | 3             |
| Disagree (D)           | 2             | Disagree (D)           | 4             |
| Strongly Disagree (SD) | 1             | Strongly Disagree (SD) | 5             |

The total scores of the scale were calculated by summing up the weightage. Since the draft scale had 55 statements an individual could get maximum scores of 275. A copy of the draft scale is given as Appendix II.

### Tryout of the draft scale

The draft scale was tried out on a sample of 100 teachers drawn from various High Schools in Kannur, Kasargod, Kozhikode and Malappuram districts of Kerala State. The teachers were requested to respond to all the statements.

### Item Analysis

The responses were arranged in the descending order, on the basis of the scores obtained by them. Then the top 25 scripts of highest scores and 25 scripts of lowest scores were taken as the upper and lower groups respectively. The statements for the final scale were selected by finding the discriminating power of each statement. The discriminating power was calculated by finding the 't' value using the following formula suggested by Edwards (1957).

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\Sigma(X_H - \bar{X}_H)^2 + \Sigma(X_L - \bar{X}_L)^2}{N(N-1)}}$$

$\bar{X}_H$  - Mean score for a given statement for High Group

$\bar{X}_L$  - Mean score on a given statement for Low Group

N - Number of cases

$$\Sigma(X_H - \bar{X}_H)^2 = \Sigma \bar{X}_H^2 - \frac{(\Sigma X_H)^2}{N}$$

$$\Sigma(X_L - \bar{X}_L)^2 = \Sigma \bar{X}_L^2 - \frac{(\Sigma X_L)^2}{N}$$

The statements having a 't' value greater than 1.96 ( $t > 1.96$ ) can be considered for inclusion of the final scale as t-values obtained for the scale were very high, the investigator decided to select only those statements having  $t > 2.58$  as significant. As such the best 40 statements (20 positive and 20 negative) were selected for inclusion of final scale. The positive and negative items were mixed in the final scale. Again, the scale was given to 400 teachers to ascertain their attitude towards teaching profession. After obtaining their score, the scale was given to 50 teachers from the same group selected randomly. These scores were compared. The 't' values of the item analysis are given in the following table.

TABLE 4

't' Values of the Items of the Draft Scale

| Item No. | 't' Value | Selected/Rejected | Item No. in the Final Score |
|----------|-----------|-------------------|-----------------------------|
| 1        | 2.87      | Selected          | 1                           |
| 2        | 6.51      | "                 | 5                           |
| 3        | 4.04      | "                 | 2                           |
| 4        | 4.79      | "                 | 6                           |
| 5        | 6.53      | "                 | 7                           |
| 6        | 3.19      | "                 | 18                          |
| 7        | 6.25      | "                 | 9                           |
| 8        | 5.51      | "                 | 8                           |
| 9        | 4.69      | "                 | 10                          |
| 10       | 6.2       | "                 | 11                          |
| 11       | 3.59      | "                 | 19                          |
| 12       | 5.30      | "                 | 13                          |
| 13       | 4.18      | "                 | 17                          |

|    |      |          |    |
|----|------|----------|----|
| 14 | 4.16 | "        | 12 |
| 15 | 6.66 | "        | 14 |
| 16 | 4.44 | "        | 20 |
| 17 | 1.58 | Rejected | -  |
| 18 | 8.36 | Selected | 3  |
| 19 | 4.79 | "        | 4  |
| 20 | 6.4  | "        | 15 |
| 21 | 4.30 | "        | 16 |
| 22 | 3.33 | "        | 21 |
| 23 | 7.46 | "        | 24 |
| 24 | 4.90 | "        | 22 |
| 25 | 3.07 | "        | 35 |
| 26 | 1.16 | Rejected | -  |
| 27 | 4.10 | Selected | 23 |
| 28 | 4.10 | "        | 26 |

|    |      |          |    |
|----|------|----------|----|
| 29 | 1.79 | Rejected | -  |
| 30 | 1.03 | "        | -  |
| 31 | 5.31 | Selected | 28 |
| 32 | 2.48 | "        | 37 |
| 33 | 1.60 | Rejected | -  |
| 34 | 1.13 | Rejected | -  |
| 35 | 7.33 | Selected | 30 |
| 36 | 7.92 | "        | 25 |
| 37 | 3.96 | "        | 31 |
| 38 | 1.35 | Rejected | -  |
| 39 | 3.42 | Selected | 33 |
| 40 | 5.07 | "        | 27 |
| 41 | 2.40 | "        | 39 |
| 42 | 1.21 | Rejected | -  |
| 43 | 4.36 | Selected | 32 |

|    |      |          |    |
|----|------|----------|----|
| 44 | 5.39 | "        | 36 |
| 45 | 0.95 | Rejected | -  |
| 46 | 1.78 | "        | -  |
| 47 | 1.46 | "        | -  |
| 48 | 5.78 | Selected | 29 |
| 49 | 5.07 | "        | 34 |
| 50 | 0.16 | Rejected | -  |
| 51 | 1.05 | "        | -  |
| 52 | 0.80 | "        | -  |
| 53 | 4.90 | Selected | 38 |
| 54 | 1.45 | Rejected | -  |
| 55 | 5.45 | Selected | 40 |

### **Validity of the scale**

The final scale was given to 400 teachers spread in 41 High Schools. A check list was given to the Heads of the institutions where the attitude scale was distributed. They were requested to rate the responding teachers according to their effectiveness as perceived by him/her. Teacher effectiveness is mostly related to the attitude towards the profession. Most of the Heads responded sincerely but all the check lists did not return as such. All the obtained scores were correlated with his/her scores in the attitude scale. High correlation was found ( $r = 0.693$ ). Thus the validity was established.

### **Reliability of the scale**

The reliability of the scale was established by test-retest method. The scale was administered on 50 High School Teachers selected at random with an interval of two weeks time. Data thus obtained was analysed.. The correlation coefficient of the two sets of scores was found to be 0.786, the result indicates the scale is highly reliable.

The copy of the final scale is given as Appendix III.

### 3) Teaching Aptitude Test Battery (TATB)

This is a scale developed by Shamim and Dixit (1986). This tool was subjected to scrutiny and it was decided to retain all the sub tests included in the scale. It is intended to measure the aptitude in teaching profession. There are 80 items related to 8 areas of sub-tests. Each sub test contains 10 items. There is no time limit prescribed for answering the test, but usually it takes 30 minutes to complete the test. The eight sub tests are related to the following 8 areas of teaching aptitude.

#### i) Co-operative Nature

The trait has been used for measuring the co-operative nature of the teachers towards their taught. Since this trait is very important for establishing relationship between the teacher and the taught. Under this area 10 questions are included.

*Example:* School Administration depends on the co-operation of teachers.

#### ii) Considerativeness

The items of this area are attributed to the General and particular attention, patience tolerance consideration etc., of the teacher trainee

which is to be devoted for the all round development of the personality of the pupils and to remove the obstruction in the way of all round development of the pupils.

*Example:* A teacher should be honest and impartial in students' assessment and do so, keeping in mind the pupils' abilities.

iii) **Wide Interest and Scholarly Taste**

The teacher is also an active participant in co-curricular activity of the students and always a student in the acquisition of knowledge. The items of this sub tests are framed to measure the wide interest and the scholarly taste of the teacher.

*Example :* The teacher should be aware of the new teaching methods.

iv) **Fair Mindedness and Impartiality**

Fairness and impartiality are the most essential traits of a teacher's personality. The items are framed to measure the same.

*Example:* A teacher should accept his defects without any hesitation and should also try to remove them.

**v) Moral character and discipline**

Teachers' moral character and discipline are very important factors for teaching efficiency since teachers high moral character and discipline bring harmony in thinking, feeling and doing - as such the items of this sub tests are framed accordingly.

*Example:* The teacher should not demand gifts etc as his labour from the pupils.

**vi) Optimistic Attitude**

Optimistic attitude is an important aspect of efficient teaching or teaching successively. The items of this sub-test are framed to judge the degree of optimistic attitude in a teacher.

*Example:* A teacher should hope that in future, his pupils will maintain good relation with him.

**vii) Motivation Aspect**

Motivation is an essential aspect of successful teaching. The items of this sub-test are framed to judge as to what degree of motivational aspect of teacher has.

*Example:* If a teacher wishes, then he can learn a good deal from his students. As such a teacher should not have an hesitation in this respect.

#### viii) Dynamic Personality

Dynamism in personality refers to the teachers adjustment with his students and classroom atmosphere which is very essential for a right goal on right times. The items of the sub-test are framed to measure the dynamic personality in a teacher.

*Example:* Whatever decision a teacher takes it should not be based on prejudice rather it should be based on the reality of facts.

Since teaching aptitude is primarily a student teacher concern there should be coordination between the two and each should actively participate as well. The items framed in the test do judge the aptitude a teacher has in teaching and moreover in what degree, so this test is a reliable source of measurement of the same.

#### Reliability of the Test

Since reliability is one of the most essential and significant feature of a test, the split half and test-retest reliabilities have been calculated

for this test battery. For calculating split half reliability, Guttman and Spearman-Browns prophecy formula (Garret, 1979) have been used which yielded the coefficient of correlation +0.85 and +0.913 respectively when the test was administered on a sample of 100 subjects. These reliability coefficients reveal that the present test battery is highly reliable.

As per the test-retest reliability the present test was twice administered to a sample of 100 teacher trainees, with a time lapse of two weeks, and the coefficient of correlation was found to be +0.894.

#### **Validity of the test**

The validity of the present test was obtained by computing coefficient of correlation between scores of the test and the assessment of final examination marks and between the scores of the test and the mark obtained through the ratings by their respective teachers and head of departments. The coefficient of correlation between the test scores on 100 teacher trainees and the total marks of theory and practical was +0.625.

The coefficient of correlation between the test scores on 100 teacher trainees and their respective teachers and between test scores and head of departments relating marks, were +0.514 and +0.426 respectively.

### Scoring Procedure

Three categories of responses are given against each statement (Agree, Doubtful, Disagree). The teacher trainee has to put a tick mark against each statement which he thinks suitable. A score of 3, 2 and 1 has been allowed to the responses agree, doubtful, disagree respectively. For getting the total score, mark of each response of a given statement should be added together. Based on the interpretation as given in the manual, the investigator classified the teacher trainees according to the scores obtained in the Teaching Aptitude Test Battery.

Classification of Teacher trainees according to the scores obtained in the Teaching Aptitude Test Battery (TATB).

| <u>Scores</u> | <u>Number</u> | <u>Interpretation</u> |
|---------------|---------------|-----------------------|
| 181-240       | 100           | Efficient Teachers    |
| 136-180       | 72            | Average Teachers      |
| 106-135       | 0             | Poor Teachers         |

#### 4) Kakkar's Interest in Teaching Scale (KITS)

This is a standardised tool developed by Kakkar (1985) to measure the teaching interest of teacher trainees.

The test consists of 27 items - Multiple Choice Type. Five choices are given in each item, out of which the respondent is to indicate one choice which represents him best. The choices within each set are equated, to a large extent for social desirability. In this way the likelihood of the individuals responding to the favourableness of the choice rather than to the degree of importance to him is considerably reduced. The items are such that the answer to each item would reveal whether the person who takes the test has genuine interest in teaching. The items seek to draw upon a person's interest in reading, hobbies, school subjects, recreational interest, likes for different types of people, loves, present personality, qualities, goals, present abilities, general interest and occupational interests all in a bid to discover whether the person's responses are characteristics of his interest in teaching.

The KITS is self administering. All instructions required are given in full on the title page of the test booklet (A copy is given as appendix V) In group administration, the respondents read the instructions silently while the teacher reads them aloud. The tester has to ensure that each respondent is choosing one 'most' preferred choice in each set of 5 choices in an item. There is no time limit, though not more than 20 minutes will be allowed for any group to complete the test.

### Scoring and Interpretation

Scoring is done as instructed in the manual. Maximum score would be 27. Interpretation of scores on the KITS is made by reference to the grade classification given in the table below. The individual is placed on a particular grade and from this his interest in teaching may be forecast.

TABLE 5  
Grade Classification

| Limits of Raw Score | Letter Grade |
|---------------------|--------------|
| 18 and above        | A            |
| 15 to 17            | B            |
| 12 to 14            | C+           |
| 9 to 11             | C            |
| 6 to 8              | C--          |
| 3 to 5              | D            |
| 2 and below         | E            |

Grade A suggests that those who are assigned this grade have very high interest in teaching and that, given other requisites they would make excellent teachers. Grade E suggests that those who are assigned this Grade possess extremely low interest in teaching and that they would make very poor teachers.

The investigator graded the teacher trainee's interest in teaching according to their inclination towards teaching. Details of teacher trainees according to the scores obtained in KITS are shown below.

TABLE 6

Grade Classification of Teacher Trainees according to the Scores Obtained in KITS

| Limits of raw scores | No. of Teacher Trainees | Grade   | Interpretation               |
|----------------------|-------------------------|---------|------------------------------|
| 15 and above         | 18                      | High    | High interest in Teaching    |
| 8 to 14              | 125                     | Average | Average interest in Teaching |
| Below 8              | 29                      | Low     | Low interest in Teaching     |
| 172                  |                         |         |                              |

### Reliability

All the items were given to a group of 50 teachers to test whether the test is reliable in the present conditions of our class room. After two weeks, these items were again given to them. The two scores thus obtained were correlated. The reliability co-efficient was found to be 0.72.

### Validity

Validity has also been established through various means. The test had a congruent validity of 0.71 and predictor validity of 0.69.

### 5) Standard Progressive Matrices

This test by J.C. Raven was constructed to measure the educative component of 'g' as defined in Spearman's theory of cognitive ability. This can be applied to the adults to measure their intelligence.

The test is made up of five sets or series of diagrammatic puzzles exhibiting serial change in 2 dimensions simultaneously. A part is missing in every puzzle item to fill in which the student has to choose one among the options provided.

The test consists of 60 problems divided into 5 sets (A, B, C, D and E) each made up of 12 problems. In each set the first problem is self

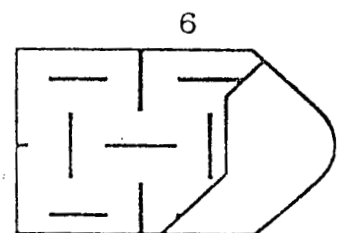
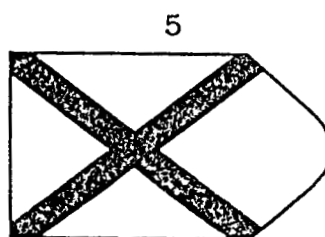
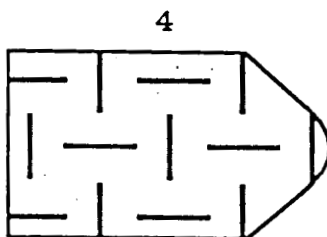
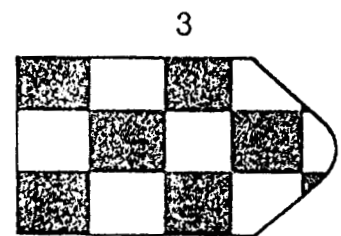
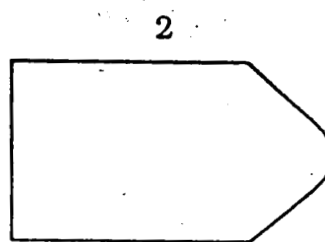
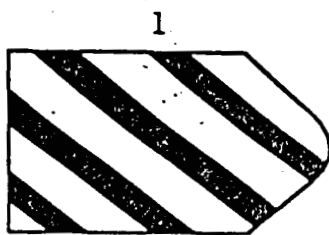
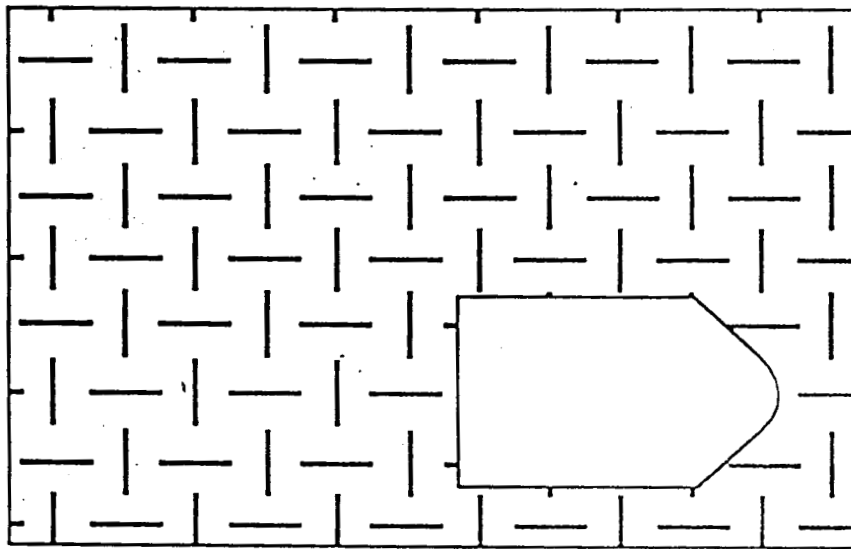
evident. The problem which follow build on the argument of those that have gone before and become progressively more difficult. The order of the items provides the standard training in the method of working. There are five sets providing five opportunities to group the method of thought required to solve the problem and five progressive assessments of a person's capacity for intellectual activity. To ensure sustained interest and freedom from fatigue, each problem is boldly presented, accurately drawn, and as far as possible pleasing to look at.

The SPM was originally designed to cover the widest possible range of mental ability and to be equally useful with persons of all ages, whatever their education, nationality or physical condition.

Set A

This set includes rather sample problems. The correct answer figure can be selected from the six alternatives and the selected one will well fit in to the pattern thus giving it a definite shape. A specimen from set A is given below.

SET A  
A 1

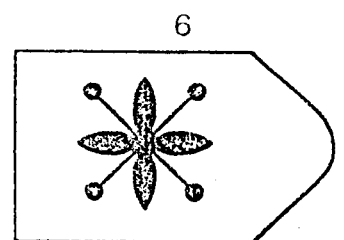
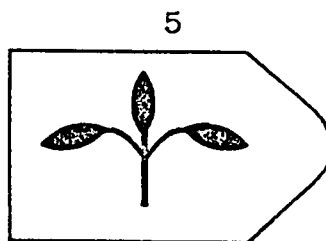
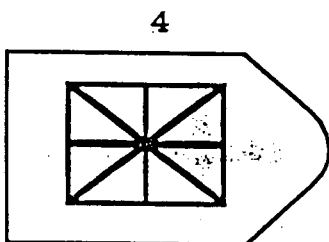
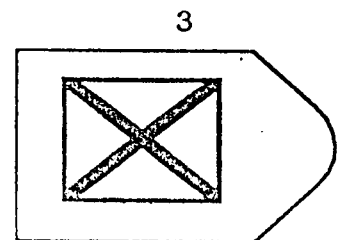
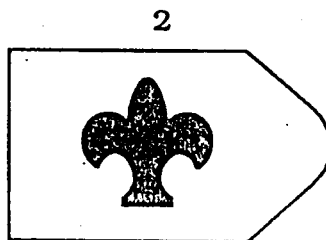
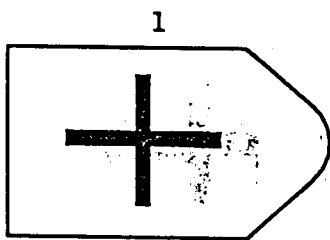
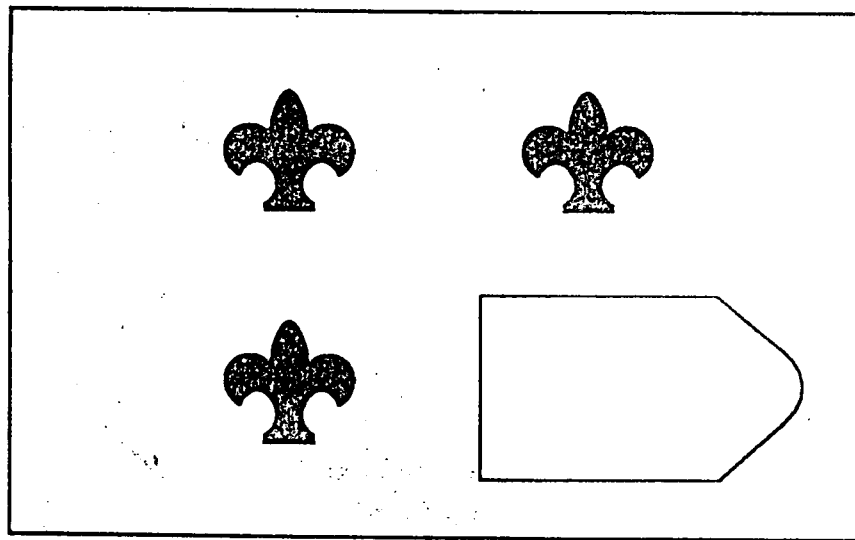


Set B

The problems in the set B are also very easy to understand. The answer figures to these problems are, somewhat identical to the elements given in the pattern. In some problems the answer figure can also be derived as the mirror image of the element which is in printed at the top position. A specimen figure from set B is given below.

SET B

B 1

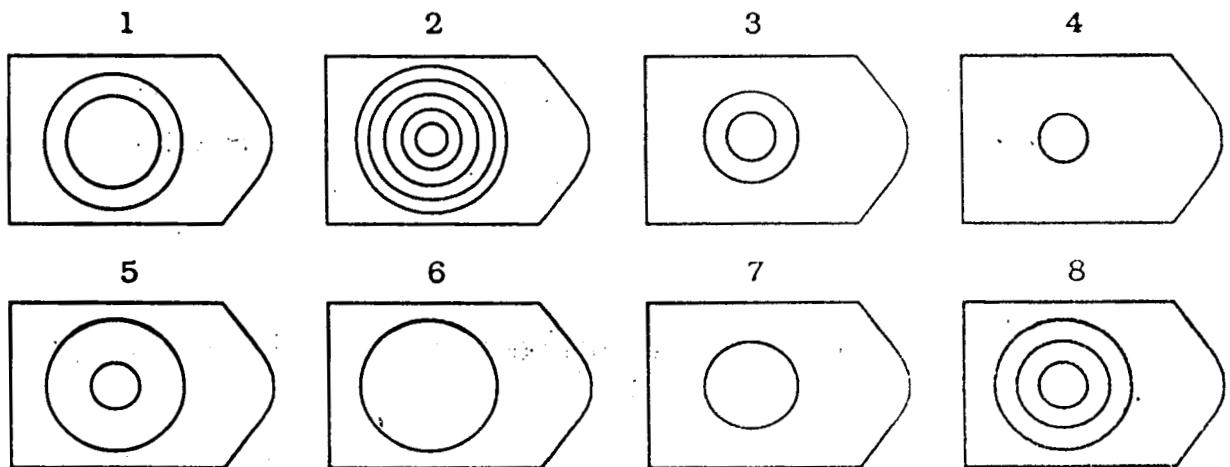
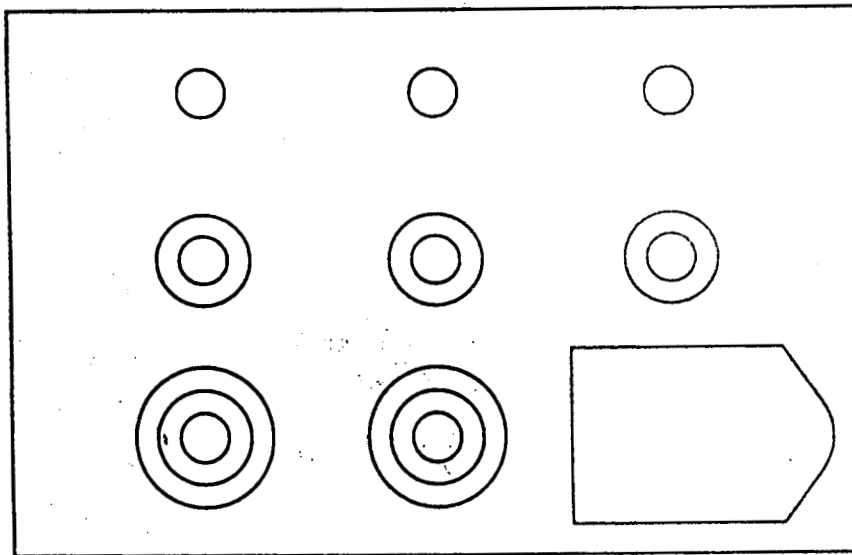


Set C

Set C is somewhat complicated nature. This set is designed to provide a reliable estimate of a person's capacity to think clearly when allowed to work steadily at his or her own speed from beginning to the end without interruption.

