CHAPTER VI

SUMMARY & CONCLUSIONS
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6.1 Summary

Teaching is a spiritual process; in which, one mind projects itself into another depending on the personal force of the teacher. As the teacher is to guide the pupils by his example as well as by his percept, he must possess certain definite qualities. The best teachers are those who have certain natural qualifications for the job.

The teaching profession should be an intellectual, a learning and practical activity. A strong, secure and effective profession of teaching is essential to build up public intelligence and to solve the social problems. Teachers who commit themselves to the profession and who have knowledge, devotion and sacrifice can only build teaching profession.

The teaching profession occupies a position of public trust involving not only the individual teacher’s personal conduct but also the interaction of the school and the community. He should perform the duties of citizens and participate in community activities. He has to discuss controversial issues from an object point of view keeping the class from partisan opinions.

Creativity acts as a determinant for a nation’s progress. Creativity is one of the most highly valued human values. Creativity affects not only the scientific progress but also society in general. Those nations, which learn best how to identify, develop and encourage creativity in their people, may find themselves in a very advantageous position. For a nation to survive in the international competition it must utilize its creative talent to the highest possible extent.
‘Creativity’ is an essential life skill, which needs to be fostered by the education system(s) from the early years onwards. Such a statement emphasises the importance of playfulness, imagination and creativity in learning for children, young people and adults and the role that schools might play in promoting these qualities in learning experiences.

Creativity, thus, for a long time thought to be a divine gift and as such afforded little scope for scientific study. Today, this view has changed. Considerable amount of research seems to have been undertaken in the area of creativity during decades and it is now accepted that creativity exists in every sphere of human activity.

There is a great need to do research in the intelligence of the teachers and teacher trainees to find out in which the students will getting better achievement. It is necessary to find out the influence of personal and socio-demographic variables on the intelligence of the teacher trainees. The very important thing is intelligence is one of the significant influencing factors in the teaching profession to establish their level of creativity and teaching competency.

Teaching is an art and many are trained in this art. Anybody can become a teacher, but everybody cannot become an effective teacher. A comprehensive teacher education programme may help in producing quality of teachers. At present the institutes of education are given responsibility of providing in-service training at primary level. Hence, there is every need to look into the status of DIET institutions from various angles and to study the creativity in relation their teaching competency and intelligence and some other socio-demographic variables.
Statement of the Problem

The present study is concerned with the creativity of the D.Ed. student-teachers in relation to their teaching competency and intelligence. It examines the differences in the level of creativity among the teacher trainees studying in different D.I.E.Ts (District Institute of Education and Training) in the SEVEN districts—from Rayalaseema, Coastal Andhra and Telangana region of Andhra Pradesh, boys and girls of rural and urban backgrounds. It establishes the relationship between the level of creativity and other variables viz., teaching competency and intelligence and certain socio-demographic variables of the teacher trainees studying D.Ed. course in DIETs.

Title of the study

Accordingly the topic for the study is entitled as “CREATIVITY OF TEACHER TRAINEES IN RELATION TO THEIR TEACHING COMPETENCY AND INTELLIGENCE”.

Need for the study

Teacher occupies a vital position in educational system in whose hands lies in the task of shaping the students. Teacher being the pivot of the educational institution provides the key to the educational system. To be effective teacher he/she should be creative and democratic in approach. A creative teacher is an accepting, tolerant and humanist who will allow the students to develop their maximum. Such a teacher represents the originality of children by giving them credit for initiated learning and thinking and by allowing them to learn through creative problem solving activities.
It is desired that a teacher should have an insight into the creative behavioural symptoms of the students under this change. This prompts one to believe that the creative traits of the teacher and the creative character of personality are implicitly important in shaping and sharpening the behaviour and personality of the learner. Teaching involves the personal values, ideals, interests and attitude of teachers whether employed consciously or otherwise. Teacher’s behaviour has a profound influence on his/her pupils. Teacher in whose hands lie the task of shaping student, should possess good teaching competency as well as intelligence. A creative teacher can be perfect only when he teaches effectively.

Teacher trainees will be the teachers of the future generation. The progress and prosperity of the nation depends upon the future generation. Teacher trainees should be equipped to recognise that children possess special resources of interest and talent professionally. This would require acquisition and application of knowledge, skills and attitudes that foster creative behaviour in children. Thus creativity is used as a central force to improve learning and teaching. Since teaching and learning are both important and are intertwined, creative teachers’ performance tends to stimulate creative learning with the result that both teacher and students expand potentialities for creativity. Teacher trainees with general understanding of creative behaviour and creative teaching skills would provide opportunities for every child to learn grow and live creatively.

