CONCLUSIONS

Conclusions of the Research:

Conclusions of the present research are as follows –

1. There was significant difference at 0.01 level between the mean scores of attitudes of B.Ed. college trainees of control and experimental group. The mean attitude score of experimental group was $M=123.2$ with standard deviation 5.6 and control group with $M=110.9$ with standard deviation 3.55. The calculated $t$-value 13.23 at 0.01 level is greater than the table value i.e. 2.63 for df 98. *Thus it is concluded that the experimental group trainees had more positive attitude than control group trainees.* Hence the research hypothesis was accepted.

When the experimental group was exposed to cooperative learning strategy it enhanced the attitudes of trainees as compared to the control group which was taught through traditional methods of instruction. This was because trainees seem to prefer learning the subject by sharing knowledge, increase higher order thinking skills and self esteem of the trainees. They feel they understand the content effectively from their peers and release the burden of subject and enjoyed learning with cooperative learning strategy. Increase in self confidence changes their attitude from negative to positive towards the subject. The questionnaire and interview results also gave evidence that attitudes of trainees improved due to cooperative learning strategy.

2. There was significant difference at 0.01 level between the mean scores of adjustment of B.Ed. college trainees of control and experimental group. The mean adjustment score of experimental group is $M=117.3$ with standard
deviation 8.35 and control group with M= 112.7 with standard deviation 5.4. The calculated t-value 3.29 at 0.01 level is greater than the table value i.e. 2.63 for df 98. Thus it is concluded that the experimental group trainees were more adjusted than control group trainees. Hence the research hypothesis was accepted.

It means that cooperative learning strategy improved adjustment of trainees. While working on a common task in cooperative group’s trainees rely on each other, share their views learn to make effective communication, manage stress and conflict and learn the content in joyful environment without any burden of the subject. During interview, trainees shared their views about cooperative learning strategy and told that they learn the way of cooperation through showing respect to each others thought while studying the common task making them tolerant.

3. There was genderwise significant difference at 0.05 level between the post test mean scores of attitudes of B.Ed. trainees of experimental group. The mean attitude score of girl trainees is M= 121.25 with standard deviation 7.2 and boy trainees with M= 115.9 with standard deviation 9.45. The calculated t-value 2.30 was greater than table value i.e. 2.01 for df 48 at 0.05 level. Thus it is concluded that the girl trainees showed more positive attitude than boy trainees of experimental group. Hence the null hypothesis is rejected at 0.05 level of significance.

Boy trainees like to work in competitive environment due to bossing nature rather than cooperative environment. Girls are being naturally social, cooperative, and interdependent and found more hard working and goal oriented as compared to boy trainees. Hence girl trainees were found more positive towards the subject than boy trainees.
4. There was no regionwise significant difference between the post test mean scores of attitudes of B.Ed. trainees of experimental group. The mean attitude score of urban trainees is M= 121.1 with standard deviation 9.2 and rural trainees with M= 118.3 with standard deviation 6.64. The calculated t-value 1.27 is smaller than table value i.e. 2.01 for df 48. Thus it is concluded that there is no significant difference between the attitudes of rural and urban trainees of experimental group. Hence the null hypothesis is accepted.

5. There was no facultywise significant difference between the post test mean scores of attitudes of B.Ed. trainees of experimental group. The calculated F-ratio 0.398 is smaller than table value i.e. 3.23 for df 2 and 47. Thus it is concluded that there is no significant difference between the attitudes of Arts, Commerce and Science trainees of experimental group. Hence the null hypothesis is accepted.

Both the two conclusions 4 and 5 in the present research showed that there was no significant difference due to region and faculty of the trainees. The reason behind this may be that the experimental group trainee’s were oriented about how to work in the cooperative task. All the trainees follow the rules of cooperative learning and worked for group’s success without considering any discrimination of region or faculty. They worked for their and group’s success only.