The first few item in this set are rather easy. There are enough difficult problems to discriminate between adults. A specimen figure from Set C is shown below.

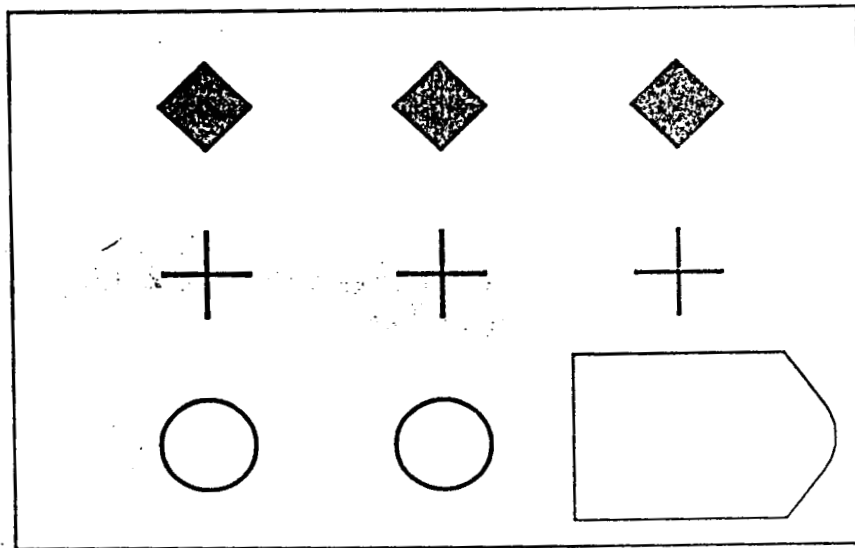
SET C  
C 1



Set D

To solve the problems in this section a high level of reasoning power is required. The items in this set distinguishes the immature person from the person of normal, or more than normal, intellectual ability. The best item follow a particular order and twisting to get the desired answer figure. An example from the Set D follows

SET D  
D 1

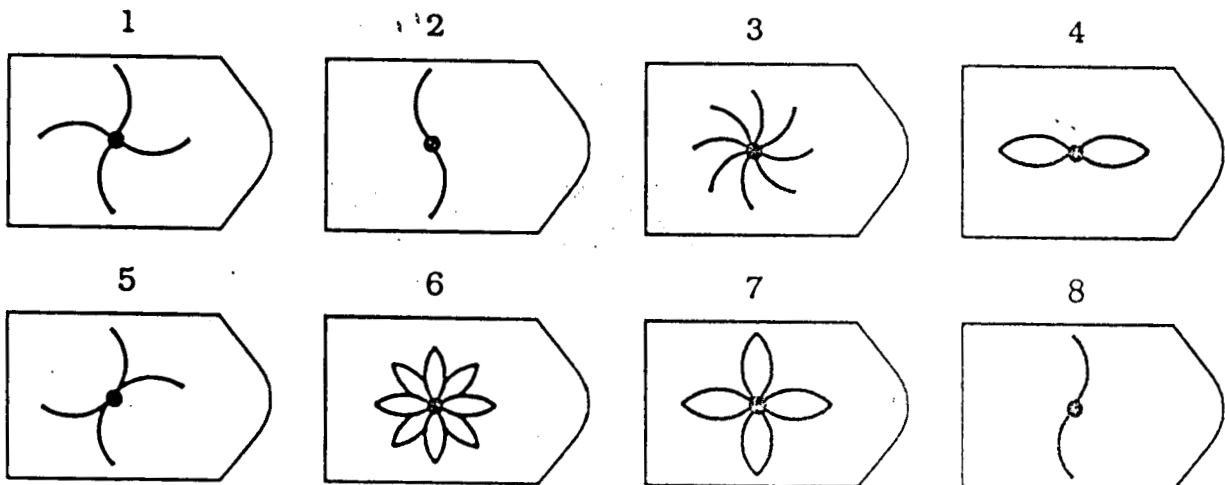
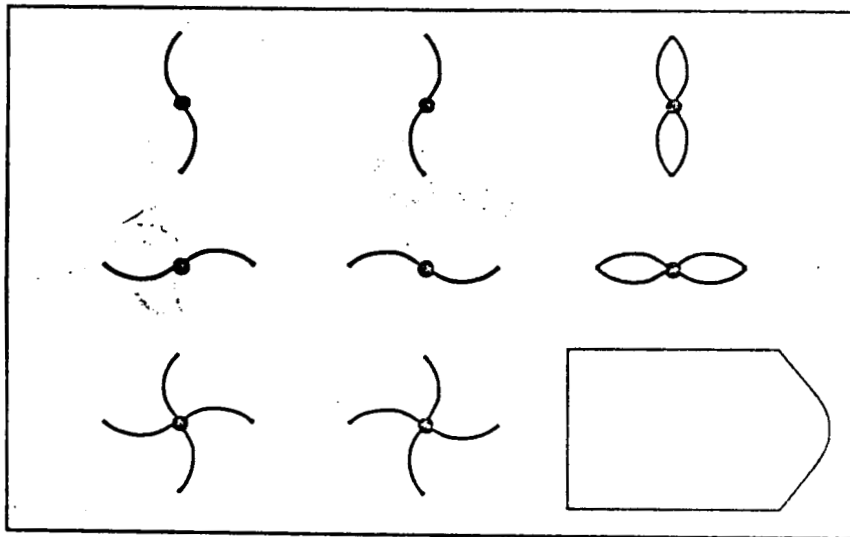


- |   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|   |   |   |   |
| 5 | 6 | 7 | 8 |
|   |   |   |   |

Set E

Set E is somewhat intricate in pattern. For the figure, the best element of each row is obtained by the combinations of the first two elements of the row. Eight alternatives are given for each problem. Most of the trainees found it difficult to answer this set fully correct. A figure from this set is shown below.

SET E  
E 1



All subjects, whatever their age, are given exactly the same series of problems in the same order and asked to work at their own speed without interruption from the beginning to the end of the test. As the order of the problems provides the standard training in the method of working, the test can be given as an individual, self administered or a group test. As the group was more or less an homogenous one, in order to avoid high difference in scores, a maximum time of 40 minutes was given to complete the whole test. A persons total score provides an index of his intellectual capacity.

This tool is a standardised one and its validity and reliability have been established. Moderate to high correlation are reported for SPM and various non verbal and performance test of intelligence. Test-retest correlation ranged 0.55 to 0.84

The test was administered in group. 10 teacher trainees were formed into a group where there was more than 10 in one institution. A booklet and a response sheet each were given to each individual. The investigator explained to the testees what is to be done. They were asked to write the number of the pattern to be filled in the gap of each puzzle in the space provided in the response sheet.

### 5) General Data Sheet

The investigator prepared a data sheet to collect information about the teacher trainee. It included the name of the trainee, sex, religion, caste, locale, the subject for graduation, and other qualifications possessed. The personal data sheet also included the request of the investigator to the trainees to cooperate with his effort to collect the data. It was also ensured that the data collected will be used only for research purpose and will be kept strictly confidential. A copy of the General Data sheet is appended (Appendix VI).

### 6) Socio Economic Status Scale

The socio economic status of the Teacher Trainees was measured by using the scale prepared by Kuppuswamy and modified by Pillai. The investigator adopted the scale with slight modifications in the weightage for income levels of parents according to the living index of the Bureau of Economics and Statistics, Government of India.

TABLE 7

Distribution of Teacher Trainees included in the study according to educational level of parents

| Sl. No. | Educational Level                       | Total No. | Percentage |
|---------|---|-----------|------------|
| 1       | Master's Degree/<br>Professional Degree | 5         | 2.90       |
| 2       | Bachelor's Degree                       | 11        | 6.39       |
| 3       | Pre-Degree                              | 21        | 12.20      |
| 4       | S.S.L.C                                 | 105       | 61.04      |
| 5       | Up to VII                               | 20        | 11.62      |
| 6       | Literate                                | 9         | 5.23       |
| 7       | Illiterate                              | 1         | 0.58       |
|         |   | 172       | 100.0      |

TABLE 8

Distribution of Teacher trainees according to the Parental Occupation

| Occupation        | No. | Percentage |
|-------------------|-----|------------|
| Professional      | 25  | 14.53      |
| Semi Professional | 5   | 2.90       |
| Skilled           | 10  | 5.81       |
| Semi skilled      | 74  | 43.02      |
| Unskilled         | 30  | 17.44      |
| Unemployed        | 28  | 16.28      |
| Total             | 172 | 100        |

TABLE 9

Distribution of Teacher Trainees according to the Estimated Annual Income of their Parents

| Annual Income    | No. of Parents | Percentage |
|------------------|----------------|------------|
| Above Rs. 8000   | 4              | 2.33       |
| Rs.6001-8000     | 15             | 8.72       |
| Rs.4001-6000     | 23             | 13.37      |
| Rs.2401-4000     | 75             | 43.60      |
| Rs.801-2400      | 43             | 25.0       |
| Rs.800 and below | 12             | 6.98       |
| Total            | 172            | 100.0      |

Weightage has been given according to a table arrived at by Pillai in his study. The investigator adopted the same method for classifying the sample into class categories and the following table was prepared

TABLE 10

Distribution of Teacher Trainees Based on Socio-Economic Status

| Category               | No. of trainees | Percentage |
|------------------------|-----------------|------------|
| Upper class (above 25) | 7               | 4.06       |
| Middle class (18-25)   | 138             | 80.24      |
| Lower class (Below 17) | 27              | 15.69      |
| Total                  | 172             | 100.0      |

A copy of the socio-economic status scale adapted and modified for the present study is given as appendix VI.

**(c) SAMPLE USED FOR THE STUDY**

The present study is confined to Teacher trainees from College/Teacher Education Institutions under Calicut and Kannur Universities. Treating this as reference population, the investigator selected the sample considering the following aspects.

- 1) Factors to be considered for selecting the sample.
- 2) Size of the sample
- 3) Intended sample for the study

**1) Factors to be considered for selecting the sample**

For selecting the sample the following criteria were taken into consideration. Since it was not possible to include all the teachers training institutions under the two universities, it was considered inevitable to draw a representative sample. There are 21 teachers education institutions under these two universities out of which 3 are not offering Malayalam optional for B.Ed. course. There are 4 types of Teacher Education Institutions viz., Government, Aided, Unaided and Teacher Education Centers run by University directly. As such the investigator selected 10 institutions out of the 18 which he considered as a representative sample

TABLE 11

Details of Teacher Training Institutions under the  
Universities of Kannur and Calicut

| Sl.No.  | Name of Institution                                | Type of Management | Strength in Malayalam optional |
|---------|--|--------------------|--------------------------------|
| KANNUR  |  |                    |                                |
| 1       | Govt. College of Teacher Education, Thalassery     | Government         | 17                             |
| 2       | PKM College of Teacher Education, Madampam         | Aided              | 15                             |
| 3       | Sir Syed College of Teacher Education, Taliparamba | Aided              | Nil                            |
| 4       | University Teacher Education Centre, Kasargod      | Self Financing     | 23                             |
| 5       | University Teacher Education Centre, Kannur        | Self Financing     | 24                             |
| 6       | University Teacher Education Centre, Manathavady   | Self Financing     | 14                             |
| CALICUT |  |                    |                                |
| 7       | College of Teacher Education, Kozhikode            | Government         | 16                             |
| 8       | Institute of Advanced Study in Education, Trichur  | Government         | 14                             |

|    |  |                |     |
|----|--|----------------|-----|
| 9  | NSS Training College,<br>Ottappalam                        | Aided          | 38  |
| 10 | Farook Training College.<br>Feroke                         | Aided          | 36  |
| 11 | MCT Training College,<br>Malappuram                        | Unaided        | 15  |
| 12 | Markaz Training College,<br>Valanchery                     | Unaided        | Nil |
| 13 | Salafi Training College,<br>Meppayur                       | Unaided        | 23  |
| 14 | Palpu Memorial Training<br>College, Koduvayur              | Unaided        | 14  |
| 15 | Jamiya Training College,<br>Edavanna                       | Unaided        | 8   |
| 16 | Jesus Training College,<br>Mala, Trichur                   | Unaided        | 12  |
| 17 | University Teacher<br>Education Centre, Tali,<br>Kozhikode | Self Financing | 16  |
| 18 | University Teacher<br>Education Centre,<br>Malappuram      | Self Financing | Nil |
| 19 | University Teacher<br>Education Centre,<br>Ollur           | Self Financing | 14  |

|       |   |                |     |
|-------|---|----------------|-----|
| 20    | University Teacher Education Centre, Palakkad     | Self Financing | 10  |
| 21    | University Teacher Education Centre, Kaniyambetta | Self Financing | 17  |
| Total |   |                | 326 |

(i) In order to ensure due representation of different strata in the population, the sample has to be divided into those strata based on sex, religion, locale and type of management.

(ii) The data were collected from Teacher Education Institutions of all types of management mentioned above. While selecting, due consideration was given to the institutions who extended help and co-operation for the study.

## 2) Size of the Sample

The investigator considered the following factors in selecting the sample.

- i) The size of the sample should be compact enough so as to permit a close study. Since an observation tool has to be administered in the actual classrooms, the investigator has to limit the sample to a manageable one.
- ii) The size should permit the type of statistical procedures intended to be used in the study.
- iii) The investigator has to consider the approximate number of Malayalam B.Ed. Trainees available in each Teacher Education Institution. Since all of them have to be observed by the investigator him self, the number of schools in which the trainees are deputed for practice teaching to be covered should also be taken into account.

### **1) Sample Selected for the Study**

Considering all the above factors, the investigator arrived at the following decisions about the sample.

- 1) The sample should be around 200 B.Ed. trainees
- 2) The sample should contain male and female teacher trainees in the ratio 1 : 3 as in almost all the Teacher Education Institutions, vast majority are females.

3) Approximately fifty per cent each of rural and urban institutions are selected as most of the Teacher Education Centres run by the University directly are situated in rural areas.

4) More Teacher Education Centres run by the University are included, since the strength in those is rather high compared to other Govt. or Aided Institutions.

#### 4) Data Collection Procedure:

The data collection was done in two phases. The first phase was during July-August 1998. During this period the investigator contacted the Principals/Asst. Directors individually to collect the information pertaining to the psycho-social variables that affect the Teaching competency of the Teacher Trainees. The time schedule for testing was fixed according to the convenience of the Teacher Educators of the optional subject.

The second part of the data collection was completed during the months October to December 1998 in which the investigator observed the classes of the trainees individually. Details of the data collection are as given below.

The investigator obtained adequate number of copies of all the test materials. The trainees in Malayalam optional subject who are undergoing the B.Ed Degree course were identified and their details were collected using the Personal Data Sheet. All the other tests were administered to the trainees using the selected tools.

Attitude towards Teaching Profession was measured by administering the attitude scale constructed and standardised by the investigator himself. The scale was handed over to each trainee personally by the investigator and he/she was requested to encircle against each statement of the scale which he/she favoured.

To measure the variable Teaching Aptitude, the Teaching Aptitude Test Battery (TATB) was distributed among the trainees. They were given separate response sheets and were asked to mark their responses.

Another Scale Kakkar's Interest in Teaching Scale (KITS) was distributed among the trainees to measure the teaching interest of the teacher trainees. There are 27 items in the scale. There was no time limit for the test. To measure the general intelligence of the trainees Standard Progressive Matrices was used. This is a group test which was administered only on 10 individuals at time. A booklet and a response sheet

were given to the trainees and necessary instructions were given. They were directed to mark the correct number of the figure which is appropriate to fill the gap in the pattern, on the response sheets given to them.

To observe the classes of trainees by administering the General Teaching Competency scale was a major task. The time schedule for practice teaching was not the same for all institutions. It could help the investigator to observe all the classes of the trainees conveniently. The observation of the classes were made during the months of September to November in the year 1998.

As the trainees began to teach the subject in the class the investigator took his seat at the back of the classroom. At the end of the period, the investigator gave his ratings on the General Teaching Competency scale against all the 21 items. The scale was thus administered on 204 teacher trainees two times during the period of practice teaching.

##### **5) Sample included for the study**

After completing the data collection of 204 samples, the investigator found that 32 of the total sample are teacher candidates deputed from service to undergo B.Ed training i.e. they had already undergone a training programme (TTC) in the primary level. As such, this number

was reduced from the total sample and only 172 were subjected to further analysis. The following table depicts the complete picture of the sample included in the study.

TABLE 12

Details of Teacher Trainees included for the study

| No.   | University | District   | Name of Institution                                     | Type of Management | No   |        | Total |
|-------|------------|------------|---|--------------------|------|--------|-------|
|       |            |            |   |                    | Male | Female |       |
| 1     | Kannur     | Kasargod   | University Teacher Education centre                     | Self Financing     | 3    | 8      | 11    |
| 2     | -do-       | Kannur     | Govt. College of Teacher Education<br>Tellicherry       | Government         | 1    | 10     | 11    |
| 3     | -do-       | Kannur     | PKM College of Education Madampam                       | Aided              | 1    | 14     | 15    |
| 4     | Calicut    | Kozhikode  | Salafi Training College Meppayur                        | Unaided            | 6    | 17     | 23    |
| 5     | -do-       | Wayand     | Teacher Education Centre, Kaniyambetta                  | Self Financing     | 6    | 11     | 17    |
| 6     | -do-       | Kozhikode  | Farook Training College, Feroke                         | Aided              | 10   | 26     | 36    |
| 7     | -do-       | Kozhikode  | College of Teacher Education, Kozhikode                 | Government         | 3    | 9      | 12    |
| 8     | -do-       | Kozhikode  | University Teacher Education Centre,<br>Tali, Kozhikode | Self Financing     | 2    | 11     | 13    |
| 9     | Kannur     | Kannur     | University Teacher Education Centre,<br>Kannur          | Self Financing     | 3    | 13     | 16    |
| 10    | Calicut    | Malappuram | MCT Training College Malappuram                         | Unaided            | 2    | 16     | 18    |
| Total |            |            |   |                    | 37   | 135    | 172   |

Sub-samples were selected on the basis of sex, locality and teacher background. The sample consisted of Male (37) and Female (135) Malayalam B.Ed trainees. Similarly Rural (102) and Urban (70) trainees were formed the sub sample based on locale. 32 candidates were identified as those who are coming from families of teacher back ground. This means that either of the parents or both of 32 candidates are teachers who are still in service.

#### 6) Scoring Procedure

Scoring of the response sheets was done according to the instruction given in the respective tools and its manual. SES scores have been calculated as per the norms described earlier.

The main statistical techniques used in the investigation are:

- 1) Preliminary analysis of test scores, to find out the Mean, Median, Mode, Standard Deviation, Skewness, and Kurtosis.
- 2) Correlation analysis to determine the extent of relationship between different variables.
- 3) Test of significance for difference between means of relevant groups.
- 4) Test of significance between 'r's.
- 5) Chi-square Test

Details of analysis are given in Chapter IV.

# ANALYSIS

P. Sreemanunni “Certain psycho-social variables as correlates on teaching competencies of Malayalam teacher trainees of Kerala” Thesis. Department of Adult Education & Extension Services, University of Calicut, 1999

CHAPTER IV

ANALYSIS

## **ANALYSIS**

This chapter presents the analysis and interpretation of data regarding the relationship of certain psycho social variables with general teaching competency of teacher trainees. The data were collected from a sample of 172 B.Ed. trainees of Malayalam optional subject of various teacher training institutions of Malabar. The analysis has been classified under the following Sections.

### **SECTION A**

This section deals with the level of psycho-social variables of teacher trainees. Preliminary analysis of test scores of both the dependent and independent variables are given in this section.

### **SECTION B**

Correlation Analysis to study the extent of relationship of psychological and sociological variables with teaching competency of teacher trainees is discussed in this section.

### **SECTION C**

This section deals with the comparison of mean scores of both dependent and independent variables.

**SECTION D**

Test of significance between 'r's and the interpretation of each is given in this section.

**SECTION E**

Chi-square Test details.

**SECTION A**

This section tries to analyse the basic properties possessed by the test scores of the total sample.

**General Teaching Competency of the Total Sample**

The scores secured by 172 teacher trainees on General Teaching Competency are shown in the following table. The statistical measures such as mean, median, mode, stand deviation, skewness and kurtosis are also shown at the bottom of the table.

TABLE 13

Frequency Distribution of General Teaching Competency Scores of Total Sample

(N = 172)

| Class interval | Frequency | Percentage of frequency | Cumulative Frequency |
|----------------|-----------|-------------------------|----------------------|
| 45-49          | 1         | 0.6                     | 0.6                  |
| 50-54          | 3         | 1.8                     | 2.4                  |
| 55-59          | 7         | 4.0                     | 6.4                  |
| 60-64          | 7         | 4.0                     | 10.4                 |
| 65-69          | 15        | 8.8                     | 19.2                 |
| 70-74          | 46        | 25.7                    | 44.9                 |
| 75-79          | 31        | 18.0                    | 62.9                 |
| 80-84          | 24        | 13.9                    | 76.8                 |
| 85-89          | 17        | 9.9                     | 86.7                 |
| 90-94          | 13        | 7.6                     | 94.3                 |
| 95-99          | 5         | 2.9                     | 97.2                 |
| 100-104        | 3         | 1.8                     | 100                  |

|        |   |       |          |   |        |
|--------|---|-------|----------|---|--------|
| Mean   | = | 76.29 | S.D.     | = | 10.451 |
| Median | = | 75.5  | Skewness | = | -0.099 |
| Mode   | = | 71.0  | Kurtosis | = | 0.176  |

From the table it is seen that the scores obtained in the teaching competency scale varies from 45 to 104. But according to the manual the maximum scores in the scale is 126. The mean score of the total sample is 76.29. From this it is clear that 45 per cent of the teacher trainees falls below the interval containing the mean and approximately 55 per cent of them falls above the mean. This indicates that a higher percentage of the teacher trainees falls in the category of average competency.

It is also observed from the table that 9.4 per cent of the trainees scores is below 63 which is considered as low competency whereas 23.2 per cent cases falls above the score of 84 which is considered as the highest teaching competency. It can thus be concluded that the percentage of trainees having high teaching competency is more than the percentage of trainees having low teaching competency. It is also noticed that there are no cases falling in the category of extremely high competency teacher trainees.

The standard deviation of the distribution of teacher trainees is found to be 10.45 and it is understood that 76 per cent of the cases falls between -ve  $1\sigma$  and +ve  $1\sigma$ . Similarly 95 per cent of the cases are covered between -ve  $2\sigma$  and +ve  $2\sigma$ . These results show that the distribution of the scores in the

former category is normal while in the latter category it is not very much different from the expected results.

### **Attitude towards Teaching Profession**

Attitude scale developed by the investigator was used to measure the attitude of teacher trainees towards teaching profession. Details of the frequency distribution of Attitude scores of teacher trainees are given in the table below.

TABLE 14

Frequency Distribution of Attitude Scores of Teacher Trainers  
(N = 172)

| Class Interval | Frequency | Percentage of frequency | Cumulative frequency |
|----------------|-----------|-------------------------|----------------------|
| 135-139        | 1         | 0.6                     | 0.6                  |
| 140-144        | 2         | 1.2                     | 1.8                  |
| 145-149        | 9         | 5.2                     | 7.0                  |
| 150-154        | 9         | 5.2                     | 12.2                 |
| 155-159        | 23        | 13.4                    | 25.6                 |
| 160-164        | 34        | 19.8                    | 45.4                 |
| 165-169        | 29        | 16.9                    | 62.3                 |
| 170-174        | 22        | 12.7                    | 75.0                 |
| 175-179        | 25        | 14.4                    | 89.4                 |
| 180-184        | 10        | 5.8                     | 95.2                 |
| 185-189        | 7         | 3.1                     | 98.3                 |
| 190-194        | 1         | 0.6                     | 100.0                |
|                | 172       | 100                     | 100                  |

Mean = 166.302                      S.D. = 10.61  
 Median = 166.0                      Skewness = -0.096  
 Mode = 160.0                      Kurtosis = -0.285

In the above table the scores of attitude towards teaching profession of teacher trainees is given. It is seen that the scores are spread from 137 to 191 where as the maximum score in the scale is 200 and minimum 40. It is evident that there is no case falling in the lower strata and it is an indication that no trainee who has extremely unfavourable attitude towards teaching profession is selected for B. Ed. course. The mean of the sample is 166.30 and standard deviation is 10.61. It is thus noticed that nearly 15 per cent of the total cases shows highly favourable attitude towards teaching profession. Those who like to come in the field of teaching are having favourable attitude towards the profession. In other words only those candidates who are having favourable attitude have been selected to undergo the course as per the sample taken for the present study.

