CHAPTER – IV

DATA ANALYSIS, INTERPRETATION
AND RESULTS

4.0 Data analysis And Their Interpretation
4.1 Result
CHAPTER- IV

DATA ANALYSIS, INTERPRETATION AND RESULT

This chapter presents the data collection, their analysis, interpretation and results. As mentioned earlier the problem of research was "A study of impact of teacher training through Distance mode and formal mode on Teaching Competence and Attitude towards teaching of B.Ed. Teacher trainees of Mahatma Gandhi Kashi Vidyapith University region." The essential objective underlying this study was to compare the impact of modes of teacher training either through distance mode or formal mode on teaching competence and Attitude towards Teaching and of B.Ed. Teacher trainees. To study this, certain hypotheses were formulated. To test these hypotheses relevant data on each of these variables were collected, which have been analyzed and discussed in this chapter. The sample of the present study was consisted of 300 B.Ed. teacher trainees of (one Fifty each mode) i.e. distance mode and formal mode. The present sample was drawn from both male and female trainees of science and arts streams.

Hypotheses formulated in this study were :-

1. There is no significant difference between teaching competence of B.Ed. teacher trainees trained through distance mode and formal mode of teacher education programme.
2. There is no significant difference between attitude towards teaching of B.Ed. trainees trained through distance mode and formal mode of teacher education programme.
3. There is no significant difference between Teaching Competence and Attitude towards teaching of Male teacher trainees trained through distance mode and formal mode of training.
4. There is no significant difference between Teaching Competence and Attitude towards teaching of female teacher trainees trained through distance mode and formal mode of training.
5. There is no significant difference between Teaching Competence and Attitude towards teaching of arts teacher trainees trained through distance mode and formal mode of training.
6. There is no significant between difference Teaching Competence and Attitude towards teaching of science teacher trainees trained through distance mode and formal mode of training.

7. There is no significant between difference Teaching Competence and Attitude towards teaching of Urban areas teacher trainees trained through distance mode and formal mode of training.

8. There is no significant between difference Teaching Competence and Attitude towards teaching of Rural areas teacher trainees trained through distance mode and formal mode of training.

To test these hypotheses relevant data on attitude towards teaching inventory was collected from eight B.Ed teacher training centers affiliated with formal and distance training centers located in Mahatma Gandhi Kashi Vidyapith, University, Varanasi region. Data for teaching competence collected through class observation of B.Ed. Trainees of the sample by using R.C. Deva's teacher rating scale. All the scores on these tools have been collected, tabulated and analyzed in the following section of this chapter. The results have been drawn and discussed hypothesis wise. Each objective and it related hypothesis along with its testing and analysis are presented in the following section.

Objective 1 :-

The first objective of the present study was to compare the impact of teacher training through distance mode and formal mode in relation to teaching competence of B.Ed. teacher trainees.

Teaching Competence :-

Present study analyzed the difference in teaching competencies of B.Ed. trainees trained either through distance mode or formal mode of teacher education programme. The New Education Policy (1985) has stressed the quality of teacher education for effective learning. The teacher is considered the most key factor in implementing all educational reforms at grass root level. It is fact that the academic qualifications,
knowledge of the subject matter, competence and skills of teaching and the commitment of the teacher have a significant impact on the teaching learning process.

A competent teacher should not have mastery over his subject matter, but his competency should be measured by student's learning. It is true that effective learning is the result of the successful teaching but successful teaching does not depend only upon the methods used, because the methods and procedures of teaching are means but not ends. There are several definitions and view expressed by educationist on the meaning and definitions of teaching competency.

Good (1973) stated that "Teaching competency are those skills, concepts, and attitudes needed by teachers for the act of instructions in an educational institution."

Teacher training programme have a major role to form the teachers' thinking towards teaching profession. For that reason, to develop positive attitudes towards teaching profession, and development of skills teacher training programme have a significant role. Instructor preparing has been characterized as "all formal and casual exercises and experience that qualify a man to accept the obligations as an individual from the instructive calling and to release his duties all the more adequately."

Educational planners realized that formal teacher education programme is not in a position to cope with the growing demand for training. Teacher education programme through distance mode in Indian context is more than two decade old. The National Council of Teacher Education (NCTE) now recognizes open & distance learning as a cost effective system which puts the learner first and the institution second, concentrate on the learners’ need. Teacher competencies are directly related to teacher training which a person gets before or after entering the teaching profession. Teacher training is a process of attaining knowledge, skill and abilities which is relevant to the life of teacher to act as a teacher. It reshapes the attitudes, remolds the habits and reconstitutes the personality qualities of a teacher.