6. There was no genderwise significant difference between the post test mean scores of adjustment of B.Ed. trainees of experimental group. The mean adjustment score of girl trainees is M= 139.2 with standard deviation 22 and boy trainees with M= 122.5 with standard deviation 8.2. The calculated t-value 4.29 is smaller than calculated t at 5% value i.e. 7.21.
Thus it is concluded that there is no significant difference between the adjustment of boy and girl trainees of experimental group. Hence the null hypothesis is accepted.

7. There was no regionwise significant difference between the post test mean scores of adjustment of B.Ed. trainees of experimental group. The mean adjustment score of urban trainees is M= 126.2 with standard deviation 20.2 and rural trainees with M= 117.8 with standard deviation 7.8. The calculated t-value 2.03 is smaller than calculated t at 5% value i.e. 6.36. Thus it is concluded that there is no significant difference between the adjustment of rural and urban trainees of experimental group. Hence the null hypothesis is accepted.

8. There was no facultywise significant difference between the post test mean scores of adjustment of B.Ed. trainees of experimental group. The calculated F-ratio 3.22 is smaller than table value i.e. 3.23 for df 2 and 47. Thus it is concluded that there is no significant difference between the adjustment of Arts, Commerce and Science trainees of experimental group. Hence the null hypothesis is accepted.

Reason behind conclusions 6, 7 and 8 in the present research may be due to the similar environment provided by the researcher to work in the cooperative group and trainees worked in their respective groups without any discrimination. The trainees acquired various social skills, personal skills and cognitive skills for success of self as well as group and fulfil their needs in cooperative groups showing improvement in adjustment.

9. There was no significant difference between the post test mean scores of attitudes of boy B.Ed. trainees of experimental group and control group. The mean attitude score of boy trainees of experimental group is M= 127.4 with standard deviation 27.1 and control group trainees with M= 
115.9 with standard deviation 9.5. The calculated t-value 1.89 is smaller than calculated t at 5% value i.e. 9.98. Thus it is concluded that there is no significant difference between the attitudes of boy trainees of experimental and control group. Hence the null hypothesis is accepted.

10. There was no significant difference between the post test mean scores of attitudes of girl B.Ed. trainees of experimental group and control group. The mean attitude score of girl trainees of experimental group is $M= 121.5$ with standard deviation 7.2 and control group trainees with $M= 103.5$ with standard deviation 20. The calculated t-value 4.47 is smaller than calculated t at 5% value i.e. 6.54. Thus it is concluded that there is no significant difference between the attitudes of girl trainees of experimental and control group. Hence the null hypothesis is accepted.

Though the results do not showed significant difference between the post test mean scores of attitudes of boy and girl trainee’s from experimental and control group but during interview trainees of experimental group told that by sharing knowledge their self confidence increased and now they do not have fear for the subject Instructional design. Working in cooperative group release the burden and made the subject interesting.

11. There was significant difference at 0.01 level between the post test mean scores of attitudes of rural B.Ed. trainees of experimental group and control group. The mean attitude score of rural trainees of experimental group is $M= 118.3$ with standard deviation 6.64 and rural trainees of control group with $M= 110$ with standard deviation 2.1. The calculated t-value 5.29 is greater than table value i.e. 2.704 for df 39 at 0.01 level. Thus the rural trainees of experimental group showed more positive attitude than rural trainees of control group. Thus it is concluded that there is significant
difference between the attitudes of rural trainees of experimental and control group. Hence the null hypothesis is rejected at 0.01 level of significance.

12. There was significant difference at 0.01 level between the post test mean scores of attitudes of urban B.Ed. trainees of experimental group and control group. The mean attitude score of urban trainees of experimental group is $M= 121.1$ with standard deviation $9.2$ and urban trainees of control group with $M= 110$ with standard deviation $6.4$. The calculated $t$-value $5.36$ is greater than table value i.e. $2.66$ for df $57$ at $0.01$ level. Thus the urban trainees of experimental group show more positive attitude than urban trainees of control group. Thus it is concluded that there is significant difference between the attitudes of urban trainees of experimental and control group. Hence the null hypothesis is rejected at $0.01$ level of significance.