The S.D. of the sample is 10.61 and the mean is 166.30. It follows from this that 121 cases out of 172 (more than 70 per cent) fall between -ve  $1\sigma$  and +ve  $1\sigma$  and 167 cases, i.e. nearly 97 per cent fall between -ve 2 SD and +ve 2 SD. This shows that the distribution of the sample is almost normal. From the above result it is clear that vast majority of teacher trainees have favourable attitude towards teaching profession.

**Teaching Aptitude Test Battery (TATB)**

This is a scale intended to measure the teaching aptitude of teacher trainees. There are 80 items in the scale related to eight areas or sub-test. Each sub test contains 10 items. The distribution of scores is given the table below.

TABLE 15  
Frequency Distribution of Teaching Aptitude Scores  
(N =172)

| Class Interval | Frequency | Percentage of frequency | Cumulative frequency |
|----------------|-----------|-------------------------|----------------------|
| 165-169        | 19        | 11.1                    | 11.1                 |
| 170-174        | 21        | 12.2                    | 23.3                 |
| 175-179        | 19        | 11.0                    | 34.3                 |
| 180-184        | 19        | 11.0                    | 45.3                 |
| 185-189        | 18        | 10.5                    | 58.8                 |
| 190-194        | 21        | 12.2                    | 68.0                 |
| 195-199        | 9         | 5.3                     | 73.3                 |
| 200-204        | 19        | 11.0                    | 84.3                 |
| 205-209        | 5         | 2.9                     | 87.2                 |
| 210-214        | 14        | 8.2                     | 95.4                 |
| 215-219        | 5         | 2.9                     | 98.3                 |
| 220-224        | 1         | 0.6                     | 98.9                 |
| 225-229        | 2         | 1.2                     | 100                  |
|                | 172       | 100                     | 100                  |

|        |   |        |          |   |       |
|--------|---|--------|----------|---|-------|
| Mean   | = | 187.44 | S.D.     | = | 15.88 |
| Median | = | 200.0  | Skewness | = | 0.27  |
| Mode   | = | 187.0  | Kurtosis | = | 0.009 |

It is seen from the table that the teaching aptitude scores are spread from the class intervals of 165-169 to 235-239.

In the scale, it is recorded that minimum score is 80 and the maximum 240. But in the present study no case is seen in the minimum level of attitude. Cent per cent cases are above average. Out of 172 teacher trainees 100 cases i.e. nearly 60 per cent comes under the highest category. Remaining (40 per cent) lies in the average category. The Arithmetic mean of the sample is 187.44 and the S.D. is 15.88. It follows from this that 104 cases (60.5 per cent) falls between  $-ve 1\sigma$  and  $+ve 1\sigma$  and 169 cases i.e. 98.2 per cent fall between  $-ve 2\sigma$  and  $+ve 2\sigma$ . This indicates that the distribution of the sample is almost normal. It is clear from the table that the teacher trainees who are selected for B.Ed. course in Malayalam as optional are having moderately high teaching aptitude.

### **Interest in Teaching**

To measure the interest in teaching of the teacher trainees, Kakkar's Interest in Teaching Scale (KITS) is used.. It is used to measure the interest in teaching of teacher trainees during the first week of starting regular classes. Scores obtained from the Interest scale are presented in the following table.

TABLE 16

Frequency Distribution of Teacher Trainees' Interest Scores on  
Total sample  
(N = 172)

| Class Interval | Frequency | Percentage of frequency | Cumulative frequency |
|----------------|-----------|-------------------------|----------------------|
| 1-3            | 2         | 1.2                     | 1.2                  |
| 4-6            | 18        | 10.4                    | 11.6                 |
| 7-9            | 56        | 32.6                    | 44.2                 |
| 10-12          | 51        | 29.7                    | 73.9                 |
| 13-15          | 36        | 21.0                    | 94.9                 |
| 16-18          | 7         | 4.1                     | 98.9                 |
| 19-21          | 1         | 0.6                     | 99.5                 |
| 22-24          | 1         | 0.6                     | 100.0                |
|                | 172       | 100                     | 100                  |

|        |   |        |          |   |       |
|--------|---|--------|----------|---|-------|
| Mean   | = | 10.436 | S.D.     | = | 3.403 |
| Median | = | 10.0   | Skewness | = | 0.421 |
| Mode   | = | 8.0    | Kurtosis | = | 0.513 |

The above table shows that scores range from 3 to 23. There are a few cases who are having low interest in teaching. But 63 cases are seen above the

mean score and it is a peculiarity to mention that a substantial percentage of teacher trainees is having high interest in teaching. Mean of the scores is 10.43 and SD is 3.4. This shows that 152 out of 172 cases is having average interest in teaching. More than that 45 cases i.e. 26 per cent of the total sample is having high interest in this field, but at the same time it is to be noted that 20 cases (nearly 11 per cent of the total sample for the present study) are not having proper interest in teaching profession. It is assumed that those who select Malayalam as optional subject do have an interest in the subject as well as in teaching. But from the table it is worth mentioning that even in Malayalam optional subject with regard to Interest in Teaching only 26 per cent of the teacher trainees are got admitted in the teacher training institutions.

#### Standard Progressive Matrices Test

This test was administered to measure the General Intelligence of the teacher trainees of Malayalam as defined in Spearman's theory of Cognitive ability. This is a test to be applied for adults irrespective of their scholastic achievement to measure their intelligence. The details of distribution of the scores are given in the table below.

TABLE 17

Frequency Distribution of Teacher trainees' Intelligence Scores on  
Total Sample  
(N = 172)

| Class Interval | Frequency | Percentage of frequency | Cumulative frequency |
|----------------|-----------|-------------------------|----------------------|
| 5-9            | 1         | .6                      | 0.6                  |
| 10-14          | 2         | 1.2                     | 1.8                  |
| 15-19          | 2         | 1.2                     | 3.0                  |
| 20-24          | 3         | 1.8                     | 4.8                  |
| 25-29          | 4         | 2.4                     | 7.2                  |
| 30-34          | 13        | 7.6                     | 14.8                 |
| 35-39          | 20        | 11.6                    | 26.4                 |
| 40-44          | 34        | 19.8                    | 46.2                 |
| 45-49          | 46        | 26.7                    | 72.9                 |
| 50-54          | 39        | 22.6                    | 95.4                 |
| 55-59          | 8         | 4.6                     | 100                  |
|                | 172       | 100                     | 100                  |

Mean = 43.407      S.D. = 9.15  
 Median = 4.5      Skewness = -1.378  
 Mode = 48.0      Kurtosis = 2.441

In the frequency table the score ranges from 8 to 58. As per the manual it is seen that those who score below 15 may be treated as 'below average' group. Hence, it is seen from the table that 3 cases out of 172 falls in this category which indicates a very low intelligence. Generally, the candidates seeking admission to B.Ed. course will be having above average intelligence. Here, this contradiction may be due to various other reasons such as fear, anxiety or lack of conducive atmosphere in answering the scale. It is also seen from the table that 8 (4.6 per cent) of the total cases are rated as highly intelligent. So it is an indication that certain percentage of students who are prospective teachers is highly intelligent and will be an asset to the teaching profession.

### Socio-Economic Status Scale

The Socio Economic Status of the teacher trainees was measured by using the tool developed by Kuppusamy with a slight modification by the researcher. The details of scores are shown in the next table.

TABLE 18

Frequency Distribution of the Socio Economic Status Scores for  
Total Sample  
(N = 172)

| Class Interval | Frequency | Percentage of frequency | Cumulative frequency |
|----------------|-----------|-------------------------|----------------------|
| 0-3            | 2         | 1.2                     | 1.2                  |
| 4-6            | 30        | 17.5                    | 18.7                 |
| 7-9            | 22        | 12.8                    | 31.5                 |
| 10-12          | 59        | 34.3                    | 65.8                 |
| 13-15          | 13        | 7.5                     | 73.3                 |
| 16-18          | 17        | 9.9                     | 83.2                 |
| 19-21          | 15        | 8.7                     | 91.9                 |
| 22-24          | 6         | 3.5                     | 95.4                 |
| 25-27          | 5         | 2.9                     | 98.3                 |
| 28-30          | 3         | 1.8                     | 100                  |
|                | 172       | 100                     | 100                  |

Mean = 12.16      S.D. = 5.97  
 Median = 11.0      Skewness = .0762  
 Mode = 10.0      Kurtosis = 0.090

The maximum scores in the SES scale is 30. It is seen from the table that the scores of SES vary from 3 to 30. The mean of the total sample is 12.16 and SD 5.97, 101 cases out of 172 fall between -ve  $1\sigma$  and +ve  $1\sigma$ . It is also noted that 54 cases, i.e., 31.5 per cent fall in the very poor group. Only 8 cases i.e. 4.7 per cent come under the category of high socio economic status group. It is an indication that those who undergo the B.Ed. course fall in the middle and lower classes.

## SECTION B

This part of the analysis deals with the relationship of the psycho social variables and General Teaching Competency of the total samples. The relationship was investigated basically using the Pearson's Product Moment Coefficient of Correlation.

- (a) Procedure for interpretations of 'r' s as shown below according to the classification suggested by Garret (1981).
  - (i) 'r' from .00 to + 0.20 denotes indifferent or negligible relationship.
  - (ii) 'r' from + 0.20 to + 0.40 denotes low correlation.

(iii) 'r' from  $\pm 0.40$  to  $\pm 0.70$  denotes substantial or marked relationship.

(iv) 'r' from  $\pm 0.70$  to  $\pm 1.00$  denotes high to very high relationship.

(b) Test of significance of 'r' using the following formula suggested by Best

$$t_r = r \frac{\sqrt{N-2}}{\sqrt{1-r^2}}$$

The details of relationship obtained between the dependent and independent variables and their interpretation are given in the following pages.

TABLE 19

Details of Relationship Between General Teaching Competency and Attitude Towards Teaching Profession for the Whole Sample  
(N = 172)

| Variables                            | 'r'   | Corresponding 't' value |
|--------------------------------------|-------|-------------------------|
| General Teaching Competency          | 0.196 | 2.612                   |
| Attitude towards Teaching Profession |       |                         |

It is seen from the table that the correlation coefficient between General Teaching Competency and attitude towards teaching profession for the whole sample is 0.196 and the corresponding 't' value is 2.612 which is significant at 0.01 per cent level. This shows that the teaching competency of the whole sample is significantly related to the attitude towards teaching profession of teacher trainees. i.e., as attitude increases teaching competency also increases and vice-versa. This is a clear signal of association between these two variables. Thus, the hypothesis that there exists significant positive relationship between General Teaching Competency and the attitude towards teaching profession is accepted.

TABLE 20

Details of Relationship Between General Teaching Competency and Teaching Aptitude for the Whole Sample

(N = 172)

| Variable                    | 'r'    | Corresponding 't' value |
|-----------------------------|--------|-------------------------|
| General Teaching Competency | 0.8082 | 17.86                   |
| Teaching Aptitude           |        |                         |

The table shows that coefficient of correlation between the Teaching Aptitude and General Teaching Competency is 0.8082 which is highly significant. This indicates that Teaching Aptitude and Teaching Competency are highly related with each other. It means that when the teaching aptitude of the teacher trainees increases competency in teaching is also seen increasing. Here also, the hypothesis that, there exists significant positive relationship between General Teaching Competency and Teaching Aptitude for the total sample is accepted.

TABLE 21

Details of Relationship Between Interest in Teaching and Teaching Competency for the Total Sample

(N = 172)

| Variable                    | 'r'    | Corresponding 't' value |
|-----------------------------|--------|-------------------------|
| General Teaching Competency | 0.1535 | 2.05                    |
| Interest in Teaching        |        |                         |

The correlation co-efficient between interest in Teaching and General Teaching Competency is found to be 0.1535. The corresponding 't' value is 2.05 which exceeds 0.05 level of significance. This shows that these two variables are positively related with each other. The finding reveals that the teaching competency would be higher when one is having genuine interest in teaching. Therefore, the hypothesis that these two variables are significantly related to each other, is accepted.

TABLE 22

Details of Relationship Between General Teaching Competency and  
Intelligence for the Whole Sample

(N = 172)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| General Teaching Competency | 0.161 | 2.15                    |
| General Intelligence        |       |                         |

The table shows that the coefficient of correlation between Teaching Competency and General Intelligence is 0.161 ( $t = 2.15$ ) which is significant at 0.05 level. It is noted that there is positive and significant relationship between intelligence and teaching competency to a certain extent. So it can be interpreted that General Intelligence is also a contributing factor for the teaching competency.

TABLE 23

Relationship Between the Socio Economic Status and General Teaching Competency for the Total Sample

(N = 172)

| Variable                    | 'r'    | Corresponding 't' value |
|-----------------------------|--------|-------------------------|
| General Teaching Competency | 0.0198 | 0.258                   |
| Socio Economic Status       |        |                         |

From the above table it is seen that the correlation coefficient obtained between the G.T.C. and Socio Economic Status is 0.0198 which is not at all significant even at 0.05 level. Though positive relationship is seen between these variables, it is totally negligible as far as the whole sample is concerned. The present study reveals that socio-economic status of the trainees has nothing to do with their teaching competency even though there can be traced a slight positive relationship.

In the following 3 tables an attempt is made to find out the relationship between the components of Socio Economic status, i.e. Parental Education,

Parental Occupation and Parental Annual Income with the teaching competency.

TABLE 24

Details of Relationship Obtained Between Parental Education and General Teaching Competency for the Total Sample

(N = 172)

| Variables                   | 'r'    | Corresponding 't' value |
|-----------------------------|--------|-------------------------|
| Parental Education          | 0.6599 | 11.47                   |
| General Teaching Competency |        |                         |

The coefficient of correlation obtained between Parental Education and Teaching Competency for the total sample is found to be 0.6599 as shown in the above table. This is significant at 0.01 level. This is a clear indication that Parental Education and Teaching Competency are closely associated with each other. The general teaching competency is highly influenced by parental education.

TABLE 25

Details of Relationship Obtained Between Parental Occupation and General Teaching Competency for Total Sample

(N = 172)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Parental occupation         | 0.303 | 5.89                    |
| General Teaching Competency |       |                         |

From the above table it is seen that the co-efficient of correlation obtained between the parental occupation and teaching competency is 0.303. This is found to be significant at 0.01 level. Here, it can be interpreted that this relationship is significant and parental occupation is also an influencing factor for the teaching competency up to a certain extent.

TABLE 26

Details of Relationship Obtained Between Parental Income and Teaching Competency for Total Sample

(N = 172)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Parental Income             | 0.028 | 0.167                   |
| General Teaching Competency |       |                         |

It is noticed that the 'r' value obtained for correlation between Parental Income and Teaching Competency is 0.028 which is not significant at any level. This indicates that Parental Income does not affect the teaching competency.

### Conclusion

Relationship between all the variables except Socio-Economic Status and Teaching Competency is highly significant with regard to the total sample. But certain components of Socio-Economic Status, i.e., Parental Education and Parental Income are having significant relationship with

Teaching Competency. Hence, it can be interpreted that almost all the variables selected for the study have positive and significant relationship with teaching competency. These variables are closely associated with teaching competency.

TABLE 27

Details of Relationship Between Attitude towards Teaching Profession and Teaching Competency for Male Trainees

(N = 37)

| Variables                            | 'r'   | Corresponding 't' value |
|--------------------------------------|-------|-------------------------|
| Attitude Towards Teaching Profession | 0.028 | 0.167                   |
| General Teaching Competency          |       |                         |

The table shows that the coefficient of correlation between the attitude towards teaching profession and General Teaching Competency for the male trainees is 0.028. This is not significant at any level. The correlation is found to be negative also. Hence, it has to be interpreted that as far as the male

trainees are concerned their attitude towards teaching profession does not have any relationship with the teaching competency of teacher trainees.

TABLE 28

Details of Relationship Between Attitude towards Teaching profession and General Teaching Competency of the Female Trainees

(N = 135)

| Variables                            | 'r'   | Corresponding 't' value |
|--------------------------------------|-------|-------------------------|
| Attitude towards Teaching Profession | 0.235 | 2.79                    |
| General Teaching Competency          |       |                         |

The coefficient of correlation seen from the table is 0.235 which is significant at 0.01 level. This is an indication that a competent female trainee will have favourable attitude towards the teaching profession. It is interesting to note that though there is no significant relationship between attitude of male trainees and General Teaching Competency, there is positive significant relationship between the attitude towards teaching profession and General Teaching Competency of the female trainees. Therefore, the

hypothesis that there exists positive significant relationship between the attitude and General Teaching Competency of the female trainees is accepted.

TABLE 29

Details of Relationship Between Teaching Aptitude and General Teaching Competency for the Male Teacher Trainees.

(N = 37)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Teaching Aptitude           | 0.878 | 10.87                   |
| General Teaching Competency |       |                         |

The correlation obtained between teaching aptitude and general teaching competency for the male teacher trainees is 0.878 ( $t = 10.87$ ) which is sufficiently high and significant well beyond 0.01 level. This indicates that Teaching Aptitude is highly correlated with Teaching Competency for Male teacher trainees. Thus, the hypothesis stating that there exists significant relationship between Teaching Aptitude and Teaching Competency of male teacher trainees is substantiated.

TABLE 30

Details of Relationship Between Teaching Aptitude and General Teaching Competency of the Female Teacher Trainees

(N = 135)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Teaching Aptitude           | 0.796 | 15.20                   |
| General Teaching Competency |       |                         |

It is noticed from the table that the correlation coefficient between the above mentioned two variables is 0.796 which is significant beyond 0.01 level. This highly positive relationship shows that General Teaching Competency is highly influenced by Teaching Aptitude. This is a finding one would normally expect in a study like this. So the hypothesis stands substantiated.

TABLE 31

Details of Relationship Between Interest in Teaching and General Teaching Competency for Male Teacher Trainees

(N = 37)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Interest in Teaching        | 0.141 | 0.846                   |
| General Teaching Competency |       |                         |

The correlation coefficient seen from the table is 0.141 ( $t = .846$ ) which is not significant even at .05 level. This is an indication that there is no relationship with interest in teaching and teaching competency. Though the relationship is negligible it is positive. This means that even if male trainees who have no genuine interest in the profession can also show high competency in teaching.

TABLE 32

Details of Relationship Between Interest in Teaching and General Teaching Competency of the Female Trainees

(N = 135)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Interest in Teaching        | 0.236 | 2.80                    |
| General Teaching Competency |       |                         |

It is observed from table that the coefficient of correlation between Interest and General Teaching Competency of female trainees is 0.236 ( $t = 2.80$ ) which is significant at 0.01 level. It means that both variables are significantly associated with each other and the trainees with high interest may have better competency than those who have less interest and vice-versa. This result indicates that interest in teaching plays an important role in developing teaching competency with respect to female trainees. Therefore, the hypothesis that there exists significant relationship between interest in teaching and General teaching Competency of Female Trainees is accepted.

TABLE 33

Details of Relationship Between Intelligence and General Teaching  
Competency for Male Trainees

(N = 37)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Intelligence                | 0.133 | 0.791                   |
| General Teaching Competency |       |                         |

The table shows that the coefficient of correlation between intelligence and teaching competency of male teachers is 0.133 ( $t = .791$ ) which is not at all significant even at 0.05 level. The relationship is seen positive. No remarkable relationship is seen between these two variables as far as male trainees are concerned. It is to be interpreted that intelligence has no remarkable influence on teaching competency. Trainees who have low intelligence can also emerge as better teachers because teaching competency is mainly influenced by various other factors rather than intelligence.

TABLE 34

Details of Relationship Between Intelligence and General Teaching Competency of the Female Trainees

(N = 135)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Intelligence                | 0.160 | 1.87                    |
| General Teaching Competency |       |                         |

It is seen from the table that the coefficient of correlation between General Intelligence and General Teaching Competency is 0.160 which is not significant even at 0.05 level. So it can be interpreted that General Intelligence and teaching competency of female trainees are not associated. It means that a female teacher trainee having high intelligence may not have high influence on her teaching ability. Thus the hypothesis that there exists significant relationship between intelligence and General Teaching Competency is not accepted.

TABLE 35

Details of Relationship Between Socio Economic Status and Teaching Competency of the Male Teacher Trainees

(N = 37)

| Variables                   | 'r'    | Corresponding 't' value |
|-----------------------------|--------|-------------------------|
| Socio Economic Status       | -0.389 | 2.49                    |
| General Teaching Competency |        |                         |

From this table it is seen, that the coefficient of correlation between SES and GTC is -0.389. These two variables do not show any positive relationship. The high SES of the male trainees is not having any influence upon their teaching competency. This is an indication that teaching competency is influenced by variables other than socio economic status..

TABLE 36

Details of Relationship Between Socio Economic Status and Teaching Competency of Female Trainees

(N = 135)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Socio Economic Status       | 0.109 | 4.25                    |
| General Teaching Competency |       |                         |

The coefficient of correlation between Socio Economic Status and Teaching Competency of female trainees is 0.109 which is significant at 0.01 level. Substantial relationship has been found between these two variables in the case of female trainees. In other words, the high scores in the Socio Economic Status affect teaching competency as far as female teacher trainees are concerned.

TABLE 37

Consolidated Table showing the relationship between Independent Variables and Dependent Variable for Male-Female Sub-Group

| Independent Variables                | Dependent Variable  | Sub-group | Significant or not |
|--------------------------------------|---------------------|-----------|--------------------|
| Attitude towards Teaching Profession | Teaching Competency | Male      | Not significant    |
| Attitude towards Teaching Profession | Teaching Competency | Female    | Significant        |
| Aptitude in Teaching                 | Teaching Competency | Male      | Significant        |
| Aptitude in Teaching                 | Teaching Competency | Female    | Significant        |
| Interest in Teaching                 | Teaching Competency | Male      | Not Significant    |
| Interest in Teaching                 | Teaching Competency | Female    | Significant        |
| Intelligence                         | Teaching Competency | Male      | Not significant    |
| Intelligence                         | Teaching Competency | Female    | Not significant    |
| Socio Economic Status                | Teaching Competency | Male      | Not significant    |
| Socio-Economic Status                | Teaching Competency | Female    | Not significant    |

## Conclusion

It is noticed from the table that variables like Attitude and Aptitude are closely associated with Teaching Competency with regard to Male and Female Sub-groups. Interest is related with Teaching Competency for Females only. Most of the variables are associated with Teaching Competency but the relationship is not significant to Intelligence and Socio-Economic Status in the case of this sub-group.

In the following pages the correlation between these variables is discussed in the case of trainees who come from urban and rural areas.

TABLE 38

Details of relationship between Attitude towards Teaching Profession and General Teaching Competency for the Urban Trainees

(N = 24)

| Variables                            | 'r'   | Corresponding 't' value |
|--------------------------------------|-------|-------------------------|
| Attitude towards Teaching Profession | 0.188 | 0.9                     |
| General Teaching Competency          |       |                         |

The Table shows the coefficient of correlation between attitude towards teaching profession and general teaching competency of urban teacher trainees is 0.188. This is a positive relationship but rather negligible. In regard to urban students the attitude is not associated substantially with teaching competency.

TABLE 39

Details of relationship between Attitude towards Teaching Profession and General Teaching Competency for Rural Students.

(N = 148)

| Variables   | 'r'   | Corresponding 't' value |
|---|-------|-------------------------|
| Attitude towards Teaching Profession<br>General Teaching Competency | 0.182 | 2.25                    |

The table shows that the coefficient of correlation between Attitude towards teaching profession and general teaching competency with regard to rural trainees is 0.182 ( $t = 2.25$ ) which is significant at 0.01 level. It is evident that SES and teaching competency are associated with each other. Thus the hypothesis that there is significant, relationship between the attitude and General Teaching Competency of rural trainees is substantiated.

TABLE 40

Details of relationship between Teaching Aptitude and General Teaching Competency of Urban Trainees

(N = 24)

| Variables  | 'r'   | Corresponding 't' value |
|--|-------|-------------------------|
| Teaching Aptitude<br>General Teaching Competency | 0.876 | 8.54                    |

The coefficient of correlation obtained between these two variables is seen as 0.876 which is significant at 0.01 level. This can be interpreted that high positive aptitude influence the teaching competency of urban students. Thus, the hypothesis that there exists positive and significant relationship between teaching aptitude and general teaching competency with regard to urban teacher trainees is established.