First objective of the present study was focused to compare the competencies of teacher trainees trained through formal and distance mode of training. This study was delimited to B.Ed. programme because B.Ed. is the basic and necessary professional qualification for the primary and secondary school teachers.
HYPOTHESIS - 1

The first hypothesis involved in the present study was stated as "that there is no significant difference between the teaching competence of B.Ed. trainees trained through distance mode and formal mode of training." The purpose of this hypothesis was to find out that how teaching competence was affected by distance mode of teacher training as compared to formal mode. To test this hypothesis two group of B.Ed. teacher-trainees trained through distance mode and formal mode were compared on teaching competence scores by using t-test. Results are given in the Table 5.01.
Significance of difference between B.Ed. trainees trained through distance mode and formal mode in relation to Teaching Competence

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Variables</th>
<th>Distance mode N=150</th>
<th>Formal mode N=150</th>
<th>D= M1-M2</th>
<th>t value</th>
<th>level of sign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M1</td>
<td>SD1</td>
<td>M2</td>
<td>SD2</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Personal qualities</td>
<td>40.22</td>
<td>4.90</td>
<td>38.86</td>
<td>4.07</td>
<td>1.36</td>
</tr>
<tr>
<td>2.</td>
<td>Professional competence</td>
<td>10.15</td>
<td>1.97</td>
<td>9.74</td>
<td>1.74</td>
<td>0.41</td>
</tr>
<tr>
<td>3.</td>
<td>Class room Performance</td>
<td>43.14</td>
<td>6.12</td>
<td>42.90</td>
<td>5.57</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td>Total teaching Competence</td>
<td>93.51</td>
<td>11.16</td>
<td>91.50</td>
<td>6.50</td>
<td>2.01</td>
</tr>
</tbody>
</table>

*=Significance at .05 level
**=Significance at .01 level
N.S.=Not Significant
Bar Diagram Showing significance of difference between distance and formal mode in relation to teaching Competence.
Figure No. 13

Bar Diagram showing significance of difference between distance and formal mode B.Ed. Trainees in relation to teaching competence each dimension
Results as shown in table 5 revealed that the t-value for total score on teaching competence was found to be 1.95, which is significant at .05 level. Hence, the null hypothesis was rejected and it was concluded that a significant difference was found in the level of teaching competence of B.Ed. trainees developed through distance mode and formal mode of teacher training. The mean score on total teaching competence of trainees trained through distance mode is higher (M = 93.51, 11.16) to that of trainees trained through formal mode (M =91.50; 6.50). This shows that when the distance mode is compared to formal mode of training, a significant difference found in the level of total teaching competence of B.Ed. trainees. From this it may be concluded that distance mode of teacher training is more effective from the point of view of development of total teaching competence of trainees. The level of total teaching competence is higher in case of trainees trained through distance mode of training as compared to trainees through conventional mode of training. Teacher training today is an integral part of any educational system. Mass literacy goals as well as the emergence of technology transformed the very character of teacher training and its philosophy. The National policy on education 1986, also reflects precisely this change in its concept and practice. These findings of the study are in support of the recommendations of expert committee appointed by the NCTE under the Chairmanship of Prof. R.C. Das (1995). Committee feel that if part time face to face institutions programmes are equivalent to face to face full time institutional programme, then the NCTE may consider their recognition after obtaining detailed in formation.

Table No.5.01 reflects the significant difference in the performance of distance trainees and formal trainees with regard to personal qualities and professional competence. The means and standard deviations was found to be 40.22 (4.90) and 38.86 (4.07) for personal qualities. This value of (t=2.62) showed a significant difference between both the groups of trainees. In case of professional competence means and S.D.s. were found to be 10.15 (1.97) and 9.74 (1.74) for distance group and formal
group of trainees respectively. The t-value i.e. 2.71 reflected a significant difference between the professional competence of trainees. In case of third dimension i.e. 'classroom Performance' of Teacher Rating Scale, the t-value was found to be 0.47 which showed that there is no significant difference on this dimension between both the groups of trainees.

Trainees trained either through distance mode or formal mode are more or less same in class Performance. Trainees of formal group were less active, dull, direct students activity in mandatory manners rough, unimpressive whereas the trainees of the distance group were more active, having cheerful look, stimulating and democratic. The level of confidence was higher in case of trainees trained through distance education as compared to the trainees trained through formal mode of training. Trainees belong to distance mode were more efficient and confident in teaching situation. The impact of distance training programme on the class room Performance of teacher trainees was more favourable. Formal mode of training provides the teacher-trainees with an opportunity to acquire knowledge under the direct guidance and supervision of teacher, whereas the distance mode is innovative approach, forward looking and flexible. Much of teacher training is viewed in terms of its impact on teacher behaviour. Distance teacher training is as important as formal teacher training. The studies conducted by Upreti, D.C. 1988), Gautam, R (1990) and Pugazhenti, G. (1991) in addition to other factors, also explored those distance learners characteristics who had joined teacher training programme through distance education. The findings of the present study are in agreement with findings of Jevans (1992) who found that off campus students were no worse than on campus students. Sreekumar (1978) also found that distance education facilitates development of managerial skills. Students of management programme could develop analytical skills, decision making skills, communication skills, public relation skills and negotiation skills. Findings of the present study does not support the findings of Akthar(2002) who found insignificant difference between the two group of teacher trainees with regard to process variable of competence. Akthar(2002) found no difference with regard to the skill of planning such as content selection, organization, objectives of lesson and audiovisual aids, skills of presentation such as introducing the learner, questioning, explanation, use
of silence and non-verbal cues and closure skills, evaluation skills and the managerial
skills of recognizing, attending behaviour, maintaining discipline etc. The studies of
service teacher training on teaching competency and attitude towards teaching.