Thus, in this technological period creativity, intelligence and teaching competency are considered as human potential resources for the development of the teacher trainees. Intellectually speaking creativity is regarded as the highest cognitive ability, which should be developed in every teacher trainee. Hence, training needs to be given to inculcate self-actualization and teaching competency. This study is confined to study the teacher trainees’ beliefs, views and orientations with regard to impact of intelligence and teaching competence on the level of creativity of D.Ed teacher trainees.
Purpose of the study

The present study aims at investigating the level of creativity among the D.Ed. teacher trainees in the teacher training colleges (DIETs) in relation to certain psycho-sociological factors. The purpose of the study is an attempt to answer the following aspects.

i. Whether there is any significant influence of the psycho-sociological variables on the level of creativity among D.Ed. teacher trainees, in general.

ii. Whether there is any impact of teaching competency on the level of creativity among the D.Ed teacher trainees.

iii. Whether there is any influence of intelligence of D.Ed. teacher trainees on their level of creativity.

iv. Whether there is any impact of the socio-demographic variables / factors on the level of creativity among D.Ed teacher trainees.

Scope of the study

The main intention of this study is to find the relation of level of creativity of D.Ed. teacher trainees with teaching competency, intelligence and some socio-demographic variables. The Creativity Test is an adopted version developed by Venkatarami Reddy (1989). The teaching competency and intelligence and socio-demographic variables are measured by using the relevant tools.

The study was attempted to identify the type of relation between the dependent variable (Creativity test score) and independent variables viz., psycho-sociological variables (intelligence and teaching competency) and certain socio-demographic variables.
Objectives of the study

The present investigation was carried out to obtain useful insights concerning creativity scores among the D.Ed teacher trainees studying in different institutions.

The main objectives of the present study are:

i. To estimate/assess the general level of creativity among the D.Ed teacher trainees.

ii. To find the relation of teaching competency on the creativity among the D.Ed teacher trainees.

iii. To explain the relationship between the intelligence and creativity among the D.Ed teacher trainees.

iv. To find out the relationship between creativity and different socio-demographic variables of D.Ed teacher trainees.

v. To find whether there was any significant differences of the levels of teaching competency on the level of creativity of the D.Ed teacher trainees.

vi. To find whether there was any significant differences of the levels of intelligence on the level of creativity of the D.Ed teacher trainees.

vii. To find whether there was any significant influence of the socio-demographic variables of the D.Ed teacher trainees on their level of creativity.
viii. To find out the association between the levels of teaching competency and creativity among the D.Ed teachers trainees.

ix. To find out the association between the levels of intelligence and creativity among the D.Ed teachers trainees.

x. To find out the association between the socio-demographic variables and creativity among the D.Ed teachers trainees.

xi. To develop multiple regression equations to predict the contributions of independent variables to the level of creativity of D.Ed teacher trainees.

Hypotheses

Based on the above objectives, the following hypotheses were setup for the investigation. Many of the hypotheses were setup in a null form, as this form of hypothesis is akin to the legal principle that a man is innocent until he is proved guilty.

i. In general, the D.Ed teacher trainees had no normal level of creativity.

Section –A

i. Null hypotheses were formulated between Creativity and independent variables viz., teaching competency, intelligence, region, gender, group studied, medium studied, parents education, parents occupation, parents income, interest and locality of D.Ed teacher trainees to find the correlation between them.
Section -B

ii. Null hypotheses were formulated to find the influence of independent variables viz., teaching competency, intelligence, region, gender, group studied, medium studied, parents education, parents occupation, parents income, interest and locality of D.Ed teacher trainees on their creativity.

Section -C

iii. Null hypotheses were formulated to find whether there exists any association between the independent variables viz., teaching competency, intelligence, region, gender, group studied, medium studied, parents education, parents occupation, parents income, interest and locality of D.Ed teacher trainees and their creativity.

Variables used in the study

The dependent variable included in the present study is scores of creativity. The two measured independent variables are teaching competency and intelligence of the D.Ed teacher trainees. 9 personal and demographic variables are included. The variables used in the investigation are given in the following table.
List of variables used in the present study

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
</tr>
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<tbody>
<tr>
<td>CREATIVITY</td>
<td>Psychological variables</td>
</tr>
<tr>
<td></td>
<td>1. Teaching Competency</td>
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<td></td>
<td>2. Intelligence</td>
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Tools Used:

The following tools are used in the present investigation.

i. Creativity Test Battery is adopted which was developed by Prof. A. Venkatarami Reddy (1989).

ii. General Teaching Competency Scale developed by Dr. Passi and Dr. Lalitha (1977) is adopted and modified by the investigator by adding one more variable and found the validity and reliability.
iii. For measuring the Intelligence Raven’s Standard Progressive Matrices (Standard Progressive Matrices – SPM) is adopted.

iv. Personal Data Sheet is developed to measure the socio-demographic variables.