TABLE 41

Details of relationship between Teaching Aptitude and General Teaching Competency for Rural Students

(N = 148)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Teaching Aptitude           | 0.798 | 16.02                   |
| General Teaching Competency |       |                         |

The 'r' value obtained from the correlation between Teaching Aptitude and General Teaching Competency is seen as 0.798 ( $t = 16.02$ ) which is significant beyond 0.01 level. This highly positive relationship indicates that these two variables are associated very much with one another. The increase in one variable directly influences the other also. This shows that the students coming from rural areas with high aptitude in teaching are highly competent in teaching also.

TABLE 42

Details of relationship between Intelligence and General Teaching  
Competency of Urban Trainees

(N = 24)

| Variables                                   | 'r'   | Corresponding 't' value |
|---|-------|-------------------------|
| Intelligence<br>General Teaching Competency | 0.028 | 0.133                   |

It is noticed from the table that the correlation coefficient between intelligence and general teaching competency is 0.028 which is not significant. This shows that intelligence and competency are not so much associated. It is generally accepted that those who possess high intelligence should have better competency. But here it shows that intelligence of the trainees is having only negligible relationship with teaching competency.

TABLE 43

Details of relationship between Intelligence and General Teaching Competency of Rural Trainees

(N = 148)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Intelligence                | 0.183 | 2.25                    |
| General Teaching Competency |       |                         |

This 'r' value noticed from the table is 0.183 ( $t = 2.25$ ) which is significant at 0.05 level. It has to be noticed that with regard to trainees who come from rural areas remarkable association is seen between intelligence and General Teaching Competency. The relationship is positive. Hence, the increase in one variable results in the increase of the other.

TABLE 44

Details of relationship between Interest in Teaching and General Teaching Competency for Urban Students

(N = 24)

| Variables   | 'r'   | Corresponding 't' value |
|---|-------|-------------------------|
| Interest in Teaching<br>General Teaching Competency | 0.320 | 1.67                    |

When compared with 'r' values interest in teaching and general teaching competency of urban trainees, it is found to be .320 which is not significant even at 0.05 level. This is an indication that there is no association between these two variables. It is supposed that high interest in teaching of urban students affect the teaching competency in a considerable manner. But here the correlation is low and it has no relevance.

TABLE 45

Details of relationship between Interest in Teaching and General Teaching Competency for Rural Trainees

(N = 148)

| Variables   | 'r'   | Corresponding 't' value |
|---|-------|-------------------------|
| Interest in Teaching<br>General Teaching Competency | 0.114 | 1.38                    |

The above table shows that the coefficient of correlation between Interest in Teaching and General Teaching Competency for rural trainees is 0.114 ( $t = 1.38$ ) which is not significant even at 0.05 level. Only a negligible relationship is seen between these two variables. This can be interpreted that interest in teaching has no substantial influence with teaching competency of rural trainees. Hence the hypothesis that there exists significant relationship between interest and General Teaching Competency is not accepted.

TABLE 46

Details of relationship between Socio Economic Status and General Teaching Competency for Urban Trainees

(N = 24)

| Variables                   | 'r'    | Corresponding 't' value |
|-----------------------------|--------|-------------------------|
| Socio Economic Status       | 0.6001 | 3.52                    |
| General Teaching Competency |        |                         |

It is observed from the table that the co-efficient of correlation between SES and GTC for urban trainees is 0.6001 ( $t = 3.52$ ) which is significant at 0.01 level. It shows that socio-economic status of the urban teacher trainees have high positive relationship with teaching competency. It can be interpreted that the teacher trainees who come from urban areas with high socio economic background seem to have teaching competency. From this it is clear that Socio Economic Status is a contributing factor in teaching competency as far as urban trainees are concerned.

TABLE 47

Details of relationship obtained between Socio Economic Status and General Teaching Competency for the Rural Trainees

(N = 148)

| Variables                   | 'r'    | Corresponding 't' value |
|-----------------------------|--------|-------------------------|
| Socio Economic Status       | -0.048 | 0.58                    |
| General Teaching Competency |        |                         |

From the above table it is seen that 'r' value obtained between Socio Economic Status and General Teaching Competency for the rural teacher trainees is -0.048 which is not at all significant at 0.05 level. The relationship is negative. This means that socio-economic status of the rural teacher trainees has nothing to do with their level of teaching competency.

TABLE 48

Consolidated table showing the relationship between the Independent Variables and Dependent Variable for the Urban-Rural Sub-group

| Independent Variables                | Dependent Variable  | Sub-group | Significant or not |
|--------------------------------------|---------------------|-----------|--------------------|
| Attitude towards Teaching Profession | Teaching Competency | Urban     | Not significant    |
| Attitude towards Teaching Profession | Teaching Competency | Rural     | Significant        |
| Aptitude in Teaching                 | Teaching Competency | Urban     | Significant        |
| Aptitude in Teaching                 | Teaching Competency | Rural     | Significant        |
| Interest in Teaching                 | Teaching Competency | Urban     | Significant        |
| Interest in Teaching                 | Teaching Competency | Rural     | Significant        |
| Intelligence                         | Teaching Competency | Urban     | Not significant    |
| Intelligence                         | Teaching Competency | Rural     | Not significant    |
| Socio Economic Status                | Teaching Competency | Urban     | Significant        |
| Socio Economic Status                | Teaching Competency | Rural     | Not significant    |

## Conclusion

Most of the variables influence the Teaching Competency as far as the Urban-Rural Sub-Group is concerned. Intelligence is not found significant at any level. All the variables have close association with Teaching Competency but Intelligence is not so much influenced.

TABLE 49

Details of relationship between Attitude towards Teaching Profession and General Teaching Competency for Trainees Coming from Teacher Background  
(N = 32)

| Variables                            | 'r'   | Corresponding 't' value |
|--------------------------------------|-------|-------------------------|
| Attitude towards Teaching Profession | 0.320 | 1.85                    |
| General Teaching Competency          |       |                         |

From the table it is clear that the co-efficient of correlation between Attitude and General Teaching Competency of the teacher trainees having teacher background is .320 which is not significant at 0.01 level of confidence.

This relationship indicates that attitude and teaching competency are not associated with each other in the case of teacher trainees who have teaching background.

TABLE 50

Details of relationship between Attitude towards Teaching Profession and General Teaching Competency for Trainees who have no Teacher Background  
(N = 140)

| Variables                            | 'r'   | Corresponding 't' value |
|--------------------------------------|-------|-------------------------|
| Attitude towards Teaching Profession | 0.245 | 2.98                    |
| General Teaching Competency          |       |                         |

From the table it is evident that the coefficient of correlation between Attitude Towards Teaching Profession and General Teaching Competency for the Trainees who have not teacher background is 0.245 ( $t = 2.98$ ) which is significant at 0.01 level. This is a clear indication that these two variables are closely associated with each other.

TABLE 51

Details of Relationship Between Teaching Aptitude and General Teaching Competency for Trainees Coming from Teacher Background

(N = 32)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Teaching Aptitude           | 0.819 | 7.81                    |
| General Teaching Competency |       |                         |

The table shows a coefficient of correlation of 0.819 ( $t = 7.81$ ) which is significant at 0.01 level. This can be interpreted that General Teaching Competency and Aptitude has high relationship as far as trainees having teacher background are concerned. One variable highly influences the other.

TABLE 52

Details of Relationship Between Teaching Aptitude and General Teaching Competency for Trainees who have no Teacher Background  
(N = 140)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Teaching Aptitude           | 0.728 | 12.48                   |
| General Teaching Competency |       |                         |

The 'r' value obtained is 0.728 which is highly significant at 0.01 level. This means that with regard to trainees who have no teacher background, Aptitude is highly influential in Teaching Competency. Aptitude and Teaching Competency are highly related with one another.

TABLE 53

Relationship between Interest and General Teaching Competency for  
Trainees coming from Teacher Background

(N = 32)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Interest                    | 0.123 | 0.68                    |
| General Teaching Competency |       |                         |

This table shows that the coefficient of correlation between interest and general teaching competency for trainees who have teacher background is 0.123 which is not at all significant at any level. This reveals that though the relationship is positive it is not to be treated as a remarkable one for the above category of students.

TABLE 54

Details of relationship between Interest and General Teaching Competency  
for Trainees who have no Teacher Background  
(N = 140)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Interest                    | 0.237 | 2.86                    |
| General Teaching Competency |       |                         |

The coefficient of correlation seen from the table is 0.237 which is significant at 0.01 level. Interest and General Teaching Competency show a positive influence with each other.. It has to be interpreted that when Interest increases the Competency in Teaching also increases.

TABLE 55

Details of Relationship obtained between Intelligence and General Teaching Competency for the Trainees Coming from Teacher Background

(N = 32)

| Variables                                   | 'r'   | Corresponding 't' value |
|---|-------|-------------------------|
| Intelligence<br>General Teaching Competency | 0.262 | 1.47                    |

The coefficient of correlation does not show significant relationship between these two variables. The trainees coming from teaching background have a positive influence upon teaching with their intelligence. But it cannot be reckoned as a contributing factor for teaching competency.

TABLE 56

Details of Relationship Between Intelligence and General Teaching Competency for Trainees who have no Teacher Background  
(N = 140)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Intelligence                | 0.158 | 1.88                    |
| General Teaching Competency |       |                         |

The 'r' value obtained when correlated between Intelligence and General Teaching Competency is 0.158 which is not significant even at 0.05 level. This indicates that though there is a positive relationship that is not to be taken into account.

TABLE 57

Details of Relationship between Socio Economic Status and General Teaching Competency for Trainees coming from Teacher background

(N = 32)

| Variables                   | 'r'   | Corresponding 't' value |
|-----------------------------|-------|-------------------------|
| Socio Economic Status       | 0.108 | 0.58                    |
| General Teaching Competency |       |                         |

No significant relationship is seen between these two variables. Socio economic status and general teaching competency are not associated in a significant way. Positive relationship is seen, but it cannot be interpreted that one variable considerably influences the other for the trainees of teaching background.

TABLE 58

Details of relationship between Socio-Economic Status and General Teaching Competency for Trainees who have no Teacher Background  
(N = 140)

| Variables                   | 'r'  | Corresponding 't' value |
|-----------------------------|------|-------------------------|
| Socio Economic Status       | .134 | 1.58                    |
| General Teaching Competency |      |                         |

The table shows the 'r' value as 0.134 which is not significant at any level. There is positive relationship between these two values with regard to the sub sample but there is no much significance.

TABLE 59

Consolidated table showing the relationship between the Independent Variables and Dependent Variable for Teacher Background and Non-Teacher Background Sub-group

| Independent Variables                | Dependent Variable  | Sub-group                      | Significant or not |
|--------------------------------------|---------------------|--------------------------------|--------------------|
| Attitude towards Teaching Profession | Teaching Competency | Trainees of Teacher Background | Not significant    |
| Attitude towards Teaching Profession | Teaching Competency | Non-Teacher Background         | Significant        |
| Aptitude in Teaching                 | Teaching Competency | Trainees of Teacher Background | Significant        |
| Aptitude in Teaching                 | Teaching Competency | Non-Teacher Background         | Significant        |
| Interest in Teaching                 | Teaching Competency | Trainees of Teacher Background | Not Significant    |
| Interest in Teaching                 | Teaching Competency | Non-Teacher Background         | Significant        |
| Intelligence                         | Teaching Competency | Trainees of Teacher Background | Not Significant    |
| Intelligence                         | Teaching Competency | Non-Teacher Background         | Significant        |
| Socio Economic Status                | Teaching Competency | Trainees of Teacher Background | Not Significant    |
| Socio-Economic Status                | Teaching Competency | Non-Teacher Background         | Not significant    |

From the table it is understood that all the variables except Teaching Aptitude do not have significant relationship with Teaching Competency in regard to the sub-group, i.e., the group of Family Teacher Background and those who have no such background. Only the Aptitude in Teaching has close association with Teaching Competency in regard to this sub-group.

In the following pages correlation between the major aspects of the general teaching competency and all the variables such as attitude towards teaching profession, teaching aptitude, intelligence, interest and socio economic status are described. There are five aspects for General Teaching Competency viz. Preparation, planning, closing, evaluation and managerial. This is to find out whether there exists any relationship between these variables and the major aspects of General Teaching Competency.

TABLE 60

Details of relationship between Attitude towards Teaching Profession and Major Aspects of Teaching Competency for the Total Sample

(N = 172)

| Independent Variable                 | Dependent Variable          | ' $\gamma$ ' | 't' value |
|--------------------------------------|-----------------------------|--------------|-----------|
|                                      | General Teaching Competency |              |           |
| Attitude towards Teaching Profession | Aspect 1                    | .1794        | 2.37      |
|                                      | Aspect 2                    | .1804        | 2.39      |
|                                      | Aspect 3                    | .1158        | 1.52      |
|                                      | Aspect 4                    | .0497        | 0.64      |
|                                      | Aspect 5                    | .1714        | 2.37      |

From the above table it is seen that the coefficient of correlation between Attitude towards teaching profession and five major aspects of teaching competency is 0.1794, .1804, .1158, 0.0497 and .1784 respectively. All these values except the values for the aspects three and four are significant at 0.05 level. There is an association between this variable and majority of the aspects of teaching.

TABLE 61

Details of Relationship between Teaching Aptitude and Major Aspects of Teaching Competency for the Total Sample

(N = 172)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Teaching Aptitude    | Aspect 1                    | .5671 | 8.97      |
|                      | Aspect 2                    | .7823 | 16.45     |
|                      | Aspect 3                    | .6356 | 10.73     |
|                      | Aspect 4                    | .5365 | 8.30      |
|                      | Aspect 5                    | .5910 | 9.52      |

The coefficient of correlation obtained between the Teaching Aptitude and five major aspects of Teaching Competency for the total sample is seen from the table as 0.5671, .7823, .6356, .5365 and .5910 respectively. These values are all significant beyond 0.01 level. This is a clear indication that Aptitude is highly related with all aspects of teaching competency. Out of these aspects planning is the most important one, and the table shows the highest 'r' value to this aspect. It can be interpreted that high aptitude in teaching is associated in the teaching competency especially in planning aspect.

TABLE 62

Details of Relationship obtained between Interest in Teaching and the Major Aspects of Teaching Competency for the Total Sample

(N = 172)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Interest in Teaching | Aspect 1                    | .1939 | 2.57      |
|                      | Aspect 2                    | .1270 | 1.66      |
|                      | Aspect 3                    | .0470 | 0.61      |
|                      | Aspect 4                    | .1321 | 1.73      |
|                      | Aspect 5                    | .2143 | 2.85      |

The 'r' values between the Interest in Teaching and various aspects of General Teaching Competency is shown in the table above. They are 0.1939, 0.1270, 0.0470, 0.1321 and 0.2143 respectively. The first and the last aspects of the General Teaching Competency, i.e. Preparation and Managerial aspects are found to be significant at 0.01 level. This is an indication that the trainees who are having more interest in teaching will be more competent than others, particularly in the preparation and management aspects of teaching competency.

TABLE 63

Details of relationship obtained between Intelligence and major aspects of Teaching competency for the Total sample

(N = 172)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Intelligence         | Aspect 1                    | .1534 | 2.004     |
|                      | Aspect 2                    | .1515 | 2.01      |
|                      | Aspect 3                    | .0835 | 1.09      |
|                      | Aspect 4                    | .0983 | 1.28      |
|                      | Aspect 5                    | .1334 | 1.74      |

The coefficient of correlation between Intelligence and the major aspects of general Teaching Competency for the total sample is found to be 0.1534, 0.1515, 0.835, 0.0923, 0.1334 from the above table. All these values except the first two are not significant even at 0.05 level. It is thus clear that Intelligence and some major aspects of teaching are associated with each other. Hence the general intelligence of the teacher trainees affect their teaching competency in preparing and planning for class room transaction.

There are so many other factors which influence the teaching competency, than intelligence. But positive and significant relationship of two major aspects with intelligence indicates that the effectiveness in teaching is influenced by the general intelligence of the trainees.

TABLE 64

Relationship obtained between Socio Economic Status and major aspects of General Teaching Competency

(N = 172)

| Independent Variable  | Dependent Variable          | 'r'     | 't' value |
|-----------------------|-----------------------------|---------|-----------|
|                       | General Teaching Competency |         |           |
| Socio Economic Status | Aspect 1                    | -0.118  | .64       |
|                       | Aspect 2                    | .0102   | .41       |
|                       | Aspect 3                    | .0178   | .43       |
|                       | Aspect 4                    | -0.6289 | 1.34      |
|                       | Aspect 5                    | .1412   | 1.86      |

All the 'r' values figured in the above table denotes the correlation between SES and major aspects of Teaching Competency. They are not significant even at 0.05 level. Some of the values are negative also. These

values reveal that the socio economic status of the trainees has no association with the five aspects of Teaching Competency. This is an indication that SES has nothing to do with the aspects of General Teaching Competency of the trainees. Other variables such as attitude, aptitude etc do influence the aspects of Teaching Competency rather than the socio economic conditions of the trainees.

TABLE 65

Relationship obtained between Attitude towards Teaching Profession and Major aspects of General Teaching Competency for Male Trainees

(N = 37)

| Independent Variable      | Dependent Variable          | 'r'    | 't' value |
|---------------------------|-----------------------------|--------|-----------|
|                           | General Teaching Competency |        |           |
| Attitude towards Teaching | Aspect 1                    | .0753  | 0.46      |
|                           | Aspect 2                    | .0199  | 0.118     |
|                           | Aspect 3                    | .1903  | 1.147     |
|                           | Aspect 4                    | -.1562 | 0.22      |
|                           | Aspect 5                    | -.1167 | 0.667     |

This table shows that coefficient of correlation obtained between Attitude and major aspects of Teaching Competency are .0753, .0199, .1903, -0.1562, -.1167 which are not significant in the case of the first 3 values. Though this relationship is positive, it is negligible. This has to be interpreted that as far as the male trainees are concerned, the attitude has no association with the various aspects of teaching competency.

TABLE 66

Relationship obtained between Attitude and Aspects of Teaching Competency for Female Trainees

(N = 37)

| Independent Variable      | Dependent Variable          | 'r'   | 't' value |
|---------------------------|-----------------------------|-------|-----------|
|                           | General Teaching Competency |       |           |
| Attitude towards Teaching | Aspect 1                    | .2032 | 2.41      |
|                           | Aspect 2                    | .2131 | 2.52      |
|                           | Aspect 3                    | .1861 | 2.18      |
|                           | Aspect 4                    | .1577 | 1.85      |
|                           | Aspect 5                    | .2332 | 2.77      |

The 'r' values obtained between attitude towards teaching profession and aspects of teaching competency for female trainees are figured in the above table. All the values except the four are significant at 0.05 level. This indicates the significant relationship between professional attitude and some important aspects of teaching competency with regard to female trainees. Relationship with preparation, planning, closing and management aspects shows that for efficient teaching competency attitude towards the profession also influence up to a certain extent in the case of females.

TABLE 67

Details of Relationship obtained between Teaching Aptitude and Major Aspects of Teaching Competency for Male Trainees

(N = 37)

| Independent Variable | Dependent Variable          | r'    | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Teaching Aptitude    | Aspect 1                    | .6533 | 5.09      |
|                      | Aspect 2                    | .7997 | 7.88      |
|                      | Aspect 3                    | .5972 | 4.43      |
|                      | Aspect 4                    | .4630 | 3.11      |
|                      | Aspect 5                    | .5353 | 3.26      |

The 'r' values figured in the above table show the correlation between Teaching Aptitude and the major aspects of Teaching Competency. They are .6533, .7997, .5972, .4630, .5353 respectively. All these values are found to be significant beyond 0.01 level. It has to be noted that Teaching Aptitude and major aspects of Teaching Competency such as preparation, planning, closing, evaluation and managerial are closely associated with each other. One variable highly influences the other in all aspects. It is to be noted that aspect 2 'planning' is having highest 'r' value. This is an indication that when the Aptitude of the trainee increases the capacity for planning lessons also increases.

TABLE 68

Relationship between Teaching Aptitude and Major aspects of Teaching Competency of Female Trainees  
(N = 135)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Teaching Aptitude    | Aspect 1                    | .5553 | 7.714     |
|                      | Aspect 2                    | .7776 | 14.25     |
|                      | Aspect 3                    | .6498 | 9.85      |
|                      | Aspect 4                    | .5548 | 7.706     |
|                      | Aspect 5                    | .6004 | 8.66      |

The above table shows the coefficient of correlation between Teaching Aptitude and major aspects of Teaching Competency of Female trainees. All the 'r' values are found to be significant at 0.01 level. i.e. Major aspects of teaching competency are closely associated with Teaching Aptitude of Female Trainees. This is a clear indication that those who are having positive aptitude in teaching may influence all the aspects of competency with regard to female trainees. When one variable increases the other also increases considerably.

TABLE 69

Relationship between Interest in Teaching and aspects of Teaching Competency for Male trainees  
(N = 37)

| Independent Variable | Dependent Variable          | 'r'    | 't' value |
|----------------------|-----------------------------|--------|-----------|
|                      | General Teaching Competency |        |           |
| Interest in Teaching | Aspect 1                    | .0701  | 0.418     |
|                      | Aspect 2                    | -.1219 | 0.73      |
|                      | Aspect 3                    | -.2095 | 1.21      |
|                      | Aspect 4                    | -.1729 | 1.17      |
|                      | Aspect 5                    | -.0404 | 0.32      |

The above table shows the 'r' values between the Interest in Teaching and aspects of Teaching Competency of male trainees. All these values are found to be insignificant. This can be interpreted that teaching interest has no association with the 'aspects' of teaching with regard to male trainees. All the aspects of teaching competency are not related with interest in teaching. As far as the male teachers are concerned, teaching competency can be higher even without taking interest in teaching into consideration.

TABLE 70

Relationship between Interest in Teaching and Aspects of Teaching  
Competency for female trainees

(N = 135)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Interest in Teaching | Aspect 1                    | .2304 | 2.74      |
|                      | Aspect 2                    | .2062 | 2.43      |
|                      | Aspect 3                    | .1091 | 1.28      |
|                      | Aspect 4                    | .2084 | 2.45      |
|                      | Aspect 5                    | .2808 | 3.36      |

The obtained coefficient of correlation between interest in Teaching and aspects of Teaching competency are given in the above table. All the values except the third one are significant at 0.01 level. But the third value is not found to be significant. This indicates that interest in teaching is associated only with the four aspects but not with the 'evaluation' aspect. Majority of the aspects in competency are influenced by the variable, Interest in Teaching.

Table 71

Relationship between Intelligence and Major Aspects of General Teaching Competency for Male Trainees

(N = 37)

| Independent Variable | Dependent Variable          | 'r'    | 't' value |
|----------------------|-----------------------------|--------|-----------|
|                      | General Teaching Competency |        |           |
| Intelligence         | Aspect 1                    | .1931  | 1.16      |
|                      | Aspect 2                    | .1409  | 0.98      |
|                      | Aspect 3                    | -.0684 | 0.42      |
|                      | Aspect 4                    | -.0559 | 0.39      |
|                      | Aspect 5                    | -.0342 | 0.28      |

The coefficient of correlation obtained between the intelligence and aspects of General Teaching competency are figured in the above table. All these values are not significant even at 0.05 level. The correlation between the first two aspects and intelligence is found to be positive and higher compared to other three aspects. This is an indication that intelligence is associated with preparation and planning, up to a certain extent.

TABLE 72

Relationship between Intelligence and aspects of Teaching Competency for  
the Female Teacher Trainees

(N = 135)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Intelligence         | Aspect 1                    | .1472 | 1.70      |
|                      | Aspect 2                    | .1422 | 1.69      |
|                      | Aspect 3                    | .1245 | 1.48      |
|                      | Aspect 4                    | .1385 | 1.53      |
|                      | Aspect 5                    | .1490 | 1.73      |

Coefficient of correlation obtained between Intelligence and aspects of Teaching Competency are shown in the above table. All the values are positive but not significant at any level. This can be interpreted that though there is relationship between intelligence and aspects of teaching competency it is rather negligible or not significant.