Objective 2:
The second objective was to study the impact of different modes i.e. distance mode and
formal mode of teacher training on attitude towards teaching of B.Ed. trainees. In order
to achieve this objective hypothesis -2 was formulated. This section presents the results
of the analysis pertaining to this hypothesis.

HYPOTHESIS 2.0
This second major hypothesis was that "There is no significant difference
between attitude towards teaching of B.Ed. teacher trainees trained through either
distance mode or formal mode." This hypothesis was further split into six sub-
hypotheses on the basis of dimensions of the Attitude Towards Teaching Inventory.
There were six dimensions of Attitude Inventory i.e. Teaching Profession, 'Class-room
Teaching,' 'Child centered Practices', 'Educational processes,' 'pupil and Teacher'. Each
of these dimension related was to the attitude towards teaching.

Sub-hypothesis:-

2.1 There is no significant difference between respondent groups with regard to attitude
towards 'Teaching Profession' in relation to modes of training.

2.2 There is no significant difference between respondent groups with regard to attitude
towards 'class room teaching' in relation to modes of training.

2.3 There is no significant difference between respondent groups with regards to attitude
towards 'child centered Practices' in relation to modes of training.

2.4 There are no significant differences between respondent groups with regard to attitude
towards 'educational process' in relation to mode of training.

2.5 There is no significant difference between respondent groups with regard to attitude
towards 'pupils' in relation to modes of training.

2.6 There is no significant difference between respondent groups with regards to attitude
towards 'teacher' in relation to modes of training

Sub Hypothesis 2.1:-
Table 5.02
Significance of difference between distance and formal mode in relation to attitude towards teaching.

<table>
<thead>
<tr>
<th>Sl N.</th>
<th>Variables Dimensions</th>
<th>Distance mean N=150 M1</th>
<th>Distance S.D. 1</th>
<th>Formal mean N=150 M2</th>
<th>Formal SD2</th>
<th>D = M1- M2</th>
<th>t test value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Teaching Profession</td>
<td>38.42</td>
<td>6.055</td>
<td>39.07</td>
<td>6.12</td>
<td>0.65</td>
<td>0.93</td>
<td>NS</td>
</tr>
<tr>
<td>2.</td>
<td>Classroom Teaching</td>
<td>42.39</td>
<td>6.066</td>
<td>39.65</td>
<td>4.97</td>
<td>2.74</td>
<td>4.35</td>
<td>**</td>
</tr>
<tr>
<td>3.</td>
<td>Child centered Practices</td>
<td>42.08</td>
<td>5.957</td>
<td>41.04</td>
<td>4.94</td>
<td>1.04</td>
<td>1.55</td>
<td>NS</td>
</tr>
<tr>
<td>4.</td>
<td>Educational Process</td>
<td>40.78</td>
<td>5.484</td>
<td>45.32</td>
<td>5.67</td>
<td>4.54</td>
<td>7.09</td>
<td>**</td>
</tr>
<tr>
<td>5.</td>
<td>Pupils</td>
<td>46.56</td>
<td>5.01</td>
<td>41.30</td>
<td>5.66</td>
<td>5.26</td>
<td>8.62</td>
<td>**</td>
</tr>
<tr>
<td>6.</td>
<td>Teachers</td>
<td>42.50</td>
<td>5.50</td>
<td>42.16</td>
<td>5.174</td>
<td>0.34</td>
<td>0.55</td>
<td>N.S.</td>
</tr>
<tr>
<td>7.</td>
<td>Total Attitude</td>
<td>253.12</td>
<td>14.41</td>
<td>248.82</td>
<td>13.48</td>
<td>4.3</td>
<td>2.68</td>
<td>**</td>
</tr>
</tbody>
</table>

*=Significance at .05 level
**=Significance at .01 level
N.S=Not Significant

Figure No. 14
Bar Diagram Showing significance of difference between distance and formal mode in relation to attitude towards teaching

Figure No. 15
The objective of this sub-hypothesis was to study the comparative impact of modes of training on the attitude towards ‘teaching profession’. To achieve this objective a null
hypothesis was formulated and was tested by applying t-test. Since the obtained t-value was found to be 1.82 which is not significant at any level (.05, .01). Hence, the sub hypothesis that there is no significant difference in the attitude towards ‘teaching profession’ of the two groups of B.Ed. trainees was accepted.

