CHAPTER - V
CONCLUSIONS, IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

The ultimate goal of any scientific research is to arrive at a final solution of the problem or an answer to the question with which the study was conducted. Such a solution is in the nature of being 'generalization' or 'conclusion'. These flow logically from the analysis and interpretation of the data. In the words of Pandey (1983), it is a kind of 'summing-up' or a "final pronouncement" on the fate of hypotheses tested by the researcher.

The term 'generalization' and 'conclusion' are operationally not very different; however, some distinctions can be made between the two. The process of generalizations is closely tied up with the analysis and interpretation of the data whereas the term conclusion represents the final result and a kind of inference deducible from generalization presupposes 'induction' while conclusions involve a process of 'deduction'.

Further, a research endeavour will go in waste if does not contribute to either theory building or to improvement of prevailing situation or practice in the field. Therefore, every study has to make meaningful recommendations for practice.

At the end some suggestions are also offered for further research. Therefore, the present chapter has been devoted to conclusions, implications and suggestions for further research.

5.1 CONCLUSIONS

On the basis of previous chapter, the following conclusions were drawn:

1. Gender is an important determinant of effectiveness of teacher training. Men and women teachers appeared to be at par with regard to contents, Presentation, Interaction, Transmission, Training material and Facilitator areas of training effectiveness.

2. Locality is closely linked with effectiveness of teacher training programme. Rural and urban teachers appeared to be at par with regard to contents, Presentation, Interaction and Transmission areas of effectiveness. But in this study rural and urban teachers differed in using training material and guided
by the centre facilitator. Teachers belonging to urban areas used the training material more than teachers of rural area. Similarly, centre facilitators of urban centres were more efficient and supportive than the rural area.

3. Academic rank is also closely linked with effectiveness of teacher training. Lecturers, TGTs and JBTs appear to use Contents, Presentation, Interaction, Facilitator and Transmission at par. However, TGTs tend to use Training material more than Lecturers and JBTs perhaps due to their exposure to technology as they were from Kendriya Vidyalayas and Navodaya Vidyalayas.

4. Variation in teaching experience matters in effectiveness of teacher training programme (i) Teachers with teaching experience of less than 5 years are more prone to use and learn contents than teachers having teaching experience between 11 and 15 years and 21 years and above. (ii) Teachers with teaching experience between 16 to 20 years tend to effectively use presentations more than the teachers with teaching experience between 6 to 10 years and 21 years and above. (iii) Teacher with teaching experience between 16 to 20 years tend to use transmission area more than teacher with teaching experience less than 5 years and between 11 to 15 years of teaching experience (iv) Teachers with teaching experience between 16 to 20 years tend to adopt training material more than the teachers with teaching experience less than 5 years and between 11 to 15 years of teaching experience.

5. Regions/locality has significant impact on the effectiveness of teacher training. Teachers of four regions North, western, North-East and Southern region appear to use contents and presentation at par with each other. (i) North & South regions teacher interacted more than North-East & western regions. (ii) North-East region teachers interacted more than the western regions. (ii) South region was more effective on receiving transmission than North region. (iv) Western region was more effective in using training material than North region and south regions. (v) Effectiveness of teacher training tended to use facilitator or the role of facilitator was more efficient in south region than North region and North-East regions.

6. The training effectiveness of teachers in 21 centres varies with regard to the following six areas of training as follows:
i) Content: the t values comparing means scores for the content area of training effectiveness in 21 centres were found to be significant at 0.01 and 0.05 level of significance for the pairs of centres i.e. 2&3, 3&5, 3&6, 3&7, 3&8, 3&10, 3&11, 3&14, 3&15, 6&7, 6&8, 7&9, 7&10, 7&11, 7&12, 7&13, 7&15, 7&16, 7&17, and 8&15. It means that content input differ significantly in the above mentioned pairs of the training centres. In rest of the centres the mean scores were found not statistically significant.

ii) Presentation: By comparing means scores for the presentation area of training effectiveness in 21 centres were found to be significant at 0.01 and 0.05 level of significance for the pairs of centres i.e. 1&8, 2&3, 3&5, 3&6, 3&7, 3&8, 3&9, 3&10, 3&11, 3&12, 3&13, 3&14, 3&15, and 3&17. It indicate that presentation input differ significantly in the above mention pairs of the training centres. In rest of the centres the mean scores were found not statistically significant.