TABLE 73

Relationship between Socio Economic Status and Aspects of Teaching Competency for Male Trainees

(N = 37)

| Independent Variable  | Dependent Variable          | 'r'    | 't' value |
|-----------------------|-----------------------------|--------|-----------|
|                       | General Teaching Competency |        |           |
| Socio Economic Status | Aspect 1                    | -.1621 | -.96      |
|                       | Aspect 2                    | -.3868 | -3.13     |
|                       | Aspect 3                    | -.2808 | -1.64     |
|                       | Aspect 4                    | -.3867 | -3.13     |
|                       | Aspect 5                    | -.1154 | -.73      |

All the values obtained between SES and major aspects of teaching competency with regard to male trainees are given in the table above. All these values are found to be negative. This is an indication that even if socio economic status comes lower it does not affect the teaching competency. Socio economic status of the male trainees does not have any association with aspects of teaching competency.

TABLE 74

Relationship between Socio Economics Status and aspects of Teaching Competency for female trainees

(N = 135)

| Independent Variable  | Dependent Variable          | r'    | 't' value |
|-----------------------|-----------------------------|-------|-----------|
|                       | General Teaching Competency |       |           |
| Socio Economic Status | Aspect 1                    | .0177 | .21       |
|                       | Aspect 2                    | .1079 | 1.29      |
|                       | Aspect 3                    | .0699 | .61       |
|                       | Aspect 4                    | .0342 | .34       |
|                       | Aspect 5                    | .1933 | 2.24      |

All the values obtained between SES and aspects of teaching competency for female trainees are presented in the above tables. All values except the last one are not significant at any level. This is an indication that socio economic status does not influence the 'aspects' of teaching competency in the case of female trainees.

TABLE 75

Consolidated table showing the relationship between the Independent Variables and Major Aspects of the Dependent Variable for Male-Female Sub-group

| Independent Variables                | Dependent Variable                   | Sub-group | Significant or not |
|--------------------------------------|--------------------------------------|-----------|--------------------|
| Attitude towards Teaching Profession | Major Aspects of Teaching Competency | Male      | Not significant    |
| Attitude towards Teaching Profession | Major Aspects of Teaching Competency | Female    | Significant        |
| Aptitude in Teaching                 | Major Aspects of Teaching Competency | Male      | Significant        |
| Aptitude in Teaching                 | Major Aspects of Teaching Competency | Female    | Significant        |
| Interest in Teaching                 | Major Aspects of Teaching Competency | Male      | Not Significant    |
| Interest in Teaching                 | Major Aspects of Teaching Competency | Female    | Significant        |
| Intelligence                         | Major Aspects of Teaching Competency | Male      | Not Significant    |
| Intelligence                         | Major Aspects of Teaching Competency | Female    | Not Significant    |
| Socio Economic Status                | Major Aspects of Teaching Competency | Male      | Not Significant    |
| Socio-Economic Status                | Major Aspects of Teaching Competency | Female    | Not significant    |

## Conclusion

It is clear that Attitude and Aptitude are associated with the major aspects of General Teaching Competency with regard to sub-sample. All other variables do not show significant relationship though they are positively related.

In the following tables relationship between all the variables and aspects of teaching competency with regard to trainees who come from Urban and Rural areas are described and subsequent interpretation has been made.

TABLE 76

Relationship between Attitude Towards Teaching Profession and Aspects of Teaching Competency for Urban Trainees

(N = 24)

| Independent Variable                 | Dependent Variable          | 'r'    | 't' value |
|--------------------------------------|-----------------------------|--------|-----------|
|                                      | General Teaching Competency |        |           |
| Attitude towards Teaching Profession | Aspect 1                    | .1004  | .47       |
|                                      | Aspect 2                    | .2440  | .93       |
|                                      | Aspect 3                    | .0367  | .17       |
|                                      | Aspect 4                    | -.1622 | .72       |
|                                      | Aspect 5                    | .1194  | .49       |

The table shows the correlation obtained between attitude and aspects of General Teaching Competency for urban trainees. All these values are not significant at any level. Thus it is an indication that attitude towards teaching profession is not associated with the aspects of Teaching Competency with regard to trainees who come from urban area.

TABLE 77

Relationship between Attitude towards Teaching Profession and Aspects of Teaching Competency of Rural Trainees

(N = 135)

| Independent Variable                 | Dependent Variable          | 'r'   | 't' value |
|--------------------------------------|-----------------------------|-------|-----------|
|                                      | General Teaching Competency |       |           |
| Attitude towards Teaching Profession | Aspect 1                    | .1708 | 2.09      |
|                                      | Aspect 2                    | .1662 | 2.03      |
|                                      | Aspect 3                    | .1225 | 1.49      |
|                                      | Aspect 4                    | .1367 | 1.66      |
|                                      | Aspect 5                    | .1778 | 2.19      |

The coefficient of correlation obtained between Attitude towards teaching profession and aspects of teaching competency are given in the

above table. All the values except 3 and 4 are found to be significant at 0.05 level when their 't' values were computed. It can be interpreted that attitude towards teaching profession is associated with the main aspects namely preparation, planning and managerial aspects of teaching competency. All other aspects do have relationship with the attitude but it is not significant.

TABLE 78

Relationship between Teaching Aptitude and Aspects of Teaching Competency of Urban Trainees

(N = 24)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Teaching Aptitude    | Aspect 1                    | .6197 | 3.88      |
|                      | Aspect 2                    | .8769 | 8.93      |
|                      | Aspect 3                    | .6773 | 4.53      |
|                      | Aspect 4                    | .4290 | 2.32      |
|                      | Aspect 5                    | .5563 | 3.27      |

The coefficient of correlation obtained between Teaching Aptitude and aspects of teaching competency is shown in the Table. The values for the five aspects are .6197, .8769, .6773, .4290, and .5563 respectively. This clearly shows that all the values except one are significant at 0.01 level. It can be interpreted that the variable teaching aptitude is highly related with all the aspects of teaching competency. Trainees who are having high aptitude in teaching would have high competency also.

TABLE 79

Relationship between Teaching Aptitude and Aspects of Teaching Competency for Rural Trainees

(N = 135)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Teaching Aptitude    | Aspect 1                    | .5585 | 8.23      |
|                      | Aspect 2                    | .7594 | 14.74     |
|                      | Aspect 3                    | .6233 | 9.67      |
|                      | Aspect 4                    | .5509 | 8.18      |
|                      | Aspect 5                    | .5933 | 8.99      |

The above table shows the 'r' values obtained when Teaching Aptitude and aspects of Teaching Competency are correlated with each other. All these values are found to be significant at 0.01 level. This is again a clear indication that Teaching Aptitude highly influences all the aspects of General Teaching Competency. These two variables are associated with each other in the case of the trainees who come from the rural area.

TABLE 80

Relationship between Interest in Teaching and Aspects of Teaching Competency for Urban Trainees  
(N = 24)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Interest in Teaching | Aspect 1                    | .5783 | 3.36      |
|                      | Aspect 2                    | .2034 | .97       |
|                      | Aspect 3                    | .1593 | .75       |
|                      | Aspect 4                    | .0138 | .06       |
|                      | Aspect 5                    | .4872 | 2.62      |

The obtained 'r' values are shown in the Table above. Here, only the values obtained for first and last variables are significant at 0.01 level. It indicates that interest in Teaching influences for the preparation and managerial aspects of teaching competency. To start a class interest in teaching is required. Managerial aspect is also influenced by the variable i.e. interest in teaching. It can be interpreted that to prepare a class and to manage it well, a genuine interest in teaching is also required. With regard to other aspects, interest in teaching does not have any remarkable influence.

TABLE 81  
Details of relationship obtained between Interest in Teaching and Aspects of Teaching Competency for Rural Students  
(N = 148)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Interest in Teaching | Aspect 1                    | .1086 | 1.32      |
|                      | Aspect 2                    | .1080 | 1.31      |
|                      | Aspect 3                    | .0226 | .27       |
|                      | Aspect 4                    | .1541 | 1.87      |
|                      | Aspect 5                    | .1508 | 1.91      |

Coefficient of correlation obtained between interest in Teaching and Aspects of Teaching Competency of rural trainees is shown in the table above. The values of each aspect is .1086, 0.1080, 0.0226, 0.1541 and 0.1508 respectively. All these values are found to be not significant. Though all the values show positive relationship with each other, this can not be treated as a significant one. This is to be interpreted that interest in teaching is not associated with teaching competency in a remarkable manner. Of course it has positive relationship with various aspects of teaching competency.

TABLE 82

Relationship between the Intelligence and Aspects of Teaching Competency for Urban Trainees  
(N = 135)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Intelligence         | Aspect 1                    | .0690 | .32       |
|                      | Aspect 2                    | .0876 | .41       |
|                      | Aspect 3                    | .1778 | .84       |
|                      | Aspect 4                    | .0330 | .21       |
|                      | Aspect 5                    | .0366 | .22       |

All the values presented in the table are the coefficient of correlation between intelligence and aspects of Teaching Competency for Urban Trainees. These values are not significant at any level. This shows that intelligence is not associated with any aspect of teaching competency. We need not take into consideration the level of intelligence when teaching competency is considered.

TABLE 83

Details of relationship between Intelligence and Aspects of Teaching Competency of Rural Trainees

(N = 1485)

| Independent Variable | Dependent Variable          | 'r'   | 't' value |
|----------------------|-----------------------------|-------|-----------|
|                      | General Teaching Competency |       |           |
| Intelligence         | Aspect 1                    | .1886 | 2.31      |
|                      | Aspect 2                    | .1628 | 2.0       |
|                      | Aspect 3                    | .1245 | 1.51      |
|                      | Aspect 4                    | .1094 | 1.34      |
|                      | Aspect 5                    | .1642 | 2.02      |

The 'r' values obtained when the intelligence variable and the aspects of Teaching Competency are correlated are shown in the table above. The three values are found to be significant at 0.05 level. All other values are not significant. It is interesting to note that to prepare, plan and manage a class well, the intelligence factor is highly influential. For all other aspects intelligence is required but its influence is not substantial. Intelligence and teaching competency are related to each other, and it is significant with respect to the majority aspects of competency.

TABLE 84  
Relationship between Socio Economics Status and Aspects of Teaching  
Competency for Urban Trainees  
(N = 135)

| Independent Variable  | Dependent Variable          | 'r'   | 't' value |
|-----------------------|-----------------------------|-------|-----------|
|                       | General Teaching Competency |       |           |
| Socio Economic Status | Aspect 1                    | .4526 | 2.38      |
|                       | Aspect 2                    | .5705 | 3.25      |
|                       | Aspect 3                    | .4095 | 2.1       |
|                       | Aspect 4                    | .2984 | 1.45      |
|                       | Aspect 5                    | .5506 | 2.58      |

Coefficient of correlation obtained between SES and major aspects of Teaching Competency for Urban trainees is given in the Table above. Relationship between SES and the three aspects of teaching competency, i.e. planning and managerial aspects are found to be significant beyond 0.01 level, but the first aspect is significant at 0.05 level. This is to be noted that as far as the urban students are concerned their socio economic status influences most of the aspects of teaching competency. In other sub samples and the total sample SES is not seen significant at any level. So relationship with SES and major aspects of teaching competency is established up to a certain extent as far as trainees who come from urban areas are concerned.

.TABLE 85

Relationship between Socio Economics Status and Aspects of Teaching Competency for Rural Trainees  
(N = 146)

| Independent Variable  | Dependent Variable          | 'r'    | 't' value |
|-----------------------|-----------------------------|--------|-----------|
|                       | General Teaching Competency |        |           |
| Socio Economic Status | Aspect 1                    | -.0562 |           |
|                       | Aspect 2                    | -.0605 |           |
|                       | Aspect 3                    | -.0252 |           |
|                       | Aspect 4                    | -.0651 |           |
|                       | Aspect 5                    | -.0909 |           |

From the above table the 'r' values obtained between SES and aspects of Teaching Competency are very clear. All the values are negative and 'not significant' at any level. This shows that socio economic status is not at all associated with Aspects of Teaching Competency with respect to trainees who come from rural area. There exists a negative relationship even. It has to be interpreted even if socio-economic status is low, that does not affect the teaching competency. Moreover the trend indicates that even when the SES decreases there is a possibility to increase the teaching competency.

### **General Conclusion**

It is established that there is significant relationship between all the variables and Teaching Competency for the total sample. When Socio Economic Status scores and Teaching Competency scores were correlated the relationship was positive but negligible. However, when each of the components of Socio Economic Status viz., Parental Education, Parental Occupation and Parental Income were correlated the result was different. Significant relationship was seen with the first two components. So it can be interpreted that the variables selected for the study have influence on Teaching Competency for the total sample.

With regard to the sub samples, viz., Male-Female, Rural-Urban almost all the variables are found significantly related. Most of the variables are associated with Teaching Competency. In the case of groups of Family Teacher Background and Non-teacher Background, all the variables are positively related with Teaching Competency, but significant relationship is established only with Aptitude.

When the major aspects of Teaching Competency and all the variables were correlated it is found that there is significant relationship with preparation, planning and managerial aspects. Socio-Economic Status is not found significantly related with all the aspects. When correlated with the sub-samples also it is established that significant influence exists with all the major aspects. It can be interpreted that all the variables have influence with Teaching Competency, but Intelligence and Socio-Economic Status are not having close association with this variable.

## SECTION C

This section attempts to find out whether there is significant difference between observed mean scores of different categories.

TABLE 86

Difference in the means scores on Attitude towards teaching profession

| Sub-sample | Sample size | Mean    | S.D   | C.R  |
|------------|-------------|---------|-------|------|
| Male       | 37          | 167.38  | 11.29 | 0.66 |
| Female     | 135         | 166.007 | 10.44 |      |

It is seen from the table that the CR value is 0.66 for the difference of means of scores of Attitude towards teaching profession between male and female teacher trainees. This is not significant at 0.05 level of confidence. It is clear that the male and female trainees do not differ significantly from each other in their attitude towards teaching profession.

TABLE 87

Details of Association between sex and Teaching Aptitude

| Sub-sample | No. of cases | Mean   | SD    | CR value |
|------------|--------------|--------|-------|----------|
| Male       | 37           | 189.87 | 13.76 | 1.16     |
| Female     | 135          | 186.78 | 16.40 |          |

It is evident from the table that the 't' value of the difference between the means of teaching aptitude of male and female teacher trainees is 1.16 which is not significant at 0.05 level. It is understood that in the teaching aptitude male and female trainees do not differ significantly.

TABLE 88

Difference in the Mean scores on Interest in Teaching of Male and Female Trainees

| Sub-sample | Sample size | Mean   | SD    | CR  |
|------------|-------------|--------|-------|-----|
| Male       | 37          | 10.108 | 4.019 | .58 |
| Female     | 135         | 10.526 | 3.225 |     |

It is noticed from the table that the CR is less than 1.96 ('t' value for 0.05 level of significance) mean difference of male and female trainees is found to be not significant at 0.05 level (that is  $P > .05$ ). This indicates that male and female trainees do not differ significantly from each other in their interest in teaching. However, it is seen that the mean value of male trainees is slightly lower than females, which indicates that females tend to have better interest than the males.

TABLE 89

Difference in the Mean Scores on General Intelligence of Male and Female Teacher trainees.

| Value  | No. | Mean   | SD    | CR   |
|--------|-----|--------|-------|------|
| Male   | 37  | 45.351 | 9.821 | 1.39 |
| Female | 135 | 42.874 | 8.922 |      |

The table indicates that the 't' value obtained for the difference of means of male and female trainees is not significant at 0.05 levels. This may be interpreted that in general intelligence male and female trainees do not differ significantly.. At the same time the fact that the mean of Males is

higher than that of Female is a clear indication that male trainees do have better intelligence.

TABLE 90

Difference in Means of Socio Economic Status Scores of Male and Female Teacher trainees

| Sub Sample | No. of cases | Mean   | SD    | CR   |
|------------|--------------|--------|-------|------|
| Male       | 37           | 10.865 | 5.827 | 1.52 |
| Female     | 135          | 12.519 | 5.99  |      |

It is seen from the table that critical ratio for SES of Male and Female Teacher trainees is only 1.52 which is 'not significant' at 0.05 level. This refers that male and female teacher trainees do not differ significantly in the Socio Economic Status.

TABLE 91

Difference in the mean scores on Attitude towards Teaching Profession for Urban and Rural Trainees

| Sub Sample | No. of cases | Mean    | S.D    | CR   |
|------------|--------------|---------|--------|------|
| Urban      | 24           | 163.125 | 11.222 | 1.51 |
| Rural      | 148          | 166.818 | 10.456 |      |

The 't' value obtained for mean difference on Attitude towards Teaching Profession for Urban and Rural trainees is 1.51 which is not even significant at 0.05 level. So it is interpreted that locality of the trainees does not have much influence on attitude towards teaching profession.

TABLE 92

Difference in the Mean Scores on Teaching Aptitude for Urban and Rural Trainees

| Sub Sample | No. of cases | Mean    | S.D    | CR   |
|------------|--------------|---------|--------|------|
| Urban      | 24           | 184.625 | 14.521 | 1.01 |
| Rural      | 148          | 187.896 | 16.093 |      |

The table reveals that there is no difference in the mean scores between urban and rural trainees in their teaching aptitude. Both these two groups are almost identical in nature.

TABLE 93

Difference in Mean Scores of Urban and Rural Trainees in the Interest in Teaching

| Sub Sample | No. of cases | Mean   | S.D   | CR   |
|------------|--------------|--------|-------|------|
| Urban      | 24           | 9.167  | 3.954 | 1.73 |
| Rural      | 148          | 10.641 | 3.272 |      |

The table shows that the 't' value obtained for difference of mean scores in the interest in Teaching of Urban and Rural Trainees is 1.73 which is not significant at 0.05 level. This is an indication that these two sections do not differ considerably in their Interest in Teaching.

TABLE 94

Difference in Mean Scores in the Intelligence of Urban and Rural Teacher Trainees

| Sub Sample | No. of cases | Mean   | S.D   | CR   |
|------------|--------------|--------|-------|------|
| Urban      | 24           | 42.917 | 10.77 | 0.25 |
| Rural      | 148          | 43.486 | 8.9   |      |

The table reveals that the 't' value is not significant even at 0.05 level. This is to be interpreted that Urban and Rural teacher trainees do not differ significantly in their intelligence. But it has to be noted that the mean of the rural trainees is higher than that of urban trainees. This is an indication that rural pupils are somewhat better than urban trainees with regard to their General Intelligence.

TABLE 95

Difference in Mean Scores of Socio Economic Status for Rural and Urban Trainees

| Sub Sample | No. of cases | Mean    | S.D   | CR   |
|------------|--------------|---------|-------|------|
| Urban      | 24           | 112.875 | 5.367 | 0.69 |
| Rural      | 146          | 12.047  | 6.079 |      |

This is to be noticed that since CR 't' value is only 0.69 the rural trainees and urban trainees do not differ significantly in their socio economic status.

TABLE 96

Difference in Mean Scores of General Teaching Competency of Trainees from Family of Teacher Background and Trainees from Non-teacher Background

| Sub Sample             | No. of cases | Mean   | S.D  | CR    |
|------------------------|--------------|--------|------|-------|
| Teacher Background     | 32           | -91.56 | 5.05 | 16.52 |
| Non Teacher Background | 140          | 72.90  | 8.19 |       |

Since the CR is more than 2.58 (t value for 0.01 level of significance) the difference is found to be significant beyond 0.01 level, i.e.  $P < 0.01$ . Trainees who come from teacher background are found to be superior in teaching competency compared to the other group. Thus the hypothesis that 'there is significant difference in teaching competency between the trainees who have teacher background and those who have not is established.

### **General Conclusion**

It is seen from the analysis that Male and Female trainees do not differ significantly from each other in their Attitude, Aptitude, Interest, Intelligence and Socio-Economic Status. It is also clear that the locality of the trainees does not have much influence on the psychological variables, viz., Attitude, Aptitude, Interest and Intelligence and Socio Economic Status. But with regard to the trainees who come from the families of teacher background are found superior in teaching competency compared with other group.

## SECTION D

This section is intended to find out whether there exists satisfactory correlation between the different sub-strata, viz., Urban-Rural, Male-Female; Trainees with Teacher Family Background and those who are not.

TABLE 97

Comparison of 'r's between Attitude towards Teaching Profession and General Teaching Competency for Male and Female Trainees

| Sl. No. | Index | Male   | Female | CR    |
|---------|-------|--------|--------|-------|
| 1       | r     | 0.0283 | 0.2354 | 1.014 |
| 2       | z     | 0.283  | 0.239  |       |

Since the critical ratio is found to be less than 1.96, the difference is not significant at 0.05 level. That is, this does not indicate any significant difference in correlation between these two groups.

TABLE 98

Comparison of 'r's between Teaching Aptitude and General Teaching Competency for Male and Female Trainees

| Sl. No. | Index | Male   | Female | CR    |
|---------|-------|--------|--------|-------|
| 1       | r     | 0.8786 | 0.7963 | 1.523 |
| 2       | z     | 1.376  | 1.085  |       |

From the above table C.R is found to be 1.523 which is less than 1.96 to be significant at 0.05 level. There the difference in correlation between Male and Female is not significant and it is only by chance.

TABLE 99

Comparison of 'r's between Interest in Teaching and General Teaching Competency for Male and Female Trainees

| Sl. No. | Index | Male  | Female | CR    |
|---------|-------|-------|--------|-------|
| 1       | r     | .1416 | .2361  | 0.513 |
| 2       | z     | .141  | .239   |       |

Here, the CR is found to be 0.513 which is less than the limit of 0.05 level of significance. So it is to be interpreted that the difference shown in the correlation between these two groups is not significant.

TABLE 100

Comparison of 'r's between Intelligence and Teaching Competency for Male and Female Trainees

| Sl. No. | Index | Male  | Female | CR    |
|---------|-------|-------|--------|-------|
| 1       | r     | .1333 | .1602  | 0.146 |
| 2       | z     | .133  | .161   |       |

From the above table the Critical Ratio is seen as 0.146 which is far below from the 0.05 level of confidence. It is clear that there is no significant difference in correlation between these two groups.

TABLE 101

Comparison of 'r's between Socio Economic Status and General Teaching Competency for Male and Female Trainees

| Sl. No. | Index | Male  | Female | CR    |
|---------|-------|-------|--------|-------|
| 1       | r     | .3891 | .1092  | 1.465 |
| 2       | z     | .40   | .1092  |       |

It is seen from the table that the Critical Ratio is 1.465. This is less than the value of 1.96 to be considered as significant at 0.05 level. So the difference shown in the correlation is not significant. These two groups do not differ significantly.

TABLE 102

Comparison of 'r's between Attitude towards Teaching Profession and General Teaching Competency for Urban and Rural Trainees

| Sl. No. | Index | Urban | Rural | CR    |
|---------|-------|-------|-------|-------|
| 1       | r     | .1886 | .1822 | 0.026 |
| 2       | z     | .186  | .182  |       |

The critical ratio is seen as 0.026 which is far below the level of significance at 0.05 level. So it is to be interpreted that these two groups that is urban and rural do not differ significantly.

TABLE 103

Comparison of 'r's between Teaching Aptitude and General Teaching Competency for Urban and Rural Trainees

| Sl. No. | Index | Urban | Rural | CR   |
|---------|-------|-------|-------|------|
| 1       | r     | .8765 | .7983 | 1.14 |
| 2       | z     | 1.354 | 1.085 |      |

Since the CR is only 1.14 which is not significant at 0.05 level, this can be interpreted that these groups do not differ significantly.

TABLE 104

Comparison of 'r's between Interest in Teaching Profession and General Teaching Competency for Urban and Rural Trainees

| Sl. No. | Index | Urban | Rural | CR   |
|---------|-------|-------|-------|------|
| 1       | r     | .3209 | .1139 | 0.92 |
| 2       | z     | .332  | .116  |      |

The CR obtained here is 0.92 as shown in the above table. This value is less than 1.96 which is significant at 0.05 level. This does not indicate any significant difference in correlation between these two groups.

TABLE 105

Comparison of 'r's between Intelligence and Teaching Competency for Urban and Rural Trainees

| Sl. No. | Index | Urban | Rural | CR   |
|---------|-------|-------|-------|------|
| 1       | r     | .0284 | .183  | 0.66 |
| 2       | z     | 0.28  | .183  |      |

Since the CR is found to be 0.66, the difference is not significant at 0.05 level. So, this difference is merely by chance and does not indicate any significant influence.