The control group trainees worked in teacher centred and fearful environment. Trainees from experimental group worked in cooperative environment making them responsible, inculcated social skills, feedback and support from peers in turn enhanced higher order thinking skills and self esteem. This in turn improved attitudes of rural and urban trainees from experimental group.

13. There was no significant difference between the post test mean scores of attitudes of Arts B.Ed. trainees of experimental group and control group. The mean attitude score of Arts trainees of experimental group is $M= 123.8$ with standard deviation $4.8$ and control group trainees with $M= 127.6$ with standard deviation $8.9$. The calculated $t$-value $1.99$ is smaller than table value i.e. $2.00$ for df $54$. Thus it is concluded that there is no significant
difference between the attitudes of Arts trainees of experimental and control group. Hence the null hypothesis is accepted.

14. There was no significant difference between the post test mean scores of attitudes of Commerce B.Ed. trainees of experimental group and control group. The mean attitude score of Commerce trainees of experimental group is $M=123.3$ with standard deviation 6.45 and control group trainees with $M=111.8$ with standard deviation 7.85. Thus it is concluded that there is no significant difference between the attitudes of Commerce trainees of experimental and control group. The calculated $t$-value 2.13 is smaller than table value i.e. 2.57 for df 5. Thus it is concluded that there is no significant difference between the attitudes of Commerce trainees of experimental and control group. Hence the null hypothesis is accepted.

Results 13 and 14 showed that trainees from both the groups do not differ in attitudes but experimental group trainees in their interview reported that positive interaction, trust towards each other and cooperation among peers made the subject easy and learn content in enjoyable environment making their attitudes positive.

15. There was significant difference at 0.01 level between the post test mean scores of attitudes of Science B.Ed. trainees of experimental group and control group. The mean attitude score of Science trainees of experimental group is $M=127$ with standard deviation 8.05 and Science trainees of control group with $M=114.4$ with standard deviation 4.65. The calculated $t$-value 5.91 is greater than table value i.e. 2.704 for df 35 at 0.01 level. Thus the Science trainees of experimental group show more positive attitude than Science trainees of control group. Hence the null hypothesis is rejected at 0.01 level of significance.
The Science trainees from experimental group were oriented with cooperative work which benefited them in improving attitudes while control group trainees worked individually or competitively. Researchers showed that cooperative environment is better than competitive or individual working (Slavin, Johnson & Johnson, Holubec).

16. There was no significant difference between the post test mean scores of adjustment of boy B.Ed. trainees of experimental group and control group. The mean adjustment score of boy trainees of experimental group is $M=122.5$ with standard deviation 8.2 and control group trainees with $M=121.1$ with standard deviation 7.7. The calculated t-value 0.591 is smaller than table value i.e. 2.01 for df 43. Thus it is concluded that there is no significant difference between the adjustment of boy trainees of experimental and control group. Hence the null hypothesis is accepted.

17. There was significant difference at 0.01 level between the post test mean scores of adjustment of girl B.Ed. trainees of experimental group and control group. The mean adjustment score of girl trainees of experimental group is $M=139.2$ with standard deviation 22 and girl trainees of control group with $M=102.6$ with standard deviation 22.1. The calculated t-value 6.17 is greater than table value i.e. 2.70 for df 53 at 0.01 level. Thus it is concluded that the girl trainees of experimental group were more adjusted than girl trainees of control group. Hence the null hypothesis is rejected at 0.01 level of significance.

18. There was significant difference at 0.01 level between the post test mean scores of adjustment of rural B.Ed. trainees of experimental group and control group. The mean adjustment score of rural trainees of experimental group is $M=117.9$ with standard deviation 7.8 and rural trainees of control
group mean \(M=109.8\) with standard deviation 9.75. The calculated \(t\)-value 2.93 is greater than table value i.e. 2.75 for df 39 at 0.01 level. Thus it is concluded that the rural trainees of experimental group were more adjusted than rural trainees of control group. Hence the null hypothesis is rejected at 0.01 level of significance.