iii) Interaction: While comparing mean scores for the interaction area of training effectiveness it were found to be significant at 0.01 and 0.05 level of significance for the pairs of centres i.e. 1&2, 1&3, 1&6, 1&8, 1&9, 1&10, 1&11, 1&12, 1&13, 1&14, 1&15, 1&16, 1&17, 1&20, 2&4, 2&18, 3&4, 3&6, 3&8, 3&10, 3&12, 3&19, 4&6, 4&8, 4&9, 4&10, 4&11, 4&12, 4&13, 4&14, 4&15, 4&16, 4&20, 5&6, 5&8, 5&9, 5&10, 5&12, 5&15, 6&7, 6&18, 6&19, 6&8, 6&9, 7&10, 7&11, 7&12, 7&13, 7&15, 7&16, 7&17, 7&20, 8&14, 8&18, 8&19, 8&21, 9&18, 9&19, 9&21, 10&14, 10&18, 10&19, 10&21, 11&18, 11&19, 11&21, 12&18, 12&19, 12&21, 13&18, 13&19, 13&21, 14&15, 14&18, 14&19, 15&18, 15&19, 15&21, 16&18, 16&19, 16&21, 17&18, 17&19, 17&21, 18&20 and 19&20. It means that interaction input differ significantly in the above mentioned pairs of the training centres. In rest of the centres the mean scores were found not statistically significant.

iv) Transmission: t values comparing means scores for the Transmission area of training effectiveness in 21 centres were found to be significant at 0.01 and 0.05 level of significance for the pairs of centres i.e. 1&3, 1&5, 1&6, 1&8, 1&9, 1&10, 1&11, 1&12, 1&13, 1&14, 1&15, 1&16, 1&17, 1&20, 2&6, 2&8, 2&9, 2&10, 2&13, 2&14, 2&15, 2&16, 2&17, 3&4, 3&6, 3&7, 3&8, 3&9, 3&13, 3&15, 6&16, 3&17, 3&18, 3&19, 3&21, 4&5, 4&6, 4&8, 4&9, 4&10, 4&11, 4&12, 4&13, 4&14, 4&15, 4&16, 4&17, 5&6, 5&7, 5&8, 5&9, 5&13.
It reveals that Transmission input differ significantly in the above mentioned pairs of the training centres. In rest of the centres the mean scores were found not to be statistically significant.

v) Training material: t values comparing means scores for the training material of training effectiveness in 21 centres were found to be significant at 0.01 and 0.05 level of significance for the pairs of centres i.e. 1&2, 1&19, 1&21, 2&3,2&4,2&5,2&6,2&7,2&8,2&9,2&10,2&11,2&12,2&13,2&15,2&16,2&17,2&18,2&19,2&20,2&21,3&6,3&9,3&10,3&11,3&13,3&14,3&15,3&16,3&17,4&9,4&10,4&11,4&13,4&14,4&15,4&16,4&17,5&14,5&21,6&14,6&19,6&21,7&9,7&10,7&13,7&14,7&15,7&16,7&17,8&9,8&10,8&11,8&12,8&13,8&14,8&15,8&16,8&17,9&19,9&21,10&19,10&21,11&19,11&21,13&19,13&21,14&19,14&21,15&21,16&21,17&19 and 17&21. It means that training material differ significantly in the above mentioned pairs of the training centres. In rest of the centres the mean scores were found not to be statistically significant.

vi) Role of facilitators: by comparing t values means scores for the Role of Facilitators area of training effectiveness in 21 centres were found to be significant at 0.01 and 0.05 level of significance for the pairs of centres i.e. 1&2, 1&3, 1&4, 1&8, 1&9, 1&10, 1&11, 1&12, 1&13, 1&14, 1&15, 1&16, 1&17, 2&3, 2&4, 2&5, 2&10, 2&19, 2&21, 3&4, 3&17, 3&18, 3&19, 3&20, 4&5, 4&6, 4&7, 4&8, 4&9, 4&10, 4&11, 4&12, 4&13, 4&14, 4&15, 4&16, 4&17, 5&6, 5&8, 5&9, 5&10, 5&12, 5&15, 5&16, 5&18, 5&19, 6&7, 6&8, 6&18, 6&20, 7&8, 7&9, 7&10, 7&11, 7&12, 7&13, 7&14, 7&15, 7&17, 8&10, 8&11, 8&15, 8&16, 8&18, 8&19, 8&21, 9&18, 9&19, 9&21, 10&18, 10&19, 10&21, 11&18, 11&19, 11&21, 12&18, 12&19, 12&21, 13&18, 13&21, 14&18, 14&19, 14&21, 15&18, 15&19, 15&21, 16&18, 16&19, 16&21, 17&18, 17&19, 17&21, 18&20, 19&20 and 20&21. It means that the Facilitators input differ significantly in
the above mentioned pairs of the training centres. In rest of the centres the means scores were found not statistically significant.