TABLE 106

Comparison of 'r's between Socio Economic Status and Teaching Competency for Urban and Rural Trainees

| Sl. No. | Index | Urban | Rural | CR   |
|---------|-------|-------|-------|------|
| 1       | r     | .6001 | .693  | 2.74 |
| 2       | z     | .0483 | .048  |      |

Here, the CR is found to be 2.74 which is significant at 0.01 level. So, this is to be interpreted that this difference is a significant one. This indicates a significant difference in correlation in two groups.

TABLE 107

Comparison of 'r's between Attitude towards Teaching Profession and General Teaching Competency for Trainees with Teacher Background and Non-teacher Background

| Sl. No. | Index | Family Teacher Background | No Family Background | CR  |
|---------|-------|---------------------------|----------------------|-----|
| 1       | r     | .3201                     | .245                 | .04 |
| 2       | z     | .332                      | .255                 |     |

Since the CR is found to be .04 which is below the level of significance at 0.05 level, it is to be interpreted that these two groups do not have any significant difference.

TABLE 108

Comparison of 'r's between Teaching Aptitude and General Teaching Competency for trainees with teacher background and non-teacher background

| Sl. No. | Index | Family Teacher Background | Others | CR   |
|---------|-------|---------------------------|--------|------|
| 1       | r     | .818                      | .728   | 1.21 |
| 2       | z     | 1.412                     | .918   |      |

The critical ratio is seen as 1.21 which is not significant at 0.05 level. This means that the trainees who have family teaching background and who have no such background do not differ significantly in Teaching Aptitude and General Teaching Competency.

TABLE 109

Comparison of 'r's between Interest and General Teaching Competency for the Trainees with Teacher Background and Non-teacher Background

| Sl. No. | Index | Family Teacher Background | Others | CR   |
|---------|-------|---------------------------|--------|------|
| 1       | r     | .1225                     | .137   | 0.43 |
| 2       | z     | .122                      | 139    |      |

When these two groups were compared the CR is found to be 0.43 which is not significant at 0.05 level of confidence. This indicates that those two groups do not differ significantly with regard to their interest and teaching competency.

TABLE 110

Comparison of 'r's between Intelligence and General Teaching Competency for Trainees with teacher background and non-teacher background

| Sl. No. | Index | Family Teacher Background | Non teacher Background | CR   |
|---------|-------|---------------------------|------------------------|------|
| 1       | R     | .262                      | .158                   | 0.57 |
| 2       | Z     | .266                      | .161                   |      |

It is seen from the table that Critical Ratio between these two groups is only 0.57. This is not significant at 0.05 level. So it is clear that these two groups have no significant difference in Interest and Teaching Competency.

TABLE 111

Comparison of 'r's between Socio Economic Status and General Teaching Competency for Trainees with teacher background and non-teacher background

| Sl. No. | Index | Family Teacher Background | Non teacher Background | CR   |
|---------|-------|---------------------------|------------------------|------|
| 1       | R     | .1077                     | .107                   | 0.14 |
| 2       | Z     | .134                      | .134                   |      |

Since the CR is found to be 0.14 it can be interpreted that these two groups do not have any significant difference.

### General Conclusion

When the 'r's were compared between the variables for Male and Female sub-group the Critical Ratios are found to be below 0.05 level of significance. Thus it is clear that these two groups do not differ significantly. With regard to other sub-group i.e. Urban-Rural all the values (CR) are below

0.05 level of significance. Here also it can be interpreted that these two groups (Urban-Rural) do not differ significantly.

When the 'r's are compared between all the variables with Teacher Background and Non-teacher Background the Critical Ratios are below 0.05 level of significance. This also indicates that the difference is only by chance.

## SECTION E

### THE $\chi^2$ (CHI-SQUARE) TEST

This section deals with the Chi-square test. The chi-square test represents a useful method of comparing experimentally obtained results with those expected theoretically on some hypotheses. The number of scores obtained for each category were classified into three groups Viz., High, Average and Low. In these cases expected values are 1/3 of the total number. In order to ascertain whether the obtained data and expected data is significant, chi-square value has been found out. Details are given below.

TABLE 112

## Attitude and General Teaching Competency

| Groups                 | No. | High Competency | Average Competency | Low Competency |
|------------------------|-----|-----------------|--------------------|----------------|
| High Attitude Group    | 119 | 39<br>(32.77%)  | 66<br>(55.46%)     | 14<br>(11.76%) |
| Average Attitude Group | 53  | 6<br>(11.32%)   | 41<br>(77.35%)     | 6<br>(11.32%)  |
| Low Attitude Group     | Nil | 0               | 0                  | 0              |

In the above table 119 trainees belong to High Attitude Group and 53 to Average Attitude Group. No trainee is found among the low attitude group. Out of 119 trainees only 39 (32.77%) comes under high competency group, where as 66 and 14 belong to average and low competency groups respectively.

TABLE 113

## Teaching Aptitude and General Teaching Competency

|                           | No. | High<br>Competency | Average<br>Competency | Low<br>Competency |
|---------------------------|-----|--------------------|-----------------------|-------------------|
| High Aptitude<br>Group    | 100 | 44<br>(44%)        | 56<br>(56%)           | Nil               |
| Average Aptitude<br>Group | 72  | 0                  | 56<br>(77.75%)        | 16<br>(22.22%)    |
| Low Aptitude Group        | Nil | 0                  | 0                     | 0                 |

N = 172

It is seen from the above table that out of 100 high aptitude group 44 and 56 belong to High Competency and Average Competency groups respectively. 72 cases come under the Average Aptitude group. 56 in this group belong to Average Competency group and 16 belong to Low Competency group.

TABLE 114

## Interest in Teaching and Teaching Competency

| Groups                 | No. | High Competency | Average Competency | Low Competency |
|------------------------|-----|-----------------|--------------------|----------------|
| High Interest Group    | 21  | 10<br>(47.6%)   | 11<br>(52.38%)     | 0              |
| Average Interest Group | 122 | 31<br>(25.4%)   | 78<br>(63.9%)      | 13<br>(10.65%) |
| Low Interest Group     | 29  | 3<br>(10.34%)   | 25<br>(86.2%)      | 1<br>(3.34%)   |

N = 172

The above table shows the percentage of High, Average and Low Competency of the High, Average and Low groups of Teaching Interest. Out of 21 High Interest group the competency is divided between High and Average groups as 47.6% and 52.38% respectively. 122 cases fall in the Average Interest group and competency of that group is 31, 78 and 13 for high, average and low competency respectively. In the low interest group, 3 cases fall in the category of High competency, 25 cases in the Average category and 1 in the low category of competency.

TABLE 115

## Intelligence and General Teaching Competency

| Groups                     | No. | High Competency | Average Competency | Low Competency |
|----------------------------|-----|-----------------|--------------------|----------------|
| High Intelligence Group    | 93  | 26<br>(27.96%)  | 59<br>(63.44%)     | 8<br>(8.6%)    |
| Average Intelligence Group | 67  | 17<br>(24.37%)  | 44<br>(65.67%)     | 6<br>(8.98)    |
| Low Intelligence Group     | 12  | 0               | 12<br>(100%)       | 0              |

N = 172

The table shows that 93 cases fall under the category of High Intelligence group. But 26 cases come under the category of high competency, 59 cases under Average Competency, and 8 cases (86 per cent) fall in the group of low competency. With regard to Average Intelligence group 17, 44 and 6 cases fall under the categories of High, Average and Low competency groups respectively. In the low group, all cases come under Average Competency Group.

TABLE 116

## Socio Economic Status and Teaching Competency

|                               | No. | High | Average | Low |
|-------------------------------|-----|------|---------|-----|
| High Socio Economic Status    | 8   | 2    | 5       | 1   |
| Average Socio Economic Status | 27  | 7    | 18      | 2   |
| Low Socio Economic Status     | 137 | 37   | 90      | 10  |

N = 172

With regard to Socio Economic Status group 8 cases come under High Socio Economic Status, 27 comes under Average Socio Economic Status and 137 comes under low Socio Economic Status group. Out of 8 cases 2 belong to High Competency group whereas 5 cases belong to Average Competency group and only one case falls in the category of Low Competency. In the Average group High, Average and Low competency are 7, 18 and 2 respectively. In the low group 37 cases come under High competency group, 90 cases come under Average group and 10 cases come under low competency group.

In the following pages an attempt is made to find out whether any significant trend is indicated between the observed frequency ( $F_o$ ) and

expected frequency (Fe) with regard to the classification as High, Average and Low groups.

TABLE 117

## High Attitude and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 39   | 66      | 14  |
| Fe        | 40   | 40      | 39  |

$$\chi^2 = \frac{(F_o - F_e)^2}{F_e}$$

$$CR = 32.54$$

The chi-square value for 0.01 level is 9.92. Since  $\chi^2$  value obtained is 32.54 a significant is indicated beyond 0.01 level of significance.

TABLE 118

## Average Attitude and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 6    | 41      | 6   |
| Fe        | 18   | 18      | 17  |

$$CR = 44.51$$

CR is higher than the value for 0.01 level of significance. This is also an indication of significant trend between these two groups

TABLE 119

## High Teaching Aptitude and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 44   | 56      | 0   |
| Fe        | 33   | 34      | 22  |

N = 100

$\chi^2$  value is 43.04. From table Chi-square value required for 0.01 level of significance is 9.92. Here the value is 43.04. It can be safely concluded that the obtained frequency is not merely by chance.

TABLE 120

## Average Teaching Aptitude and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 0    | 56      | 16  |
| Fe        | 24   | 24      | 24  |

N = 72

$\chi^2$  value is 69.32. This exceeds the value required for 0.01 level of significance. It is evident that the obtained frequency is significant at 0.01 level

TABLE 121

## Interest in Teaching and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 10   | 11      | 0   |
| Fe        | 7    | 7       | 7   |

$\chi^2$  value is 10.56. This is significant at 0.01 level.

TABLE 122

## Interest in Teaching and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| FO        | 31   | 78      | 13  |
| Fe        | 41   | 41      | 40  |

$\chi^2$  value obtained here is 54.04. This exceeds the value required for 0.01 level of significance. The obtained frequency is significant and not merely by chance.

TABLE 123

## Interest in Teaching and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 3    | 25      | 1   |
| Fe        | 10   | 10      | 9   |

$\chi^2$  value obtained here is 34.5 which exceeds the value required for 0.01 level of significance. The obtained frequency is significant at 0.01 level.

TABLE 124

## Intelligence and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 26   | 59      | 8   |
| Fe        | 31   | 31      | 31  |

$\chi^2$  value is found to be 43.21. This is significant at 0.01 level.

TABLE 125

## Intelligence and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 17   | 44      | 6   |
| Fe        | 23   | 23      | 22  |

$\chi^2$  value 32.36 which is significant at 0.01 level. Therefore significant trend is indicated beyond 0.01 level of significance.

TABLE 126

## Intelligence and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 0    | 12      | 0   |
| Fe        | 4    | 4       | 4   |

$\chi^2$  value is 24. The obtain frequency is significant at 0.01 level.

TABLE 127

Socio Economic Status and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 2    | 5       | 1   |
| Fe        | 3    | 3       | 2   |

$\chi^2$  value is 1.99. This is below the level of significance. Here the obtained frequency is merely by chance.

TABLE 128

Socio Economic Status and General Teaching Competency

| Frequency | High | Average | Low |
|-----------|------|---------|-----|
| Fo        | 7    | 18      | 2   |
| Fe        | 9    | 9       | 9   |

$\chi^2$  value 14.88 which is significant at 0.01 level.

TABLE 129

## Socio Economic Status and General Teaching Competency

| Frequency      | High | Average | Low |
|----------------|------|---------|-----|
| F <sub>o</sub> | 37   | 90      | 10  |
| F <sub>e</sub> | 46   | 46      | 45  |

$\chi^2$  value is 71.93. This value exceeds the value required for 0.01 level of significance. Hence significance is indicated for the obtained frequency.

### Conclusion

Considering the all the tables above, it is seen that the observed frequencies and expected frequencies of each valuable are beyond 0.01 level. This clearly shows that the obtained frequencies of all the variables are not near by chance. In almost all the cases a significant trend is indicated between the observed frequency (F<sub>o</sub>) and expected frequency (F<sub>e</sub>) with regard to the classifications as High, Average and Low groups. But it is to be noted that in the case of Socio-Economic Status Group no significant trend is indicated. It can be concluded that the obtained frequency is mere by chance.

# CONCLUSIONS, SUGGESTIONS AND RECOMMENDATIONS

P. Sreemanunni “Certain psycho-social variables as correlates on teaching competencies of Malayalam teacher trainees of Kerala” Thesis. Department of Adult Education & Extension Services, University of Calicut, 1999

CONCLUSIONS, SUGGESTIONS  
AND RECOMMENDATIONS

## **CONCLUSIONS, SUGGESTIONS AND RECOMMENDATIONS**

### **THE STUDY IN RETROSPECT**

The study as stated earlier was an attempt to find out the nature and extent of relationship of certain psycho-social variables on Teaching Competencies of prospective teachers. The problem was stated as 'Certain Psycho-Social Variables as Correlates on Teaching Competencies of Malayalam Teacher Trainees of Kerala'.

### **OBJECTIVES OF THE STUDY**

- 1) To examine the level of teacher trainees with regard to each of the psycho-social variables viz. (1) Attitude towards teaching profession, (2) Teaching Aptitude (3) Interest in Teaching (4) Intelligence and (5) Socio Economic Status.
- 2) To categorise the Teacher trainees in regard to their general teaching competency.
- 3) To locate the level of Teacher trainees who come from the family of teachers in regard to both of the independent and dependent variables.

- 4) To understand whether the psychological variables viz., Attitude towards teaching profession, teaching aptitude, interest in teaching and intelligence have significant relationship with general teaching competency of the teacher trainees.
- 5) To find out whether the socio economic status of the teacher trainees has significant relationship with teaching competency.
- 6) To estimate whether there is any significant difference in teaching competency between trainees who come from families of teachers and who are not.
- 7) To ascertain the extent of relationship of each of the psycho-social variables listed above with each of the major aspects of teaching competency, viz., Planning, Presentation, Closing, Evaluation and Managerial.
- 8) To compare the relationship of each of the psycho-social variables with teaching competency of
  - i) male and female teacher trainees
  - ii) teacher trainees coming from rural and urban areas
  - iii) teacher trainees who come from the family of teachers and who are not.

- 9) To find out the grouping pattern among teacher trainees when categorised in relation to High, Average and Low Groups with respect to each of the psycho-social variables mentioned above.

### **HYPOTHESES OF THE STUDY**

The hypotheses formulated in the present study are:

- 1) There exists significant positive relationship between each of the psychological variables, viz.,
  - i) Attitude towards Teaching Profession
  - ii) Aptitude for Teaching
  - iii) Interest in Teaching and
  - iv) General Intelligencepossessed by the teacher trainees and their General Teaching Competency.
- 2) There exists significant relationship between socio-economic status of the trainees and their teaching competency.

- 3) There is significant positive relationship between each of the four psychological variables listed above and each of the major aspects of teaching competency, viz. Planning, Presentation, Closing, Evaluation and Managerial.
- 4) There is significant positive relationship between Socio Economic Status and major aspects of teaching competency mentioned above.
- 5) There exists positive relationship between each of the components of socio economic status viz., Parental Education, Parental Occupation and Parental Annual Income and Teaching Competency of Teacher Trainees.
- 6) There is significant difference in teaching competency between group of trainees who have teacher background and those who have not.
- 7) There is significant sex difference in the correlation between each of the psycho-social variables considered and teaching competency.
- 8) There exists significant difference in the correlation between each of the psychosocial variables considered and teaching competency in the case of trainees coming from urban and rural areas.

- 9) There is significant difference in the correlation between each of the psycho social variables of trainees coming from family of teachers and who have no such background with regard to their teaching competency.
- 10) There exists significant difference in the percentages with respect to each of the psycho-social variables and General Teaching Competency when the trainees are classified into three sub groups namely High, Average and Low.

## **METHODOLOGY IN BRIEF**

The present study is intended to find out the nature and extent of relationship of teaching competencies of B.Ed. trainees specialising in teaching of Malayalam with certain psycho-social variable viz., Attitude towards Teaching Profession, Teaching Aptitude, Interest in Teaching, General Intelligence (Psychological variables), and Socio Economic Status (Social variable) were considered as independent variables. General teaching competency is considered as dependent variable.

### **1. Sample**

This study has been conducted on a sample of 172 teacher trainees who have taken Malayalam as optional subject at B.Ed. level from ten

Teacher Education Colleges under the jurisdiction of Kannur and Calicut Universities. The sample was selected giving due representation to rural-urban locale, sex, and type of management of colleges.

## **2. Tools Employed**

- 1) General Teaching Competency Scale developed by Passi (adapted by the researcher).
- 2) Attitude Scale constructed and standardised by the researcher.
- 3) Teaching Aptitude Test Battery (1986) developed by Shamim
- 4) Kakkar's Interest in Teaching Scale (1985)
- 5) Raven's Standard Progressive Matrices
- 6) Socio Economic Status Scale prepared by Kuppusami and modified by the investigator.

## **3. Techniques of data collection**

The data collection was done in two phases. The first phase was during July-August, 1998. During this period the investigator contacted the Principals/ Asst. Directors of the concerned Institutions to collect the general information of the students intended for the study. He

administered all the proposed tests in this period. Help and co-operation of the Teacher Educators were sought and the time table for each test was prepared accordingly.

The second phase of the data collection was done during the months of September, October and November 1998. The trainees were sent to teaching practice to several High schools. The investigator observed the classes of the trainees individually. In the actual class room he observed the performance of each trainee,. By sitting at the back of the class room. At the end of the class the investigator gave his rating on the general teaching competency scale against all the 21 items. Thus he obtained the scores of trainees included in the study. All the data were consolidated and put to analysis using various statistical techniques.

#### **4. Statistical Technique adopted**

The collected data were analysed by the following statistical techniques.

- i) Preliminary analysis of test scores such as arithmetic mean, median, mode, standard deviation, skewness and kurtosis.
- ii) Correlation Analysis using Pearsons' Product Moment Coefficient of Correlation ( $r$ )

- iii) Comparison of relevant groups using the test of significance for mean difference.
- iv) Test of significance for difference between 'r's
- v) Chi-square Test.

### MAJOR FINDINGS OF THE INVESTIGATION

172 B.Ed. trainees with Malayalam Optional subject were included in the study. Their Attitude towards Teaching Profession, Aptitude in Teaching, Teaching Interest, General Intelligence and Socio-Economic Status were measured. Large percentage of the trainees are found to have favourable attitude towards their profession. No trainee was seen selected for B.Ed. course, who had extremely unfavourable attitude. All the trainees are having high aptitude in teaching. Majority of the trainees selected for B.Ed. course are found to be interested in teaching, but a few are not having proper interest in the profession. With regard to general intelligence, most of the trainees belong to average group while about 9 per cent of the total sample is seen highly intelligent. When the Socio-Economic Status was put to further analysis it was noted that most of the trainees come under the lower group and only a few percentage lies in the upper strata.

Relationship of all the psycho social variables with teaching competency was found out for the whole sample. The obtained 'r' and their corresponding 't' values are presented below.

| Sl. No. | Independent Variable                 | Dependent variable          | 'r'    | 't' value |
|---------|--------------------------------------|-----------------------------|--------|-----------|
| 1       | Attitude towards Teaching Profession | General Teaching Competency | 0.196  | 2.612     |
| 2       | Teaching Aptitude                    | -do-                        | 0.8182 | 17.86     |
| 3       | Interest in Teaching                 | -do-                        | 0.1535 | 17.86     |
| 4       | General Intelligence                 | -do-                        | 0.161  | 2.05      |
| 5       | Socio Economic Status                | -do-                        | 0.0198 | 0.258     |

All the above values except the last one were found to be significant beyond 0.05 level. It is evident that all the psychological variables are having close association with General Teaching Competency of the teacher trainees. But the relationship between socio economic status and teaching competency is not at all significant. All psychological variables are positively related with teaching competency. It has been established that the socio-economic status of the teacher trainees has nothing to do with their teaching competency. It is clear that all the above variables, viz., attitude, aptitude, interest, and general intelligence of the

candidates should be taken into account in the selection and preparation of prospective teachers .

The components of socio-economic status, i.e. parental education, parental occupation and parental annual income were again put to analysis to find out whether there is any relationship between these components and teaching efficiency. The findings are given below in a tabular form.

| Sl. No. | Independent Variable | Dependent Variable          | 'r'   | 't' value |
|---------|----------------------|-----------------------------|-------|-----------|
| 1       | Parental Education   | General Teaching Competency | 0.659 | 11.46     |
| 2       | Parental Occupation  | General Teaching Competency | 0.303 | 4.15      |
| 3       | Parental Income      | General Teaching Competency | 0.028 | 0.37      |

The first two values are highly significant while the third 'r' value is not at all significant at any level. This is a clear indication that both the parental education and parental occupation can influence the teaching competency to a great extent.

Relationship between all the independent variables and teaching competency were found out for the sub samples of male and female, urban and rural, and those who are having family teacher background and others and arrived at the following conclusions.

**Conclusion 1**

| Sl. No. | Sub-sample | Variable              | Significant or not |
|---------|------------|-----------------------|--------------------|
| 1       | Male       | Attitude              | Significant        |
| 2       | Female     | Attitude              | Significant        |
| 3       | Male       | Aptitude              | Significant        |
| 4       | Female     | Aptitude              | Significant        |
| 5       | Male       | Interest              | Not significant    |
| 6       | Female     | Interest              | Significant        |
| 7       | Male       | Intelligence          | Not significant    |
| 8       | Female     | Intelligence          | Not significant    |
| 9       | Male       | Socio-Economic Status | Significant        |
| 10      | Female     | Socio-Economic Status | Significant        |

From the above, high relationship is seen between Attitude, Aptitude, and SES with Teacher Competency with regard to both male and female sub samples. With regard to Intelligence no significant relationship is noticed. It is an indication that intelligence and teaching competency are not associated with each other, for both males and females.

**Conclusion 2**

| Sl. No. | Sub-sample | Variable              | Significant or not |
|---------|------------|-----------------------|--------------------|
| 1       | Urban      | Attitude              | Not Significant    |
| 2       | Rural      | Attitude              | Significant        |
| 3       | Urban      | Aptitude              | Significant        |
| 4       | Rural      | Aptitude              | Significant        |
| 5       | Urban      | Interest              | Not significant    |
| 6       | Rural      | Interest              | Not Significant    |
| 7       | Urban      | Intelligence          | Not significant    |
| 8       | Rural      | Intelligence          | Significant        |
| 9       | Urban      | Socio-Economic Status | Significant        |
| 10      | Rural      | Socio-Economic Status | Not significant    |

Positive and significant relationship is found between Aptitude and SES with Teaching Competency for the Urban group. But no significant relationship is noticed for other variables. With regard to the trainees coming from rural areas, attitude, aptitude and intelligence influence their teaching competency.

**Conclusion 3**

| Sl. No. | Sub-sample                     | Variable              | Significant or not |
|---------|--------------------------------|-----------------------|--------------------|
| 1       | Trainees of Teacher background | Attitude              | Not significant    |
| 2       | Non-teacher background         | Attitude              | Significant        |
| 3       | Trainees of Teacher background | Aptitude              | Significant        |
| 4       | Non-teacher background         | Aptitude              | Significant        |
| 5       | Trainees of Teacher background | Interest              | Not significant    |
| 6       | Non-teacher background         | Interest              | Significant        |
| 7       | Trainees of teacher background | Intelligence          | Not significant    |
| 8       | Non-teacher background         | Intelligence          | Not significant    |
| 9       | Trainees of teacher background | Socio-Economic Status | Not significant    |
| 10      | Non-teacher background         | Socio-Economic Status | Not significant    |

Significant relationship could be observed only between Teaching aptitude and teaching competency for the trainees who come from teacher family. All other variables do have positive relationship but that is negligible. Relationship between the variables and major aspects of teaching competency were measured. Preparation, Planning and Managerial aspects of teaching competency have been much influenced by all the variables. It is thus clear that Attitude, aptitude and interest influence the teaching competency especially in the preparation and planning stages.

#### **Conclusion 4**

No significant difference is observed in the mean scores of all the variables with the sub samples male-female and rural urban. But in the case of trainees who come from the family of teachers the result is worth mentioning. The mean scores in teaching competency between the trainees who have family teacher background and the rest was compared and the CR is found to be 16.52. This is very high and significant beyond 0.01 level. This is a clear indication that trainees having teacher background are far superior to others in teaching competency.