It was then concluded that so far as attitude forwards ‘teaching profession’ is concerned, it was affected more or less in the same was by any of these mode of training. It seems these two mode of teacher training are not very different, from one another with regard to this variable. Distance group of trainees have more favourable attitude towards ‘teaching profession’. It is thought that the teachers attitude not only affects his behaviour in the class but also influences the behaviour of the students. How a teacher performs his duty is dependent to a great extent on his attitudes. BaySal (1981) defines attitude as a cognitive, affective and behavioural response which is organized. On the basis of experience and knowledge, to the individuals himself/herself or any object or event around his/her environment. Individuals attitude towards their profession have an effect on their performance (Hussain et al., 2011). It is also acceptable for teaching profession, because the attitudes and perceptions of a profession affects professional competence and achievement, ‘trainees’ attitudes towards their profession have a great importance in fulfilling the requirements of the profession. (Drum soglu et al, 2009; Terzi and Tezci, 2007) Attitudes towards profession are one of the most important factors to be successful in the profession. For this reason, the belief that "someone who does not like the job cannot be successful in the profession" is quite common in society. To be successful in the teaching profession which require patience, dedication and continuous operation, it is important to like and willingly do this profession. Attitude towards the ‘teaching profession’ of trainees is the result of interaction of numerous factors. In the present study a comparative impact of mode of training was studied, in the light of comparison undertaken, it was found that the impact of two type of teacher training programme were more or less same on this dimension of attitude. The formal as well as distance training influence in the similar way. The findings of the study shown that both the training programmes are equally effective in developing attitudes towards teaching profession. Both the groups of trainees feel motivated is similar manners after this respective training. Teacher training
programme have a major roles to form the favourbale thinking towards teaching profession-Both the modes of training develop positive attitudes towards teaching profession, the content courses and pedagogical content courses taught is distance formal mode have a significant similar role.

**Sub Hypothesis 2.2**

This sub-hypothesis aimed at studying the effect of two types of training programme on attitudes towards 'class room teaching' of the trainees. To arrive at some conclusion a null hypothesis was formulated which was tested by applying the t-test. Results as shown in the table 5.2 revealed that t-value was found to be 4.35. Since it exceeds the table value of 2.63 for 299.4 of 0.01 level of significance. Therefore, the null hypothesis that 'there is no significant difference between the attitude towards 'class room teaching' of the two groups of trainees was rejected. It may be inferred from the above statement that mode of training i.e. distance mode and formal mode have different impact on attitude toward 'class room teaching'. High mean scores i.e. 42.39 (6.06).

On this dimension showing more favourable attitude towards class room teaching in case of distance group showing more favourable attitude towards ‘class room teaching’ in case of distance group. On the other hand low mean scores 39.65 (4.97) on this dimension was found in case of formal group of trainees. It seems that these groups of trainees i.e. distance trainees and formal group of trainees are different from one another with regular to attitude toward class room teaching. High mean scores on the 'class room teaching' dimension of inventory indicates that B.Ed. trainees who were trained through distance mode of training have more favourable attitude towards 'class room teaching'. Their clarification of more favorable attitude toward class room teaching indicates better pupils doubt, strengthen thinking and their desire to learn. This group of trainees was found more indirect, in the class room behaviour than the trainees with less favourable, attitude toward 'classroom teaching.' It may be pointed out that the trainees i.e formal group who have less favourable attitude toward ‘class room teaching’, expressed lack of satisfaction and interest in teaching. A more favourbale attitude toward class room teaching has been identified in the trainees trained through distance mode. It seems that distance training plays an important role in the
development of more positive attitude towards 'class room teaching'. In contrast Ramchandran (1991) reported that regular teacher trainees had a more favourable attitude towards teaching than correspondence course trainees. In a study conducted by Prasad, R. and John, I E.A. (1992) the distance trainees were found to have more control over class room situation so as to make students more disciplined than trainees of conventional group.

**Sub Hypothesis 2.3**

The third sub-hypothesis was that "there is no significant difference between distance and formal group of trainees with regard to attitudes toward child ‘centered practices.’

The purpose of this hypothesis was to investigate where the attitude toward ‘child centered practices’ is affected more by the distance training mode as compared to formal mode. Again both the means score on this dimension of attitude inventory were compared, using t-test. The t-value was found to be 0.61 which was insignificant at both levels. Thus, the null hypothesis was accepted and it was concluded that there is no significant difference between distance and formal mode of training as far as development of attitude toward child centered practices. It seems these two mode of training are not very different from one another with regard to the development of attitude toward ‘child countered practices.’

On the basis of result it can be concluded that both type of training programme are equally effective in respect of development of favorableness of attitude toward ‘child centered practices’. Both the streams have the same effect.