(vii) The perception of the teachers with regard to different areas i.e. Relevance of training content, Implementation of training content, Improvement in teaching process as a result of training, Facilitators of training programme, Learning material for participants, Appropriateness of the transactional approaches to the programme were found to be highly relevant in all the areas.

5.2 IMPLICATIONS OF FINDINGS

This study suggest that a different areas of training be lend together for effectiveness of teacher training programme. Teacher training appear to be distinct to so many ways and areas. However, individual differences seem to exist to different areas of teacher training due to variables like gender, locality, academic rank, years of teaching experience, regions and different training contras.

The Training programme was not effective for male & female teachers. It indicates that more effective training programme should be introduced to make the teacher training programme successful.

Again the training programme was not effective for rural & urban teachers in terms of contents, Presentation, Interaction & Transmission. It indicates that there is a need to improve these areas to make contents enriched & Presentation interesting. Good quality equipments should be introduced and power backup arranged to make sessions interactive & carry transmissions barrier free. Further, rural teachers should be provided training material and computer training well in advance so that they can also come to the level of urban teacher and thereby make the teacher training programme effective and successful one.

Similarly, Facilitator/resource person in the centre should be qualified and experienced, interested in facilitating the teachers, effectively conduct the group work for teachers coming from rural background is highly essential to improve the quality of effectiveness of the teacher training programme.

Again the training programme was not effective for lecturer, TGT & JBT in the concerned area i.e. contents, Presentation, Interaction, Transmission and facilitator. The situation is very depressing, as teacher did not perceive the contents, not attracted by the presentation, could not interact with the teaching end in regular
intervals etc. This calls for introspection in the part of the organizing agencies/ policy markers. The situation demands need assessment studies before launching training programme.

There was a significant difference in relation to teaching experience of teachers in the areas of contents, Presentation, Transmission and training material etc. The teachers having teaching experience between 16 to 20 years are more effective on the content coverage of teacher training the teachers having teaching experience below 5 years took benefit of presentations more than their counterparts. These finding suggest that teachers having teaching experience up to 5 years use the transmission of training more seriously and used materials during training than the most experienced teachers. There is a need to motivate the experienced teachers and make them aware about the importance of such training programme in enhancing quality of education in general.

The teacher’s of North East regions tended to use more two way interaction than western region. North region tended to adopt transmission area more than the western region. The transmission of programme in South region is more effective than North-East region. On training material north region is using more than North East region. Further, the finding related to interaction, Transmission and training material suggest that there is an urgent need to improve the distribution of training material in time and technical equipments and power backups should be introduced to make interaction & transmission effective & barrier free.

The training contents area of effectiveness inputs to all the centres were alike except CBSE Guwahati (Assam) which used contents in better manner than other centres. In case of Presentation area of effectiveness, on the average every centre appeared to be at par with regard to use and understanding of presentations from teaching end. On Quality of Interaction undertaken during the training through Edusat, it may be noted that most of the centres interacted with experts at teaching end at their own initiatives. Most of the centres found quality of transmission as better one and were of equitable standard. Use of supplied training material in most of the centres were equally distributed. The similar trend is visible with regard to facilitator area of effectiveness of teacher training through Edusat. Further the findings related to contents, Presentation interaction transmission training material & facilitator area of effectiveness of teacher training programme through EDUSAT needs to find out the
reasons for low effectiveness of the training programme and take adequate steps to improve the training programme.

5.3. SUGGESTIONS FOR FURTHER RESEARCH

In view of the experience gained following suggestions may be laid down for future researchers to overcome the limitations of the present study and also to extend it, further for arriving at broad generalization regarding the problem. For making effective use of EDUSAT network in teacher training the following suggestions may be offered to the researchers who have interest in the field and want to contribute in the domain of different areas of effectiveness of teacher training.

1. Similar but more exhaustive studies are needed in this area.

2. A comparative study may be conducted between actual classroom & virtual classroom to find out the difference (face-to-face, Video-Conferencing and online courses).

3. A similar study may be taken at a large sample.

4. Further research is also required in establishing the technology’s influence on teachers training, especially achievement and attitude.

5. A study may be undertaken to examine the preference of teachers for different areas of effectiveness.

6. Relation between different areas of effectiveness may be studied.

7. A study may be undertaken to see the impact of matching & mismatching of different areas of effectiveness.