**Conclusion 5**

When the  $r$ 's were compared between all the variables and General Teaching Competency for the sub-samples male female, urban-rural and teacher family background-non-teacher background, all the values are found to be below the 't' value for 0.01 level of significance. This can be interpreted that there is no significant difference between these groups with regard to teaching competency.

**Conclusion 6**

The scores obtained between each of the independent variable and General Teaching Competency were classified into three groups viz. High, Average and Low. In order to ascertain whether the difference between obtained data and expected data is significant, chi-square value has been found out. In all the cases except socio-economic status the obtained values were significant at 0.01 level. It is an indication that obtained frequency of scores was not merely by chance.

**TENABILITY OF THE HYPOTHESES**

The first hypothesis formulated for the study is "There exists significant positive relationship between each of the psychological

variables, viz. (i) Attitude towards teaching profession, (ii) Teaching Aptitude, (iii) Interest in teaching and (iv) General Intelligence possessed by the teacher trainees and their General Teaching Competency. This hypothesis is fully substantiated since the correlation coefficients for all the variables were found to be significant. All the  $r$ 's are significant at 0.01 level.

The second hypothesis states that :“There exists significant relationship between socio-economic status of the trainees and their teaching competency.” This hypothesis is totally rejected. No significant relationship is seen between these two variables.

The third hypothesis is partially substantiated. Positive significant relationship is seen between all the psychological variables and some major aspects of teaching competency. No significant relationship is found in the case of aspects of teaching such as closing and evaluation. With regard to socio economic status and teaching competency the relationship is negative. This indicates that there is no association with socio-economic status of the trainees and their teaching competency. Hence the fourth hypothesis is also not accepted.

The fifth hypothesis states that "There exists positive relationship between each of the components of socio-economic status viz., Parental Education, Parental Occupation and Parental Income and Teaching Competency of Teacher Trainees." Here also significant relationship is established between the first two components with teaching competency. But no positive significant relationship is found between parental income and Teaching Competency. Hence this hypothesis is partially established.

The sixth hypothesis is well established. High difference is seen in teaching competency of trainees between those who have teacher background and those who have no such background. Trainees whose parents, either one or both are service teachers, have high competency compared to others.

No sex difference and locale difference is found in the correlation between each of the psycho social variables considered and Teaching Competency. Likewise, no significant difference is seen between those variables and Teaching. Competency of trainees who have teacher background and who have not. Hence the hypotheses formulated number seven eight and nine are not accepted in this study.

The last hypothesis is partially substantiated. In all the cases the observed data is significant except in the case of socio-economic status. It indicates that most of the obtained frequencies are not merely by chance.

### EDUCATIONAL IMPLICATIONS

From this study it is possible to conclude that teaching competency is highly influenced by attitude towards teaching profession, teaching aptitude, interest in teaching and general intelligence. These factors are also to be taken into account before admitting the students for B.Ed. course. As such, an Entrance Test to measure the candidate's attitude, aptitude, interest and intelligence is highly required. It is to be ascertained that no candidate who is not having favourable attitude and genuine interest in the profession enters in this noble profession. i.e. teaching. At present anybody who acquires high marks in the qualifying examination is admitted to the course. This practice should go.

It is also seen from the study that trainees who come from family of teachers perform well in their profession. Hence it is suggested that a certain percentage of seats in each Teacher Education Institution may be

allocated to the dependents of teachers. If it is not possible at least a weightage of marks should be given to such candidates in their admission to the course.

### **SUGGESTIONS FOR FURTHER RESEARCH**

The present study opens up certain areas for further research.

- 1) The study can be replicated in other optional subjects also.
- 2) A more elaborate study can be conducted selecting a few more independent variables which consider relevant in teaching efficiency.
- 3) The study can be conducted on other categories of teacher trainees in preprimary and primary levels.

# REFERENCES

## REFERENCES

### BOOKS

- Tarachand (1994). *Principles of Teaching* New Delhi: Anmol Publications Pvt. Ltd.
- Aggarwal, J.C. (1995). *Teacher and Education in a Developing Society*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Anastasy, A. (1982). *Psychological Testing*. V ed. New York: Macmillan.
- Arun, K. Gupta. (1984). *Teacher Education - Current and Prospects*. New Delhi: Sterling Publishers Pvt. Ltd.
- Barbara and Terry Field. (1985). *Teachers as Mentors – A Practice Guide*. London: The Falmer Press.
- Best, John W. & Kahn, James, V. (1996) *Research in Education*. New Delhi: Prentice Hall of India.
- Bhaskara Rao, Digumarti. (1996). *Current Trends in Indian Education*. New Delhi: Discovery Publishing House.
- Bourai, H.H.A. (1991). *Dynamic Teaching*. Delhi: B.R. Publishing Corporation.
- Brijendra, M. Mathur & Beena Thadani (1988). *A Handbook of Prospective Teachers*. New Delhi: Atlantic Publishers & Distributors.
- Brubacher S. John (1980). *History of the Problems of Education*. New York: Mc Graw Hill Book Company.

- Buch, M.B. (Ed.). (1987). *Teacher Development*. New York: The Falmer Press.
- Buch, M.B. (Ed.). (1991). *Fourth Survey of Research in Education (1983-88)*. Vol. II. New Delhi: NCERT.
- Buch, M.B. (Ed.). (1983). *Third Survey of Research in Education (1978-83)*. Vol. II, New Delhi: NCERT.
- Buch, M.B. (Ed.). (1998). *Fifth Survey of Research in Education*. Vol. I. New Delhi: NCERT.
- Chadda, R. (1992). *Dimensions of Teacher Education*. New Delhi: Anmol Publications.
- Chauhan, C.P.S. (1990). *Higher Education in India*. New Delhi: Ashish Publishing House.
- Chaurassia (1977). *Challenges and Innovations*. New Delhi: Sterling Publishing Co.
- Craft, Anna. (1996). *Continuing Professional Development*. London: Routledge.
- Dutt, Suresh. (1997). *Society and Education*. New Delhi: Anmol Publications Pvt. Ltd.
- Edwards, L. Allen (1969). *Techniques of Attitude Scale Construction*. Bombay: Vakkils, Feffer and Simons Private Ltd.
- Ferguson A. George and Yoshio Thakane. (1969). *Statistical Analysis in Psychology and Education*. New Delhi: McGraw Hill Book Company.

- Foster Watson (Ed.) (1993). *The Encyclopaedia and Dictionary of Education*. Vol. I. New Delhi: Akash deep Publishing House.
- Garret, E. Henry (1981). *Statistics in Psychology and Education*. Bombay: Vakkils, Peffer and Simons Pvt. Ltd.
- Good, C.V. (Ed.). (1977). *Dictionary of Education*. New York: Mc Graw Hill Book Company.
- Grover, R.P. (1996). *Education for all*. India: Associated Publishers.
- Guilford, J.P. (1978). *Fundamental Statistics in Psychology*. Mc Graw Hill, Inc.
- Jangira and Anupam Ahuja (1992). *Effective Teacher Training*. New Delhi: National Publishing House.
- Jangira, N.K. (1978). *Teacher Training and Effectiveness*. New Delhi: National Publishing House.
- Jangira, N.K. and Pinki Jangira. (1995). *Effective Teaching*. New Delhi: National Publishing House.
- Joseph, C. Mukalal. (1998). *Creative Approach to Classroom Teaching*. New Delhi: Discovery Publishing House.
- Kothari, D.S. (1971). *Education and National Development*. Report of the Education Commission (1964-68). NCERT.
- Mascarenhas and K.L. Joshi (1997). *Relevant Issues in Education*. India: The Associated Publishers.
- Mc Clelland, Alan. & Ved P.Verma. (Ed.). (1989). *Education Advances in Teacher*. London: Fetter Lane.

- Minton , David. (1991). *Teaching Skills in Further and Adult Education*.
- Mishra, R.S. (1989). *Problems of School Teachers*. New Delhi: Commonwealth Publishers.
- Mohit Chakrabarty (1998). *Teacher Education – Modern Trends*. New Delhi: Kanishka Publishers & Distributors.
- Mujibul Hassan, Siddiquei. (1993). *Excellence of Teaching: A Model Approach*. New Delhi: Ashish Publishing House.
- Murthy, S.K. (1989). *Contemporary Problems and Current Trends in Education*. Ludhiana: Parkash Brothers.
- Naik, J.P. (1997). *The Education Commission and After*. New Delhi: APH Publishing Corporation.
- Palwal, M.R. (1985). *Teacher Education on the Move*. New Delhi: Uppal Publishing House.
- Pandey, Damayanti. (1997). *Relationship between Teaching Competency and Students' Achievement*. New Delhi: Classical Publishing Company.
- Passi, B.K. (1976). *Becoming Better Teacher – Micro Teaching Approach*. Ahamedabad: Sahitya Mudranalaya.
- Pillai, K. Sivadasan. (1990). *Contemporary Issues in Education*. India: Associated Publishers
- Pillai, N.P. (1970). *Problems in Teacher Education*. V.S. Mathur (Ed.) New Delhi: Arya Book Depot.

- Power, K.B., Panda, S.K. (1992). *Higher Education in India – In Search of Quality*. New Delhi: Association of Indian Universities.
- Ram, Atma and Sharma, K.D. (1989). *National Policy on Education – An Overview*. New Delhi: Vikas Publishing House.
- Reddy, R.S. (1988). *Principles and Practices of Teacher Education*. New Delhi: Rajat Publications.
- Robert R. Reilly and Ernest L. Lewis (1989). *Educational Psychology*. New York: Macmillan Publishing Company.
- Ryburn, V.M. (1981). *The Progressive School*. London: Oxford University Press.
- Sharma, B.M. (1997). *Teachers Training and Educational Research*. New Delhi: Commonwealth Publishers.
- Sharma, S.B. (1990). *Problems of Educational Research*. New Delhi: Anmol Publishers, Pvt. Ltd.
- Singh, A. and Sharma, G.D. (1993). *Higher Education in India – The Institutional Context*. New Delhi: Konark Publishers Pvt. Ltd.
- Singh, A. and Sharma, G.D. (1989). *Higher Education in India; The Institutional Context*. New Delhi: Konark Publishing Pvt. Ltd.
- Singh, L.C. (1992). *Teacher Education in India*. New Delhi: School of Education.
- Singh, R.P. (Ed.) (1993). *Indian Education*. New Delhi: Commonwealth Publishers.

Singh, U.K. and Sundhar Shan (1996). *Teacher Education*. New Delhi: Discovery Publishing House.

Singh, U.K. and Sudarshan, K.N. (1996). *Teachers Education*. New Delhi: Discovery Publishing House.

Vijayakumari Kaushi, and S.R. Sharma (Ed.) (1977). *The Essentials of Teaching and learning*. New Delhi Anmol Publications Pvt. Ltd.

Vijayakumari Kaushik and L.S.R. Sharma (Ed.) (1977). *Education: Theory and Practice*. New Delhi: Anmol Publications Pvt. Ltd.

## **JOURNALS**

Adisheshiah, Malcolm. (1977). Being professional. *University News*. May.

Arora, G.L. and Pranati Panda, Teacher Education at the Crossroads. *University News*. Vol. 36, No.23, June 8, 1998.

*Asian Journal of Psychology and Education*. Vol.28, September 1995.

Dhaneswar, Harichandran. (1987). Teacher education in Maharashtra. *University News*. April.

*Glimpses*. Quarterly News Letter, NDU, NCERT, Vol.16.

Goel, D.R. Chhaya Goel. (1995). Teacher Education and Admission Control. *University News*. Vol. XXXIII. Oct. 9. 1995.

Kapruan, N.S. and D.S. Kapruan. (1989). Issues in Teacher Education in 2000 AD. *Teacher Education*, Vol. XXIOIV, July, 1989.

Lalithkumar. (1998). A study of relationship between attitude towards Mathematics and achievement in Mathematics. *International Educator*. 13: 1 & 2.

Mohan. Radha. (1998). Teaching Effectiveness – A Factorial Approach. Abstract. *Experiments in Education*. Vol. XXVI, June 1998.

NCERT. *Indian Educational Abstracts*, Issue I. July, 1996.

NCTE Document. (1996). Curriculum Framework for Teacher Education. NCERT, 1996.

Pandey, Saroj. (1998). Teachers for 21<sup>st</sup> Century. *University News*. No.6, Feb. 9, 1998.

Reddy, K. Venkata. (1994). The importance of being a teacher. *University News*. November.

Rita, A. and Sudha. (1995). Aptitude in teaching and job satisfaction among teachers. *Journal of Institute of Educational Research*. 16-20.

Sabharwal, Nirmala. (1997). Prediction of Secondary Student Teacher Performance in Practice Teaching. *Experiments in Education*. Vol. XXV. No. 4, April, 1997.

Sharma, A.P. Towards a Meaningful Teacher Education. *University News*. Vol.36, No.133, March 30, 1998.

Singh, L.C. (1987). Teacher Education in India. School of Education. IGNOU

*Teacher Education*. Indian Association of Teacher Education. July-Dec. 1989. Vol. 48-49.

The Influence of Teacher Attitude and Experimentation on Pupils; Achievement. *Experiments in Education*, January 1995.

Venugopal. The Influence of Teacher Attitude and Expectations on Pupil's Achievement. Abstract. *Experiments in Education*, No.1, Vol. XXIII, Jan. 1995.

*Workshop Report on the Role of IASEs and CTEs (1997)*. Restructuring and Revitalising Teacher Education. NCERT, New Delhi.

### **THESES**

Alexander, P.J. (1975). *A study of teacher characteristics as perceived by the B.Ed. trainees*. M.Ed. dissertation. University of Kerala.

Babu, M.A. (1988). *History of teacher education in Kerala State 1956-76*. Doctoral Dissertation. University of Calicut.

Das, Subrahmania .(1991). *Knowledge, Attitude and Perspectives on Population Related Problems Among College Students*. Unpublished Doctoral Thesis.

Ganapathy, S. (1992). *Self concept of student teachers and their attitude towards teaching profession*. M.Phil. Education, Madurai Kamaraj University.

Haridasan, N.K. (1993). *Personality and adjustment as correlates of burnout among secondary school teachers of Kerala*. Doctoral dissertation. Calicut University.

- Hooda, R.C. (1976). *Relationship of attainments in theory subjects in B.Ed. course with attitude as a teacher and teaching efficacy*. Ph.D. In Education, Kurukshetra University.
- Kala, Sashi (1989). *Relationship of selected psychological variables, with attitude towards teaching of traditional and model school teachers*. Ph.D. Education, Punjab University.
- Komala, A.C. (1980). A comparative study of teacher characteristics as perceived by experienced and inexperienced teachers. M.Ed. dissertation. University of Calicut.
- Leelavathy, T.K. (1984). *A comparative study of the teacher education programmes in select developed and developing countries*. Doctoral Dissertation. University of Calicut.
- Malini, P.M. (1995). A study of gender differences in certain psychological variables of the Mathematical domain at secondary school level. Doctoral dissertation. Calicut University.
- Mohanthy, A. (1990). *A Critical Analysis of the reactions of pupil teachers towards teaching profession*. M. Phil. Education. Ravenshow College, Cuttack.
- Nair, P. Viswanathan. (1987). *A comparative study of certain cognitive, affective and social variables which discriminate between high-creative and low creative underachievers in secondary school science*. Doctoral dissertation. Calicut University.

- Nakum, G.G. (1991). A study of the existing value pattern of secondary teacher trainees of Sourashtra. Ph.D. Education, Sourashtra University.
- Nancy, Ida (1994). *The relationship of some selected correlates of achievement motivation with different dimensions of cognitive ability of IX standard students in Chemistry. Doctoral dissertation.* Calicut University.
- Naseema, C. (1993). *Teaching competence of secondary school Physical Science teachers in relation to satisfaction of teaching Physical Science* Doctoral thesis, Department of Education, University of Calicut.
- Pillai, Kamala S. (1981). *Sex differences in certain personality and aptitudinal dimensions related to science achievement.* Doctoral Dissertation. University of Kerala.
- Raj, A.C. (1971). *Teacher characteristics as perceived by pupils and teachers.* M.Ed. dissertation, University of Kerala.
- Rajagopalan, K. (1990). *Job satisfaction and attitudes towards teaching profession as correlates of the organisational climate of teaching training colleges of Kerala.* Published Masters' Dissertation, University of Calicut.
- Ramachandra, G. (1991). An enquiry in to the attitude of student teachers towards teaching. M.Phil. thesis, Department of Education, Madurai Kamaraj University.

Roy, G.K. Samant. (1971). *A study of Teacher Attitude and its Relationship with Teaching Efficacy*. Ph.D. in Education, Sambalpur University

Singh, S.K. (1974). *A Study of Relationship between Verbal Interaction of Teachers in Class rooms and Attitude Towards Teaching*. Ph.D. Education. Meerut University.

# APPENDICES

APPENDIX I  
GENERAL TEACHING-COMPETENCE SCALE

Name of the Student Teacher:

Name of School :

Class:

Name of the Institution :

|        |               |              |
|--------|---------------|--------------|
| Date : | 0. Not at all | 4. Good      |
| Topic: | 1. Very weak  | 5. Very good |
|        | 2. Weak       | 6. Excellent |
|        | 3. Average    |              |

PLANNING (Pre-instructional)

1. Objectives of the lesson were appropriate: clearly stated relevant to the content, adequate and attainable. 0 1 2 3 4 5 6
2. Content selected was appropriate: relevant and adequate with respect to the objectives of the lesson, and accurate. 0 1 2 3 4 5 6
3. Content selected was properly organized: Logical continuity and psychological organization. 0 1 2 3 4 5 6
4. Audio-visual material chosen were appropriate: suited to the pupils and content, adequate and necessary for attaining the objectives. 0 1 2 3 4 5 6

PRESENTATION (Instructional)

5. Lesson was introduced effectively and pupils were made ready emotionally and from knowledge point of view to receive the new lesson: continuity in statements or questions, relevance, use of previous knowledge and use of appropriate device/technique 0 1 2 3 4 5 6
6. Questions were appropriate: well-structured, properly put, adequate in number, and made pupils participate. 0 1 2 3 4 5 6
7. Critical awareness was brought about in pupils with the help of probing questions: prompting, seeking further information, refocusing, re-direction and increasing critical awareness. 0 1 2 3 4 5 6
8. Concepts and principles were explained (understanding brought about) with the help of clear, interrelated and meaningful statements: Statements to create set, to conclude, statements which had relevancy, continuity, appropriate vocabulary, explaining links, fluency and had no vague words and phrases. 0 1 2 3 4 5 6
9. The concepts and principles were illustrated with the help of appropriate examples through appropriate media (verbal and non-verbal): simple, relevant to the content and interest level of pupils. 0 1 2 3 4 5 6
10. Pupils' attention was secured and maintained by varying stimuli like movements, gestures, changing speech pattern, focusing, changing interaction styles, pausing, and oral-visual switching: Pupils' postures, and listening, observing, and responding behaviour of pupils 0 1 2 3 4 5 6

P.T.O.

36

--:2:--

11. Deliberate silence and nonverbal cues were used to increase pupil participation. 0 1 2 3 4 5 6
12. Pupils' participation (responding and initiating) was encouraged using verbal and nonverbal reinforcers. 0 1 2 3 4 5 6
13. Speed of presentation of ideas was appropriate: matched with the rate of pupils' understanding and there was proper budgeting of time. 0 1 2 3 4 5 6
14. Pupils participated in the classroom and responded to the teacher and initiated by giving their own ideas and reacting to others ideas. 0 1 2 3 4 5 6
15. The blackboard work was good: legible, neat; appropriateness of the content written, and adequate. 0 1 2 3 4 5 6

## CLOSING

16. The closure was achieved appropriately: main points of the lesson were consolidated, present knowledge was linked with the past knowledge, opportunities were provided for applying present knowledge, and present knowledge was linked with future learning (assignment). 0 1 2 3 4 5 6
17. The assignment given to the pupils was appropriate: suited to individual differences, relevant to the content taught, and adequate. 0 1 2 3 4 5 6

## EVALUATION

18. Pupils' progress towards the objectives of the lesson was checked and the procedures of evaluation were appropriate: relevant to the objectives, valid, reliable, and objective. 0 1 2 3 4 5 6
19. Pupils' difficulties in understanding a concept or a principle were diagnosed by step-by-step questioning and suitable remedial measures were undertaken. 0 1 2 3 4 5 6

## MANAGERIAL

20. Both attending and non-attending behaviours of the pupils were recognized: attending behaviour was rewarded, directions were given to eliminate nonattending behaviour, questions were asked to check pupils' attending behaviour, pupils' feelings and ideas were accepted, and nonverbal cues were used to recognize pupils' attending and nonattending behaviours. 0 1 2 3 4 5 6
21. Classroom discipline was maintained in the class: pupils followed teacher's instructions that were not related to the content. 0 1 2 3 4 5 6

Comments (if any)

--:0:--

M

APPENDIX II

**ATTITUDE TOWARDS TEACHING PROFESSION**

blinds subject A 10  
 about ten or four years of blinds subject A 20  
 Name of the teacher: 20  
 School: 10  
 Qualifications: 20  
 Length of service: 20  
 Instructions: 20

Some statements are given below. Your responses to the statements may be one of the following.

- Strongly Agree SA
- Agree A
- Undecided U
- Disagree D
- Strongly Disagree SD

Now please put a mark against your response for each of the statements.

1. A true teacher should have mastery over the subject matter. SA A U D SD
2. A teacher should be capable of presenting the subject matter with different and appropriate method. SA A U D SD
3. A teacher need not require any teaching aids. SA A U D SD
4. The teacher should give utmost care in preparing the students to get through the examination. SA A U D SD
5. A teacher should not punish his students without ascertaining the reasons of their mistakes. SA A U D SD
6. A teacher should not tolerate the attitude of his students, asking questions. SA A U D SD
7. Teacher should be self disciplined to maintain absolute discipline in the class. SA A U D SD
8. Drawing out the hidden talents of the students is not the primary concern of the teacher. SA A U D SD
9. A teacher should not involve in any work other than teaching. SA A U D SD
10. Teacher should be dynamic to cope up with the needs and interests of the pupils. SA A U D SD
11. Giving compensatory education to socially deprived students is not the responsibility of the teacher. SA A U D SD
12. Pupil's Participation is inevitable in the teaching learning process. SA A U D SD
13. A teacher should not discriminate his students on the basis of caste, creed, class or colour. SA A U D SD
14. Teacher should not contact the parents occasionally. SA A U D SD
15. No teacher likes his own children to become teachers in future. SA A U D SD
16. A teacher is expected to know the children's experiences and feelings. SA A U D SD
17. The teacher should provide the same learning experiences to all of his students. SA A U D SD
18. Teacher should illumine his subject with collateral information. SA A U D SD
19. All learning materials should be supplied by the authorities. SA A U D SD
20. Teacher should try to arouse curiosity in his students. SA A U D SD

20

|    |  |    |   |   |   |    |
|----|--|----|---|---|---|----|
| 21 | A teacher should give up teaching profession when he gets other attractive posts.              | SA | A | U | D | SD |
| 22 | A teacher should be interested to get teaching aids prepared for using local resources.        | SA | A | U | D | SD |
| 23 | Teaching is a monotonous profession.   | SA | A | U | D | SD |
| 24 | Corporat punishment is essential to make the teaching effective.                               | SA | A | U | D | SD |
| 25 | Teacher should be free to leave the formal classroom to get direct experience to his students. | SA | A | U | D | SD |
| 26 | Desirable changes in children can be made only by trained teachers.                            | SA | A | U | D | SD |
| 27 | A real teacher is always proud of his profession.  | SA | A | U | D | SD |
| 28 | Teaching and learning activities should be confined in the classrooms only.                    | SA | A | U | D | SD |
| 29 | Teacher should not allow his students to dissent with him.                                     | SA | A | U | D | SD |
| 30 | A teacher should be ready to work anyware in the state.  | SA | A | U | D | SD |
| 31 | Teaching profession is considered as a last resort for qualified youths.                       | SA | A | U | D | SD |
| 32 | No profession is better than teachin.  | SA | A | U | D | SD |
| 33 | Teacher should encourage students to imitate his fellow beings for good deeds.                 | SA | A | U | D | SD |
| 34 | People prefer teachig because it gives more leisure time.                                      | SA | A | U | D | SD |
| 35 | In service courses are not essential for experienced teachers.                                 | SA | A | U | D | SC |
| 36 | Teacher should lead a disciplined life outsid the School.                                      | SA | A | U | D | SC |
| 37 | Teacher should encourage his students to ask questions while teaching.                         | SA | A | U | D | SC |
| 38 | Gurukula system of education is the Only remedy to maintain proper discipline.                 | SA | A | U | D | SC |
| 39 | Frequent inservice courses are a boon to teachers for professional improvement.                | SA | A | U | D | SC |
| 40 | Teaching should be love oriented rather than examination oriented.                             | SA | A | U | D | SC |
| 41 | It is the responsibility of the society to respect the teachers.                               | SA | A | U | D | SD |
| 42 | Sincers techers are not often appreciated by his colleagues.                                   | SA | A | U | D | SC |
| 43 | Majntenance of dtscipline is the pivotal issue in the classroom.                               | SA | A | U | D | SD |
| 44 | Teacher need not be a model to the students  | SA | A | U | D | SD |
| 45 | As the teacher acquires moie qualifications teachig becomes more effective.                    | SA | A | U | D | SD |
| 46 | Teaching skill is purely inborn.   | SA | A | U | D | SD |
| 47 | Student in discipline is the sole reason for low achievement.                                  | SA | A | U | D | SD |
| 48 | Teacher derives great pleasure when he is with the pupils.                                     | SA | A | U | D | SD |
| 49 | Preparation of lesson plans is a waste of time.  | SA | A | U | D | SD |
| 50 | All promotion in the lower classes leads to idleness among teachers.                           | SA | A | U | D | SD |
| 51 | Internship is unnecessary for teacher trainees.  | SA | A | U | D | SD |
| 52 | Teachers should interfere in the personal problems of his students.                            | SA | A | U | D | SD |
| 53 | Teacher's role is negligible in eradicating social evils.                                      | SA | A | U | D | SD |
| 54 | A good teacher should not expect rewards.  | SA | A | U | D | SD |
| 55 | Friendly relationship of teachers with their students adversely affect the school discipline.  | SA | A | U | D | SD |

APPENDIX III  
DEPARTMENT OF ADULT EDUCATION & EXTENSION SERVICES  
UNIVERSITY OF CALICUT  
Scale of Attitude Towards Teaching Profession  
(Prepared by: P. Sreemanunni)

This attitude scale consists of 40 items aimed at discovering the likes or dislikes of school teachers towards the professional attitude. Against each statement is given the symbol SA, A, U, D, SD representing Strongly Agree, Agree, Undecided (Uncertain), Disagree, Strongly Disagree. You are requested to read each statement carefully and decide what your response is. Then mark your answer in the space provided against each statement by putting a 'x' mark above the appropriate symbol.