**SUB - HYPTOHESIS - 2. 4**

This sub hypothesis was that "There is no significant difference existing between the distance and formal training with regard to the development of attitude toward. 'Educational Process'. The purpose of this hypothesis was to find out how attitude towards ‘Educational Process’ was affected by distance mode and formal mode of training scores were compared by using t-test. To test this sub hypothesis two groups of teacher-trainees trained through distance mode and formal mode were compared by using t- test. The t value was found to be 7.09 which is significant at (.05 .01) levels."
Hence the null hypothesis was rejected and it was concluded that a significant difference was found in the attitude towards ‘Educational Process’ of trainees. The mean score on this dimension of teacher trainees trained through formal mode is higher (M=45.32, 5.67) to that of the trainees trained through distance mode (M = 40.78, 5.48). This shows that when the two groups of training are compared, a significant difference is found in the development of attitude toward 'Education Process'. From this it may be concluded that formal mode of training is more effective for the development of more favourable attitude toward ‘educational process’ such as attitude towards methods of teaching, school environment etc. formal mode of training provides the student teacher with an opportunity to acquire knowledge, skills and attitude under supervision of the teacher and clarify immediately the difficulties felt in comprehension.

**Sub Hypothesis - 2.05**

This sub hypothesis was stated as “There is no significant difference between distance mode and formal mode of teacher training with regard to the attitude toward ‘pupils’. To test this hypothesis t-test was used and it was found that t- value was 8.62 which is significant at .01 level. Hence, again the sub hypothesis was rejected and it was concluded that the difference of attitude toward ‘pupils’ is significantly different in groups of teacher trainees. High mean value i.e. 46.56 (5.01) on this dimension was in favour of teacher trainees trained through distance mode. These trainees have more favourable attitude toward pupils in comparison to other group. This group feels that students are generally sincere, live in harmony with each other, are disciplined and should be given freedom. On the other hand formal group of trainees are not enough competent in this behaviour. Lee (1950) demonstrated that teacher pupil relation in the class room were associated with teacher attitude. The teacher who has a positive attitude toward pupils means that they want to maintain better student teacher relationship and work with pupil in a social atmosphere of co-operative Endeavour. Distance mode of training can be seen as system which emerged as a result of certain cultural and social forces. Randall (1969) found that teachers with favourable opinion about children, concentrated less on subject matter. Bachelor (1975) studied teacher attitude and teacher response to pupil questions and found a significant relationship between them.
Sub Hypothesis 2.06
Next hypothesis involved in the study was that “There is no significant difference between the attitude towards ‘teachers’ of both the group of trainees.” Both the groups of teacher trainees have similar attitude towards teachers. That 't' value for comparing the attitude of teacher trainees towards teacher was calculated and found to be 0.55 which is not significant. Results as shown in Table 4.02 reveal that there is no significant difference between the trainees of both group as regard to attitude towards ‘teachers’. Thus, on the basis of this finding shall hypothesis was accepted. Hence, it can be inferred that the mode of training do not affect the attitude towards teacher. Both the groups of trainees have similar attitude towards teacher.

The composite scores on all the dimensions of attitude inventory of the both groups were also compared. Means values of composite attitude scores 253.12 (14.41) and 248.82 (13.48) was found for distance and formal trainees respectively. The t-value was computed to be 2.67 which is significant at .01 level. This indicates a significant difference between the two groups of trainees and hence the major null hypothesis that "there is no significant difference in the attitude towards teaching of trainees trained through distance mode and formal mode" is rejected. In day to day life also it may be seen that individuals who have positive attitude or more favorable attitude towards their work are more comfortable than the person who have been less favorable attitude towards their work. Attitude equip individuals with ready made frame of reference according to which they evaluate thing around themselves . The teacher trainees trained through distance system was found to have a more favorable attitude towards teaching profession as compared to the trainees trained through formal system of training. This finding of the study is supported by the results of the studies conducted by Farah Akthar, Chaturvedi, H.C. and Singh (1996) who found that distance teacher trainees have better attitude toward teaching in comparison to trainees trained through formal mode. They found that the distance education programme may develop better attitudes, than the formal system. It appears that distance education system plays an important role in the development of more positive attitude among trainees. Curiosity to increase their qualifications develop in them a positive attitude towards teaching.
Hypothesis - 3

The next hypothesis to be tested in this investigation was that: "There is no significant difference between teaching competence and Attitude toward teaching of B.Ed. teacher trainees of differing sex (male) and streams trained through Distance and Formal mode of teacher training."

Aimed at testing if there was any significant difference between the teaching competence and Attitude towards teaching of male B.Ed. teacher trainees trained through distance mode and formal mode. In other words, the interest of the researcher was in investigating of sex of the trainees related to the mode of training, if male distance trainees had higher or lower level of teaching competence and Attitude toward teaching as compared to the male formal trainees. The null-hypothesis formulated for this purpose. For this purpose teacher trainees were regroups into two categories- male teacher - trainees of distance mode and male teacher trainees of formal mode of training, means and S.D.s of these groups of teacher trainees were computed for all the three dependent variables involved in the present study. In order to test whether there was any significant difference between teaching competence and attitude toward teaching of male trainees of two modes, t-test was applied. The whole of the operation is presented in Table 5.03

Table 5.03
Significance of difference between teaching competence and attitude towards of male teacher trained through distance mode and formal mode of training.