**Sample selected**

The problem is aimed at investigating the general level of creativity and the teaching competency and intelligence and the relationship among these variables among the D.Ed teacher trainees of 7 districts of three regions of Andhra Pradesh. In selecting the sample for the study in Andhra Pradesh the researcher selected 3 regions viz., Coastal Andhra, Telangana and Rayalaseema through stratified random sampling technique. The study is confined to the D.Ed – II year teacher trainees who received complete teaching skills are treated as subjects for the present study.

The distribution of the sample of teacher trainees selected for the Final study.

<table>
<thead>
<tr>
<th>Region</th>
<th>Boys</th>
<th></th>
<th>Girls</th>
<th></th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td>Urban</td>
<td>Rural</td>
<td></td>
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<tr>
<td>Telangana</td>
<td>14</td>
<td>77</td>
<td>43</td>
<td>45</td>
<td>179</td>
</tr>
<tr>
<td>Rayalaseema</td>
<td>21</td>
<td>60</td>
<td>40</td>
<td>66</td>
<td>187</td>
</tr>
<tr>
<td>Coastal Andhra</td>
<td>29</td>
<td>98</td>
<td>34</td>
<td>73</td>
<td>234</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>64</td>
<td>235.</td>
<td>117</td>
<td>184</td>
<td>600</td>
</tr>
</tbody>
</table>
Collection of data

The investigator personally visited all the DIETs (07) included in the sample. A good rapport was developed with the D.Ed teacher trainees as explained earlier. They were explained the purpose and importance of the study as a matter of motivation.

The trainees were given a copy of all the instruments viz., creativity test battery, teaching competency scale, Ravens standard progressive matrices inventory and personal data sheet and requested them to respond to all parts of the booklet of instruments and to all items without leaving any item or any part. Though all the above instruments were self-administering, they were explained clearly each of them. Sufficient time was given to them to respond the items.

Analyses of the data

Thus the total scores obtained by each of 600 D.Ed teacher trainees on all the variables were computed. The data was analysed using relevant statistical techniques like ‘t’ test, ANOVA, Chi-square test to find out whether the differences in the independent variables accounted for significant differences in the dependent variables. The usual levels of significance viz., 0.05 and 0.01 levels were employed to test the significance of the obtained values.

6.2 Major Findings of the study

A. Frequency Distribution:

i. The mean creativity score of the D.Ed students is 65.02. Hence, the level of creativity of the D.Ed teacher trainees is low or below average. The values of mean, median and mode of the distribution is
65.02, 64.00 and 53.00 respectively. The gap among these three values is very negligible. Therefore, the distribution is very near to normal distribution.

ii. The values of skewness and Kurtosis of the creativity scores are 0.753 and 1.344 respectively. Hence, the distribution of the creativity scores for the whole group is slightly positively skewed and platy kurtic.

iii. Out of 600 sample 508 showed lower level of creativity and the remaining 92 teacher trainees fall under higher level of creativity.

**B. Simple correlation:**

i. Teaching Competency of the D.Ed teacher trainees has significant positive correlation with the total creativity. But, the level of intelligence is not correlated with the total creativity scores. The results are in the expected direction.

ii. Overall Creativity scores of the D.Ed trainees has a significant correlation with the gender only. But on the remaining socio-demographic variables viz., region, group studied, medium studied, parents education, parents occupation, parental income, interest and locality found no significant correlation with creativity among the teacher trainees.

**C. Differences between the variables**

i. Teacher trainees with low level of teaching competency showed low creativity compared to the trainees with average and high level of teaching competency.
ii. Intelligence of the teacher trainees would show any significant influence on their level of creativity.

iii. Region of the teacher trainees showed a significant influence on the creativity. Among the D.Ed teacher trainees, Rayalaseema D.Ed teacher trainees got high creativity scores, whereas the D.Ed teacher trainees of Coastal Andhra and Telangana got significantly low creativity scores.

iv. The gender of the D.Ed teacher trainees has shown a significant influence on the level of their creativity. The girl teacher trainees got significantly high creativity score than the boys.

v. Parents' educational level, occupational status and Annual Income had shown no significant influence on the level of the creativity of the D.Ed teacher trainees.

D. Chi-square analysis

Independent variables viz., Teaching competence, Intelligence, region, gender and parents income has significant association with the creativity of the D.Ed teacher trainees.