19. There was no significant difference between the post test mean scores of adjustment of urban B.Ed. trainees of experimental group and control group. The mean adjustment score of urban trainees of experimental group is \(M=126.2\) with standard deviation 20.2 and control group trainees with \(M=120.2\) with standard deviation 15.3. The calculated \(t\)-value 1.29 is smaller than table value i.e. 2.704 for df 57. Thus it is concluded that there is no significant difference between the adjustment of urban trainees of experimental and control group. Hence the null hypothesis is accepted.

20. There was no significant difference between the post test mean scores of adjustment of Arts B.Ed. trainees of experimental group and control group. The mean adjustment score of Arts trainees of experimental group is \(M=115.7\) with standard deviation 4.45 and control group trainees with \(M=113.8\) with standard deviation 1.42. The calculated \(t\)-value 0.12 is smaller than table value i.e. 2.704 for df 54. Thus it is concluded that there is no significant difference between the adjustment of Arts trainees of experimental and control group. Hence the null hypothesis is accepted.

21. There was significant difference at 0.05 level between the post test mean scores of adjustment of Commerce B.Ed. trainees of experimental group and control group. The mean adjustment score of Commerce trainees of experimental group is \(M=118.7\) with standard deviation 2.62 and Commerce trainees of control group with \(M=110.5\) with standard deviation 4.72. The calculated \(t\)-value 2.93 is greater than table value i.e. 2.51 for df
5 at 0.05 level. Thus it is concluded that the Commerce trainees of experimental group were more adjusted than Commerce trainees of control group. Hence the null hypothesis is rejected at 0.05 level of significance.

22. There was significant difference at 0.01 level between the post test mean scores of adjustment of Science B.Ed. trainees of experimental group and control group. The mean adjustment score of Science trainees of experimental group is $M= 118.5$ with standard deviation 8.7 and Science trainees of control group with $M= 110.6$ with standard deviation 10.4. The calculated $t$-value $4.14$ is greater than table value i.e. $2.704$ for df 35 at 0.01 level. Thus it is concluded that the Science trainees of experimental group were more adjusted than Science trainees of control group. Hence the null hypothesis was rejected at 0.01 level of significance.

From findings 16, 19 and 20 it was concluded that there was no significant difference between the post test mean adjustment scores of boys, urban and Arts trainees of experimental and control group. The reason behind this may be that in control group the trainees worked individually or competitively. They do not react with each other for sharing their views about the subject or feel jealous about classmates. In cooperative environment trainees’ cooperate with each other and depends upon each other for success. Though trainees from experimental group trainees worked in cooperative groups in interview they narrated that it was very hectic for waiting weaker members of group and get bored and want to work independently. The researcher also found that trainees worked with different learning styles. This differentiation affects the adjustment process and hence not showed significant difference in adjustment.
From finding 17 it was concluded that there was significant difference between the adjustments of girl trainees of both the groups. Though girls are naturally interdependent and devotionally work on any task but the girl trainees from experimental group were oriented about cooperation and they follow the principles of cooperative learning. This was not happened with trainees from control group.

Finding 18 showed that rural trainees significantly differ in adjustments of both the groups. Rural trainees from experimental group worked with urban trainees who care for peer’s learning. Urban trainees helped, motivated the rural trainees from experimental group which make them more adjusted and confident as compared to control group trainees who worked passively either individually or competitively.

Findings 21 and 22 indicated that both Commerce and Science trainees from control and experimental group showed significant difference in their adjustment. The reason may be that when the trainees from experimental group were exposed to cooperative learning strategy irrespective of their differences (gender, region and faculty) worked towards a common goal. Trainees of experimental group interact positively, resolve disputes, acquired various social and personal skills and get benefited from each other. This improved their adjustment whereas control group trainees learn the content in teacher centred competitive environment. There was no connection or bonding among the trainees of control group.