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Variables</th>
<th>Distance mode N=150</th>
<th>Formal mode N=150</th>
<th>D = M1 - M2</th>
<th>t value</th>
<th>level of sign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
<td>SD1</td>
<td>M2</td>
<td>SD2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>92.27</td>
<td>6.27</td>
<td>91.07</td>
<td>12.62</td>
<td>1.2</td>
<td>1.05</td>
</tr>
<tr>
<td>2.</td>
<td>253.78</td>
<td>15.35</td>
<td>249.11</td>
<td>13.05</td>
<td>4.67</td>
<td>2.85</td>
</tr>
</tbody>
</table>

N.S.= Not significant
** = .01 level
Figure No. 16
Bar Diagram showing Significance of difference among teaching competence and Attitude towards teaching profession of Male distance and formal B.Ed. teacher trainees
The table 5.03 reveals that the obtained t-value is 0.74 for total teaching competence score which is not significant. The hypothesis of no difference is accepted and it is concluded that the male teacher trainees of distance mode and formal mode do not differ among themselves olds. This study analysis the significant of differences in the total teaching competence of male B.Ed. teacher trainees trained through distance mode and formal mode of teacher training in Kashi Vidyapith University, region. Total teaching competence consisted of personal qualities, professional competence and classroom management. In the present study it seems that two mode of teacher training are not very different from one another with regard to teaching competence of male teacher trainees.

Table 5.04 reveals that the composite attitude toward teaching score for male distance group of teacher trainees is found to be higher 253.78 (15.35) than that of the male of formal mode (249.11; 13.05). It may be said, in view of this, that level of attitude, towards teaching profession of male teacher trainees of distance mode is significantly higher as compared to that of the male teacher’s trainees of the formal group. The test of hypothesis 4 has revealed that male teachers trainees of distance group has more favourable attitude toward teaching as compared to the other group.

**Hypothesis -4**
This hypothesis aimed at testing the difference between total teaching competence and attitude toward teaching profession of female teacher trainees trained through distance mode and formal mode of training. To test this hypothesis t-test was used and two groups of female teacher trainees representing distance mode and formal mode of training were compared on total teaching competence and attitude toward teaching scores. Obtained scores given in the table 5.04.

**Table 5.04**
Significance of difference between teaching competence and Attitude towards Teaching of Female B.Ed. Teacher trainees trained through distance and formal mode.

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Variables</th>
<th>Distance mode N=150</th>
<th>Formal mode N=150</th>
<th>D= M1- M2</th>
<th>t value</th>
<th>level of sign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M1</td>
<td>SD1</td>
<td>M2</td>
<td>SD2</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Teaching Competence</td>
<td>94.48</td>
<td>12.82</td>
<td>94.37</td>
<td>12.08</td>
<td>0.11</td>
</tr>
<tr>
<td>2.</td>
<td>Attitude towards teaching</td>
<td>250.72</td>
<td>19.19</td>
<td>249.56</td>
<td>16.53</td>
<td>1.16</td>
</tr>
</tbody>
</table>

N.S. = Not Significant
Figure No. 1
Bar Diagram showing Significance of difference between teaching competence and Attitude towards teaching profession of Female B.Ed Teacher trainees trained through distance and formal mode.
Table 5.04 indicated that in case of teaching competence the t value was found to be 0.07. It was judged against the value at .05 and .01 level. The difference was not to be significant at both the levels i.e. .05 and .01. Thus, it revealed that the difference between the teaching competence of female groups trained through different modes of teacher training trained through different modes of is not significant. The null hypothesis was accepted.

From this finding it may be interpreted that modes of teacher training is not a significant factor in influencing the level of teaching of female teacher trainees. Still another part of this sub hypothesis to be stated under the main hypothesis - 4 was that there is no significant difference between the attitude toward teaching profession of female B.Ed. teacher trainees with regard to modes of training. For testing this sub hypothesis t-value was calculated and it was found to be 0.36 as given in the table 5.04. Again this value was not significant at 0.05 and .01 level of significance. Table 5.04 revealed that the mean value i.e. 250.72 (19.19) and 249.56 (16.53) were found for distance group and formal group respectively. It appeared that the mean value for attitude score 250.72 was found to be higher in case of female, teacher trainees trained through distance mode of teacher training. Thus the findings of the present study revealed that modes of teacher training i.e. distance mode and formal mode are not a significant factor in influencing the levels of teaching competence and attitude towards teaching profession of female teacher trainees.