E. Multiple Regression Analysis

It is found that the best regression equation for predicting the overall creativity of D.Ed teacher trainees with the all 11 variables is:

\[ OC = 65.21 - 0.014 \times (TC) + 0.513 \times (G) \]

The variance explained with the help of these two variables i.e. Teaching competency and gender is 30.50 percent.
6.3 Conclusions

In the light of the above findings, the following conclusions are drawn:

i. The frequency distribution of creativity scores of the D.Ed teacher trainees are very nearer to the normal distribution.

ii. D.Ed teacher trainees are far below the average level in their overall creativity.

iii. Teaching competency levels of the D.Ed teacher trainees are significantly correlated with their creativity.

iv. The gender only has a significant correlation with the overall creativity of the D.Ed teacher trainees.

v. ‘Teaching Competency’ of the D.Ed teacher trainees has significant influence on their level of creativity. The higher level of teaching competency exhibited higher level of creativity.

vi. Region is showing a significant influence over the creativity of the D.Ed teacher trainees. The teacher trainees of Rayalaseema region acquired higher level of creativity compared to the trainees of Telangana and Coastal Andhra regions.

vii. Gender has a significant influence over the creativity of the teacher trainees. Girl trainees exhibited higher level of creativity over their counterparts of boys trainees.

viii. Teaching competence, Intelligence, gender, parental income of the D.Ed teacher trainees are significantly associated with their level of creativity.
ix. 30.50% of the creativity of the D.Ed teacher trainees was predicted with the help of the different sets of independent variables.

### 6.4 Educational implications

The quality of a nation depends upon the quality of its citizens, the quality of citizens depends upon the quality of their education, the quality of education depends upon the quality of teachers and the quality of teachers depends upon the quality of 'teacher education' among many other factors.

In framing 'teacher education curriculum' one has to keep in mind the constitutional goals, social and economic challenges, political and cultural scenario, scientific and technological revolutions, educational challenges, new emerging concerns, etc.

The teacher serves the human and helps to shape the destiny of the society. The teacher has a powerful and abiding influence in the formation of the character of the future citizens. The teacher acts as a pivot for the transmission of intellectual and technical skills and cultural traditions from one generation to another. Hence, effective training has to be provided to the student-teachers at D.Ed level. The following recommendations are made for the benefits of the teacher education.

i. Special care should be taken and extra facilities should be provided to the teacher trainees to improve their activities on development of creativity.

ii. Attitude towards teaching tests may be conducted before admitting the students into the D.Ed course. Those who have more positive attitude towards teaching profession and training may only be given opportunity for admission into these training courses. This may be
very useful for them in the overall development of the creative activities.

iii. Better study habits, self-confidence and academic activities may be developed among the teacher trainees with necessary training in the creativity.

iv. Personality development programmes may be conducted.

v. Full care and attention should be taken during their exposure to different training programmes at institutional level.

vi. Computer and Educational technology labs should be established with full equipment. Because these are essential for the present day system of education. These may have an automatic development among the trainees in their development of creative activities.

vii. The deficiencies in the physical and infrastructural facilities should also be improved.

viii. The government should take suitable steps in creating campus more attractive for both the teacher trainee and teacher educator.

ix. The cultural and co-curricular activities have their own influence on the creativity development among the trainees. Hence, the authorities should provide / encourage such type of programmes and encourage the teacher trainees to participate in such programmes.
x. The NCERT, SCERT, NCTE and the Department of Education of the Universities have to organize a series of workshops and seminars to re-orient the teacher educators to be committed to their profession.

xi. Qualified and dedicated teacher-educators should be recruited into the educational institutions.

6.5 Limitations and Suggestions for further research

The following limitations and suggestions are considered for further investigation.

i. The present study is confined to 600 D.Ed teacher trainees only studying in 7 DIETs of Andhra Pradesh. It is suggested that future researchers may undertake studies with larger sample covering as many DIETs as possible.

ii. This study may be extended to other districts, other private DIETs in Andhra Pradesh and also in other states.

iii. This study is conducted only on the government D.Ed students. Similar studies may be conducted on of B.Ed, M.Ed, Pandit training students and B.P.Ed students.

iv. Similar studies may be conducted on the professional courses like Engineering, Medicine, Polytechnic, ITI students.

v. Prediction of teacher trainees creativity may be attempted with some other variables like self-concept, attitude towards teaching, interest in the profession, aptitudes, adjustment, personality characteristics etc.
vi. Studies have hardly been longitudinal. In view of this fact that there is a serious need for taking up longitudinal studies with respect to all pupils' outcomes. For example, the following directional relationships among the factors, would be taken up as a longitudinal study-teacher training programmes- regular teaching - individual, group and community changes - their involvement, participation and productivity in respect of national development. This of course, ought to be planned as a national level research undertaking - project.

vii. This is a presage-product study in the area of teacher training. Presage- Process, Process- Product and Presage- Process- Product studies may be undertaken in the area of teacher training.

viii. Creativity of teacher trainees in relation with full length personality test (Cattell's 16 PF questionnaire form A - B - C) may be undertaken.

ix. Studies to estimate the influence of course content, teacher educators, cooperating teachers, practicing schools and books available etc., on teacher trainees creativity, may be undertaken.