Eg:- If you strongly agree with the statement 1 please put a x mark on the symbol - <sup>x</sup>SA. Now start.

Name of the Teacher:

school:

- |   |    |   |   |   |    |
|---|----|---|---|---|----|
| 1. A true teacher should have mastery over the subject matter.  | SA | A | U | D | SD |
| 2. A teacher need not require any teaching aids   | SA | A | U | D | SD |
| 3. Teacher should illumine his subject with collateral information,                                     | SA | A | U | D | SD |
| 4. All learning materials should be supplied by the authorities   | SA | A | U | D | SD |
| 5. A teacher should be capable of presenting the subject matter with different and appropriate methods. | SA | A | U | D | SD |
| 6. Teachers' prime concern should be in preparing the students to get through the examination.          | SA | A | U | D | SD |
| 7. A teacher should not punish his students without ascertaining their mistakes.                        | SA | A | U | D | SD |
| 8. Drawing out the hidden talents of the students is not the primary concern of the teacher.            | SA | A | U | D | SD |
| 9. Teacher should be self disciplined to maintain absolute discipline in the class.                     | SA | A | U | D | SD |
| 10. A teacher should not involve in any work other than teaching.                                       | SA | A | U | D | SD |
| 11. Teacher should be dynamic to cope up with the needs and interests of the pupils.                    | SA | A | U | D | SD |
| 12. Teacher should not contact the parents occasionally.  | SA | A | U | D | SD |
| 13. Pupils' participation is inevitable in the teaching learning process.                               | SA | A | U | D | SD |
| 14. No teacher likes his own children to become teachers in future.                                     | SA | A | U | D | SD |
| 15. Teacher should try to arouse curiosity in his students.   | SA | A | U | D | SD |
| 16. A teacher should give up teaching profession when he gets other attractive posts.                   | SA | A | U | D | SD |
| 17. A teacher should not discriminate his students on the basis of caste, creed, class or colour        | SA | A | U | D | SD |
| 18. A teacher should not tolerate the attitude of his students, asking questions.                       | SA | A | U | D | SD |

- |   |    |   |   |   |    |
|---|----|---|---|---|----|
| 19. Giving compensatory education to socially deprived students is not the responsibility of the teacher. | SA | A | U | D | SD |
| 20. A teacher is expected to know the children's experiences and feelings.                                | SA | A | U | D | SD |
| 21. A teacher should be interested to get teaching aids prepared for using local resources.               | SA | A | U | D | SD |
| 22. Corporeal punishment is essential to make teaching effective  | SA | A | U | D | SD |
| 23. A true teacher is always proud of his profession  | SA | A | U | D | SD |
| 24. Teaching is a monotonous profession   | SA | A | U | D | SD |
| 25. Teacher should lead a disciplined life outside the school.  | SA | A | U | D | SD |
| 26. Teaching and learning should be confined in the classrooms only.                                      | SA | A | U | D | SD |
| 27. Teaching should be love oriented rather than examination oriented.                                    | SA | A | U | D | SD |
| 28. Teaching profession is considered as the last resort for the qualified youths.                        | SA | A | U | D | SD |
| 29. Teacher derives great pleasure when he is with the pupils.  | SA | A | U | D | SD |
| 30. Inservice courses are not essential for experienced teachers.   | SA | A | U | D | SD |
| 31. Teacher should encourage his students to ask questions while teaching.                                | SA | A | U | D | SD |
| 32. Maintenance of discipline is the pivotal issue in the class room.                                     | SA | A | U | D | SD |
| 33. Frequent inservice courses are a boon to teachers for professional improvement.                       | SA | A | U | D | SD |
| 34. Preparation of lesson plans is a waste of time.   | SA | A | U | D | SD |
| 35. Teacher should be free to leave the formal class rooms to get direct experiences to his students.     | SA | A | U | D | SD |
| 36. Teacher need not be a model to his students.  | SA | A | U | D | SD |
| 37. No profession is better than teaching.  | SA | A | U | D | SD |
| 38. Teachers' role is negligible in eradicating social evils.   | SA | A | U | D | SD |
| 39. It is the responsibility of the society to respect the teachers.                                      | SA | A | U | D | SD |
| 40. Friendly relationship of teachers with their students adversely effect the school discipline.         | SA | A | U | D | SD |

APPENDIX IV

# Teaching Aptitude Test Battery [TATB]

By

**Smt. Shamim Karim**

*Lecturer, Psychology Department  
Dhaka University, Dhaka (Bangladesh)*

and

**Prof. Ashok Kumar Dixit**

*Department of Psychology  
Agra College, Agra*

|                           |
|---------------------------|
| Name .....                |
| Age ..... Date .....      |
| Teaching Experience ..... |
| Address .....             |
| .....                     |
| .....                     |

Note—Please give your answer in Answer sheet only.

*Published By :*  
**Agra Psychological Research Cell**  
Tiwari Kothi, Belanganj, Agra-282004  
*Phone : 362964*

### Part - 1

1. In order to give right and proper education to the pupils. It is essential for the a teacher to know the main problems of the pupils and to help them in solving.
2. School administration depends on the cooperation of the teachers.
3. It is said that "If teacher provides 100 gms of love to his pupils then he will attain one kilogram of love from his pupils". A teacher should keep in mind this statement while teaching.
4. 'Teacher and pupil both are an inseparable part of the society'. Keeping this in his mind, a good teacher should teach.
5. The teacher should be aware of the problems of the Nation and as well as cooperate in solving them.
6. 'The welfare of not only the society and the Nation but the Whole world is based on the feeling of cooperation'. The teacher should keep this in mind while teaching.
7. School is also like a family. As such in order to make it decent, not only the pupils but the teacher's cooperation is also essential.
8. The teacher's cooperative behaviour with others, expands his knowledge.
9. Success and failure in the examination is the result of the labour of both student and the teacher. The teacher should keep this in his mind while teaching.
10. Teacher should cooperate with the parents in making them an ideal citizen.

### Part - 2

1. Besides teaching the pupils their syllabus, the teacher should also develop such feelings in them that they may understand themselves and try to fulfill their duties.
2. The teacher should praise the good deeds of the pupils and also criticise their unworthy acts.
3. The teacher should have patience towards the emotional reactions of the pupils and should also try to understand them.
4. The teacher should have intimate relations with the pupils, so that the pupils may present their problems before them without any hesitation and as well as seek their advice to solve them.
5. The teacher should have the feeling of kindness in his behaviour towards the pupils.
6. The teacher should have so much tolerance that if the pupils criticise them, they may hear it and pulpied their curiosity.
7. The teacher should devote his maximum time to the pupils according to their needs.
8. The teacher should neither punish too much to his pupils nor be too liberal with them.
9. The teacher's teaching method should be in accordance with the individual difference of the pupils.
10. The teacher should be impartial and honest in student's assessment and do so, keeping in mind the pupils abilities.

### Part - 3

1. Teachers should keep in mind the various interests, of their pupils while teaching.
2. Teacher should not spend much of his time in politics etc. but should spend most of his time in teaching.
3. Besides teaching, teacher should also take interest in other extra-curricular activities of the pupils.
4. Teacher should be aware of the new teaching methods.
5. Teacher should not make his students book-worm but should give them such education that pupils may have both theoretical as well as practical knowledge.

6. Teacher should have a library of their own for teaching at home.
7. Besides personal aims teacher should also keep in mind the social aims.
8. Besides solving the quarries related to the syllabus, the teachers should also solve the other quarries and curiosity of the students.
9. Teacher should take active part in educational symposium and seminars etc.
10. The Education should be according to the time. Keeping this, in his mind, the teacher should draw the attention of Government and the educational authorities towards the defects of the present education system.

#### **Part - 4**

1. 'The pupils very much depend on the teacher,' keeping this in his mind, the teacher should spend his time in their proper social development.
2. Teacher is considered as the source of motivation. Hence teacher should carry over his promise properly.
3. Teacher should not take any decision without thinking and after taking decision should remain firm in it.
4. All pupils are equal for the teacher. Hence the teacher should not behave partially with the pupils.
5. The teacher should give marks to the pupils in the examination on the basis of his work performance and not on the basis of his approach.
6. The teacher should maintain such discipline in the class that the pupils develop that this teacher behaves lawfully and impartially.
7. The teacher should not pay attention to only one student but should pay attention to all the students.
8. The teacher should act in an organized way at home also.
9. A teacher should not hasitate in revealing the qualities and defects of the pupils in front of them.
10. A teacher should accept his defects without any hesitation and should also try to remove them.

#### **Part - 5**

1. The teacher should not demand gifts etc. as his labour from the pupils.
2. The teacher should not do any illegal thing at any cost.
3. The teacher should not be shy but be bold in doing legal things.
4. The teacher should know that he will be called on an ideal teacher on the basis of moral values.
5. Teacher should show his honesty and self-safficiency in evaluation of the students.
6. When pupils raise agitation or strike, then teachers should deal with patience.
7. In order to maintain proper discipline in the classroom, it is essential that the teacher should himself be disciplined.
8. Character is above all. As such a teacher should present an ideal of his character before his pupils.
9. 'Duty is the key of success'. As such, a teacher should present an ideal of his dutifulness infront of his pupils.
10. A teacher should behave politely so that his students may take a lesson from him.

#### **Part - 6**

1. Pupils are rude by nature. Hence a teacher should not pay much attention on their defects rather they should pay attention on thier qualities and also motivate them for good deeds.
2. If a teacher works according to the well established plans, then his several educational problems may get solved.
3. A teacher should teach in such interesting manner that the pupils may not feel monotony in the class.

4. A teacher should hope that in future, his pupils will maintain good relations with him.
5. A teacher should keep in mind the basic theory of Gita. "Karma is the duties, not in results."
6. A teacher should hope that in future his pupils will glorify him.
7. Environment may be new or old, if a teacher desires, then he can make it according to his convenience.
8. Teacher should not only pay attention on teaching-learning but should also maintain a pleasant atmosphere.
9. A teacher should hope that knowledge given by him will help his pupils is not only solving the educational problems but also the problems of practical life.
10. A teacher should always be in happy mood and try to make his pupils also happy with his behaviour.

#### **Part - 7**

1. A teacher should also motivate his pupils to study themselves besides teaching them himself.
2. Enthusiasm and concentration are the key to success. As such a teacher should motivate the pupils for it by placing an ideal himself.
3. A teacher should develop new energy and power in pupils.
4. If a teacher wishes, then he can learn a good deal from his students. As such a teacher should not have and hesitation in this respect.
5. Teacher is considered as a source of motivation for the pupils. As such a teacher should place an ideal before the pupils.
6. Not only environment of the class, but the environment of the whole school depends on the teacher. As such a teacher should take active part in.
7. Education aims at the all-round development of the personality.
8. Besides behaving friendly with the pupils, a teacher should also behave friendly with others and them with his knowledge.
9. From social point of view a teacher occupies a significant place in society. As such a teacher should take a lead in doing new things.
10. A teacher should himself do his work in time and motivate his pupils also to do their work in time.

#### **Part - 8**

1. However the pupils may be, a teacher should maintain proper adjustment with them.
2. Whatever decision a teacher takes, it should not be based on prejudice rather it should be based on the reality of facts.
3. However may be the situation, a teacher should keep his nature normal.
4. A teacher should try to make his thoughts and behaviour dynamic and creative.
5. A teacher should make his personality so impressive that not only the pupils and the parents may be impressed but other people are also impressed.
6. There is a lesson in each experience. As such a teacher should try to take lesson from each experience of life.
7. A teacher should include originality in his subject matter and as well accept the original thoughts of pupils without any hesitation.
8. A teachers personality should not be rigid rather it should be dynamic.
9. Difficulties are common in life. It is not appropriate for a teacher to stop teaching on being disturbed by them.
10. A teacher should be able to express his views to others in proper way and in simple language so that people may understand it easily.

## Answer Sheet

# Teaching Aptitude Test Battery [TATB]

## भाग 1 (PART 1)

## भाग 2 (PART 2)

| Item | सहमत<br>Agree            | सन्देहपूर्ण<br>Doubtful  | असहमत<br>Disagree        | Item | सहमत<br>Agree            | सन्देहपूर्ण<br>Doubtful  | असहमत<br>Disagree        |
|------|--------------------------|--------------------------|--------------------------|------|--------------------------|--------------------------|--------------------------|
| 1.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 11.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 12.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 13.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 14.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 15.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 16.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 17.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 18.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 19.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 20.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## भाग 3 (PART 3)

## भाग 4 (PART 4)

| Item | सहमत<br>Agree            | सन्देहपूर्ण<br>Doubtful  | असहमत<br>Disagree        | Item | सहमत<br>Agree            | सन्देहपूर्ण<br>Doubtful  | असहमत<br>Disagree        |
|------|--------------------------|--------------------------|--------------------------|------|--------------------------|--------------------------|--------------------------|
| 21.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 31.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 32.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 33.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 34.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 35.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 36.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 27.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 37.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 28.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 38.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 29.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 39.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 30.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 40.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## भाग 5 (PART 5)

## भाग 6 (PART 6)

| Item | सहमत<br>Agree            | सन्देहपूर्ण<br>Doubtful  | असहमत<br>Disagree        | Item | सहमत<br>Agree            | सन्देहपूर्ण<br>Doubtful  | असहमत<br>Disagree        |
|------|--------------------------|--------------------------|--------------------------|------|--------------------------|--------------------------|--------------------------|
| 41.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 51.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 42.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 52.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 43.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 53.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 44.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 54.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 45.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 55.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 46.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 56.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 47.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 57.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 48.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 58.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 49.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 59.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 50.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 60.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## भाग 7 (PART 7)

## भाग 8 (PART 8)

| Item | सहमत<br>Agree            | सन्देहपूर्ण<br>Doubtful  | अस मत<br>Disagree        | Item | सहमत<br>Agree            | सन्देहपूर्ण<br>Doubtful  | असहमत<br>Disagree        |
|------|--------------------------|--------------------------|--------------------------|------|--------------------------|--------------------------|--------------------------|
| 61.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 71.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 62.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 72.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 63.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 73.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 64.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 74.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 65.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 75.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 66.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 76.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 67.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 77.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 68.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 78.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 69.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 79.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 70.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 80.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Published by

**Agra Psychological Research Cell**

Tiwari Kothi, Belanganj, Agra-282004

(Phone : 362964)

407



Dr. S. B. KAKKAR  
Principal  
Govt. College of Education  
PATIALA (India)

Please fill up the followings :- Please don't write anything on this sheet.

Name -----

School/College ----- Rural/Urban -----

Educational qualifications -----

Teaching experience, if any, in years ----- Dated -----

### Instructions

In each of the given items on the next pages each question is followed by five alternatives. Choose the best alternative and show your answer in this booklet by putting a cross (x) on the corresponding letter (a b c d e) of the alternative of your choice. Please follow these instructions :-

1. Please work as rapidly as you can, but do not make unnecessary haste to finish the test. You will have enough time to answer all the items.
2. Please read carefully, and then answer on the ~~same test.~~ *response sheet.*
3. If you do not understand anything, ask me; but do not discuss anything with your neighbours.
4. Your frank and sincere answers will help a lot in research.
5. Your answers will be kept strictly confidential.
6. Please omit no item and answer all the items.
7. When you have answered all the items, please return the test sheet, *and the response sheet.*

Now turn over the page and start the work.

Estd , 1971

Phone , 63551

**National**  
PSYCHOLOGICAL CORPORATION  
4/230 KACHERI GHAT, AGRA - 202 004 (INDIA)

43

1. You have got the indication books to read in your spare time. You can afford to read only one of them. Choose the one you would like most to read.
  - (a) A novel
  - (b) A biography
  - (c) A holy book
  - (d) A book on 'We live for Children'
  - (e) A book of poems
2. Of the magazines mentioned against having equal subscription rates, you can afford to subscribe one only. Which one would you like most to go in for ?
  - (a) Filmfare
  - (b) Child Education
  - (c) Illustrated weekly
  - (d) Women and Home
  - (e) Life
3. Of the forth activities/hobbies available to you for your leisure-time. You are required to choose only one. Which one would prefer most ?
  - (a) Reading
  - (b) Gardening
  - (c) Playing with children
  - (d) Visiting friends
  - (e) Gossiping
4. In your spare time you might be engaging yourself in different chores. Which one of the forth chores would you like most to engage yourself in ?
  - (a) Gardening
  - (b) Doing house-hold chores
  - (c) Teaching children or doing tuitions
  - (d) Visiting friends
  - (e) Writing
5. Of the forth school subjects you had, choose the one you had like most.
  - (a) English/Hindi/Punjabi
  - (b) Mathematics
  - (c) Science
  - (d) Social Studies
  - (e) Hygiene and Physiology
6. Of the forth amusements available to you, you are required to choose only one. Which one will you prefer most ?
  - (a) Restaurants
  - (b) Dramatics
  - (c) Dances
  - (d) Cinema shows
  - (e) Talking to little ones
7. Forth are given a few distinguished persons in different walks of life. Which one of these persons would you like most to identify yourself with ?
  - (a) Ravi Shanker
  - (b) Radhakrishnan
  - (c) C. V. Raman
  - (d) Mulk Raj Anand
  - (e) Sarojini Naidu
8. You have the forth types of persons living in your neighbourhood-environment. Which one of these persons would you prefer to meet most often ?
  - (a) A shopkeeper
  - (b) An I. A. S./P. C. S. Officer
  - (c) An Office Clerk
  - (d) An Engineer
  - (e) A school master/lecturer
9. Forth are given a few loves that people develop. Indicate the love you would like most to develop.
  - (a) Love of money
  - (b) Love of power
  - (c) Love of children
  - (d) Love of good life
  - (e) Love of opposite sex

44

10. People aspire to acquire or develop different assets. Of the forth said assets which one would you like most to acquire ?
11. Forth are some of the qualities that people should develop in their personalities. Choose the quality you would emphasize most in order of your preference.
12. Of the forth mentioned qualities one may have, which one do you think you have most or you would like to have most ?
13. Given forth are some of the steps that one should take for building the country and the nation. Choose the step you would like most to take while contributing your might to the task.
14. If you are required to set things right in the country, which one of the forth adventures would you like most to make ?
15. Showing forth types of people can contribute toward making a nation great and strong. Choose the type you think, can contribute most.
16. Different people are tempted to do different things when the youth go wrong Which of the mentioned things are you most tempted to do on such occasions ?
17. Which one of the forth can best lead to improvement in education ?
18. Of the mentioned abilities, choose the one you will like to develop most.
- (a) Knowledge  
 (b) Personality  
 (c) Interest in children  
 (d) Personal fitness  
 (e) Popularity
- (a) Scholarship and humility  
 (b) Dominance and power  
 (c) Discipline and obedience  
 (d) Optimism and cheerfulness  
 (e) Stability and maturity
- (a) Sympathy  
 (b) Studious nature  
 (c) Fluent speech  
 (d) Impartiality  
 (e) Physical health
- (a) Industrialization  
 (b) Making children grow and develop into Complete individuals  
 (c) Working hard  
 (d) Streamlining the administration  
 (e) Developing patriotism in country-men
- (a) Pull up the administration  
 (b) Change the system of education  
 (c) Teach the teachers who make men and women  
 (d) Punish the law breakers  
 (e) Order people to work hard
- (a) Political leaders  
 (b) Philosophers  
 (c) Administrators  
 (d) Teachers  
 (e) Scientists
- (a) Set them right with force  
 (b) Give them a sermon on the how and why of youth welfare  
 (c) Put them to serious work  
 (d) Meet their demands  
 (e) Get schools reform the educational system
- (a) Good teacher  
 (b) Raised financial grants  
 (c) Public school pattern of education  
 (d) A very capable education minister  
 (e) Parents co-operation
- (a) Mechanical ability  
 (b) Artistic ability  
 (c) Musical ability  
 (d) Verbal ability  
 (e) Reasoning ability

19. Of the forth mentioned Interests one may have, which one do you think you have most or you would like to develop most ?
20. People have various likes. Which one of the forth said is your chief like ?
21. Forth are some of the factors which can motivate one to choose an occupation. Select the factor which you think can motivate you most.
22. Different people want something different from their jobs. Which one of the mentioned things would you want most from the job that you may have ?
23. Different people go in for jobs because of different attractions can make you like your job most ?
24. Of the mentioned kinds of occupations, choose one you would prefer most.
25. Of the said jobs in life, choose the one you would like most to be employed in.
26. You have got offers for the forth said appointments. Select the one you would like most to accept.
27. You may be working as a teacher in a school when you are trying to enhance your prospects in life. Suddenly you find before you an opportunity of going abroad on a very high post of an administrative nature. Which one of the indicating would be your most likely reaction ?
- (a) Mechanical  
(b) Literary  
(c) Artistic  
(d) Social  
(e) Scientific
- (a) To work hard on whatever is entrusted  
(b) To travel  
(c) To teach things to children  
(d) To eat, drink and be merry  
(e) To read about other people
- (a) Good pay or income  
(b) Security of job  
(c) Authority and power to rule others  
(d) Benefits like bonus, medical facilities, house  
(e) Opportunity to educate and influence others
- (a) Congenial working conditions  
(b) Good boss  
(c) Opportunity to mould the young  
(d) High socio-economic status  
(e) Amiable work-mates
- (a) Its interesting work  
(b) The fact that it suits your tastes  
(c) Its proximity to your home  
(d) In it one can train minds  
(e) In it one can learn much
- (a) Professions  
(b) Semi-skilled  
(c) Skilled  
(d) Administrative  
(e) Unskilled
- (a) Engineering  
(b) Practising law of becoming a magistrate/-officer  
(c) Journalism  
(d) Teaching in schools  
(e) Nursing
- (a) Gazetted Officer  
(b) Manager in a firm  
(c) Editor of a news-paper  
(d) Actor or Actress  
(e) Teacher in a school
- (a) Resign the job and go away  
(b) Not bother about it  
(c) Consult parents and teachers  
(d) Find out the future prospects of the new job  
(e) Think carefully and then decide