**Hypothesis 5**

This hypothesis aimed at testing the difference between total teaching competence and attitude towards teaching profession of art group teacher trainees trained through distance and formal mode of training. To test this hypothesis t-test was used and two group of arts teacher trainees representing distance and formal mode of training were compared on total teaching competence and attitude towards teaching scores. Obtained scores given in the table 5.06.
Table 5.05
Significance of difference between Teaching competence and Attitude of Teacher trainees (Arts groups) for distance and formal mode

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Variables</th>
<th>Distance mode N=70</th>
<th>Formal mode N=80</th>
<th>D= M1- M2</th>
<th>t value</th>
<th>level of sign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M1</td>
<td>SD1</td>
<td>M2</td>
<td>SD2</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Teaching Competence</td>
<td>93.56</td>
<td>12.82</td>
<td>94.8</td>
<td>12.94</td>
<td>1.24</td>
</tr>
<tr>
<td>2.</td>
<td>Attitude towards teaching</td>
<td>251.01</td>
<td>19.19</td>
<td>252.87</td>
<td>12.37</td>
<td>1.86</td>
</tr>
</tbody>
</table>

N.S.= Not Significant
Figure No. 18

Bar Diagram Showing Significance of difference between Teaching competence and Attitude of Teacher trainees (Arts groups) for distance and formal mode.
In a faculty wise comparison (table 5.05) of teaching competence and Attitude towards teaching of Arts teacher trainees (distance mode and formal mode), the means and S.D.s were found to be 251.01. The t-values were found to be 0.51, 0.96 and 0.78 for teaching competence and Attitude towards teaching profession. The differences were
not found to be significant in all the three variables. Thus, it revealed that the difference between the teaching competence and attitude toward teaching of teacher trainees of arts distance and formal group are not significant. The null hypothesis was accepted. From this finding it may be inferred that mode of training is not a significant factor influencing the level of teaching competence and attitude feelings of arts teacher trainees.

Hypothesis-6
This hypothesis aimed at testing the difference between total teaching competence and attitude towards teaching profession of science teacher trainees trained through distance and formal mode. To test this hypothesis t-test was used and two group of science teacher trainees representing distance and formal mode of training, were compared on total teaching competence and attitude towards teaching scores obtained given in the table 5.07
Significant difference between teaching competence and attitude towards teaching of teachers trainees (science group) for distance and formal mode

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variables</th>
<th>Distance mode N=80</th>
<th>Formal mode N=70</th>
<th>D= M1-M2</th>
<th>t value</th>
<th>level of sign</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>M1</td>
<td>SD1</td>
<td>M2</td>
<td>SD2</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Teaching Competence</td>
<td>95.02</td>
<td>12.7</td>
<td>93.12</td>
<td>13.2</td>
<td>1.9</td>
</tr>
<tr>
<td>2.</td>
<td>Attitude towards teaching</td>
<td>253.78</td>
<td>15.21</td>
<td>252.18</td>
<td>14.41</td>
<td>1.6</td>
</tr>
</tbody>
</table>

N.S = Not Significant

Figure No. 19
Bar Diagram showing significance of difference between Teaching Competence and Attitude towards teaching of Teacher trainees (Science Group) for Distance and Formal Mode.
In a faculty wise comparison (table 5.06) of teaching competence and attitude towards teaching of science teacher trainees (distance mode and formal mode) the t-value were found 0.98, 0.66 and 0.41 for teaching competence and attitude towards teaching. The difference was not found to be significant in all three variables. Thus, it revealed that the difference between the teaching competence and attitude toward teaching of teachers training of science distance and formal are not significant. The Null Mean hypothesis was accepted. From this findings it may be inferred that mode of training is not a significant factor influencing the level of teaching competence and attitude of science teachers training.

**Hypothesis -7**

This hypothesis aimed at testing the difference between total teaching competence and attitude toward teaching profession of Urban teacher trainees trained through distance mode and formal mode of training. To test this hypothesis t-test was used and two groups of Urban teacher trainees representing distance mode and formal mode of training were compared on total teaching competence and attitude toward teaching scores. Obtained scores given in the table 5.07.
Table 5.07
Significant of difference between teaching competence and attitude towards teaching of teachers trainees (Urban) for distance and formal mode

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Variables</th>
<th>Distance mode N=150</th>
<th>Formal mode N=150</th>
<th>D= M1-M2</th>
<th>t value</th>
<th>level of sign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M1</td>
<td>SD1</td>
<td>M2</td>
<td>SD2</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Teaching Competence</td>
<td>95.48</td>
<td>12.80</td>
<td>94.27</td>
<td>12.08</td>
<td>1.21</td>
</tr>
<tr>
<td>2.</td>
<td>Attitude towards teaching</td>
<td>250.45</td>
<td>19.29</td>
<td>248.56</td>
<td>16.53</td>
<td>1.89</td>
</tr>
</tbody>
</table>

N.S = Not Significant
Figure No. 20
Bar Diagram showing significance of difference between Teaching Competence and Attitude towards teaching of Teacher trainees (Urban) for Distance and Formal Mode.
The table 5.07 reveals that the obtained t-value is 0.27 for total teaching competence score which is not significant. The hypothesis of no difference is accepted and it is concluded that the Urban teacher trainees of distance mode and formal mode do not differ among themselves olds. This study analysis the significant of differences in
the total teaching competence of Urban B.Ed. teacher trainees trained through distance mode and formal mode of teacher training. In the present study it seems that two mode of teacher training are not very different from one another with regard to teaching competence of Urban teacher trainees.

Table 5.07 reveals that the composite attitude toward teaching score for Urban distance group of teacher trainees is found to be higher 250.45 (19.29) than that of the Urban of formal mode 248.56(16.53). It may be said, in view of this, that level of attitude, towards teaching profession of Urban teacher trainees of distance mode is significantly higher as compared to that of the Urban teacher’s trainees of the formal group. The test of hypothesis -7 has revealed that Urban teachers trainees of distance group has more favourable attitude toward teaching as compared to the other group.

**Hypothesis 8**

this hypothesis aimed at testing the difference between total teaching competence and attitude towards teaching profession of Rural teacher trainees trained through distance and formal mode of training. To, test this hypothesis t-test was used and two group of Rural teacher trainees representing distance and formal mode of training were compared on total teaching competence and attitude towards teaching scores. Obtained scores given in the table 5.08.

**Table 5.08**

Significant of difference between teaching competence and attitude towards teaching of teachers trainees (Rural) for distance and formal mode
<table>
<thead>
<tr>
<th>SI No.</th>
<th>Variables</th>
<th>Distance mode N=150</th>
<th>Formal mode N=150</th>
<th>D= M1-M2</th>
<th>t value</th>
<th>level of sign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
<td>SD1</td>
<td>M2</td>
<td>SD2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Teaching Competence</td>
<td>90.08</td>
<td>11.40</td>
<td>91.56</td>
<td>11.66</td>
<td>1.84</td>
</tr>
<tr>
<td>2.</td>
<td>Attitude towards teaching</td>
<td>245.50</td>
<td>18.29</td>
<td>247.67</td>
<td>15.39</td>
<td>2.17</td>
</tr>
</tbody>
</table>

N.S.=Not Significance

Figure No. 21
The table 5.09 reveals that the obtained t-value is 0.57 for total teaching competence score which is not significant. The hypothesis of no difference is accepted
and it is concluded that the Rural teacher trainees of distance mode and formal mode do not differ among themselves olds. the composite attitude toward teaching score for Rural distance group of teacher trainees is found to be higher than the Rural of formal mode. It may be said, in view of this, that level of attitude, towards teaching profession of Rural teacher trainees of distance mode is significantly higher as compared to that of the Urban teacher’s trainees of the formal group. The test of hypothesis -8 has revealed that rural teachers trainees of distance group has more favorable attitude toward teaching as compared to the other group.

4.1 Results
On the basis of above tests of significance, the results of the study may be summarized in the following ways-

1a. For as the composite “teaching competence" scores of B.Ed. teacher trainees are concerned, it is clear from the analysis of hypothesis first that the distance mode of teacher training was associated with the high mean score of total teaching competence. Trainees trained through the distance mode were more competent than the trainees trained through formal mode in the overall competencies of teachers.

1b. B.Ed. trainees trained through distance mode was more competent than the other group with regard to "personal qualities" and "Professional Skills"

1c. Third dimension of rating scale i.e. "classroom performance skill" was not found to be affected by the modes of teacher training. Although a significant difference does not exist between the two groups of trainee, but the trend of scores shows that the trained through distance through distance mode were more competent in the "class room performance skill" than the trainees trained through formal model.

2a. A significant difference in the composite scores on "attitude towards teaching" was found. Trainees trained through distance mode having more favourable" attitude toward teaching."

2b. Both the groups of trainees were significantly different to each other in case of attitude toward "class room teaching," attitude towards "educational process" and attitude towards "Pupils". Trainees trained through distance mode having more favourable attitude toward" classroom teaching" and "pupil"
2c. Trainees trained through formal mode of training express high level of attitude toward "educational process"

2d. Both the groups of trainees were not significantly different from each other with regard to attitude towards - teaching profession, Child Central Practices and attitude towards teacher.

3. There was no significant difference between the total teaching competence and attitude toward teaching of male teacher trainees trained through distance mode and formed mode of teaching training.

4. Female teacher trained through distance mode and formal mode were significantly different to each other with regards to Overall teaching competence scores and Total attitude towards teaching.

5. A significant difference was not found between the trainees of arts groups trained through distance mode and formal mode in relation to "teaching competence" and "attitude toward teaching".

6. There was no significant difference between the science groups of trainees through distance mode and formal mode of teacher training in relation to teaching competences and attitude toward teaching.

   It may be said , that the level of teaching competence and attitude toward teaching of male and female trainees trained through different modes do not differ significantly. Likewise, trainees, of arts and science Streams trained through distance and formal mode of trainees do not differ significantly with regard to teaching competence and attitude toward teaching.

7. A significant difference was not found between the Urban areas trainees of a trained through distance mode and formal mode in relation to "teaching competence" and "attitude toward teaching".

8. A significant difference was not found between the Rural areas trainees of a trained through distance mode and formal mode in relation to "teaching competence" and "attitude toward teaching".

   It may be said finally, that the level of teaching competence and attitude toward teaching of Urban and Rural areas trainees trained through different modes do not differ significantly.