CHAPTER-V

MAIN FINDINGS, EDUCATIONAL IMPLICATIONS AND SUGGESTIONS

This chapter summarizes the analysis from the previous chapters, consolidate the research findings and focus the attention to major recommendations for necessary consideration and implementation. It also indicates what further research can be done to ensure support or validation of the research results.

The present chapter is confined to the main findings of the study, educational implications and suggestions for the further studies.

5.1 MAIN FINDINGS

5.1.1 Section Wise Mean Achievement Gain Scores and Standard Deviations of $E_1$, $E_2$ and $C$

1. Mean achievement gain scores of pupil-teachers taught through ICAI programme ($E_1$) in sections A, B and C were 2.04, 4.72 and 10.24 respectively. Standard deviations with respect to the said sections were 1.57, 2.07 and 5.51 respectively.

2. Mean achievement gain scores of pupil-teachers taught through ICAI programme -cum- Lecture method ($E_2$) in sections A, B and C were 2.96, 4.76 and 11.20 respectively. Standard deviations with respect to the said sections were 1.62, 2.01 and 3.55 respectively.

3. Mean achievement gain scores of pupil-teachers taught through traditional method of instruction ($C$) in sections A, B and C were 1.40, 2.76 and 7.12 respectively. Standard deviations with reference to the said sections were 1.00, 1.50 and 3.85 respectively.
5.1.2 **Objective Wise Mean Achievement Gain Scores and Standard Deviations of E₁, E₂ and C**

4. Mean achievement gain scores of pupil-teachers taught through ICAI programme (E₁) at different levels of learning viz. knowledge, understanding, application and skill were 4.56, 5.72, 3.88 and 2.84 respectively. Standard deviations with respect to the said levels were 2.66, 2.76, 1.72 and 0.94 respectively.

5. Mean achievement gain scores of pupil-teachers taught through ICAI programme -cum- lecture method (E₂) at different levels of learning viz. knowledge, understanding, application and skill were 4.76, 6.36, 4.52 and 3.28 respectively. Standard deviations with respect to the said levels were 1.88, 1.91, 1.08 and 0.74 respectively.

6. Mean achievement gain scores of pupil-teachers taught through traditional method of instruction i.e. Lecture method (C) at different levels of learning viz. knowledge, understanding, application and skill were 3.80, 4.80, 1.24 and 1.44 respectively. Standard deviations with reference to the said levels were 1.47, 1.73, 1.01 and 1.04 respectively.

5.1.3 **Mean Total Achievement Gain Scores and Standard Deviations of E₁, E₂ and C**

7. Mean total achievement gain score of pupil-teachers taught through ICAI programme (E₁) was 17.00 and Standard deviation score was 7.21.

8. Mean total achievement gain score of pupil-teachers taught through ICAI programme -cum- lecture method (E₂) was 18.92 and Standard deviation score was 4.79.
9. Mean total achievement gain score of pupil-teachers taught through traditional method of instructions i.e. lecture method (C) was 11.28 and Standard deviation score was 3.92.

5.1.4 Mean Attitude Gain Scores and Standard Deviations of $E_1$, $E_2$ and C

10. Mean attitude gain score of pupil-teachers taught through ICAI programme ($E_1$) was 36.24 and Standard deviation score was 14.79.

11. Mean attitude gain score of pupil-teachers taught through ICAI programme cum-lecture method ($E_2$) was 34.12 and Standard deviation score was 19.16.

12. Mean attitude gain score of pupil-teachers taught through traditional method of instructions i.e. lecture method (C) was 3.44 and Standard deviation score was 6.83.

5.1.5 Comparative Effectiveness of ICAI Programme & Traditional Method of teaching

13. ICAI programme was more effective than the traditional method of teaching in terms of section wise achievement of the pupil-teachers. However, the difference was not found significant for Section-A i.e. Meaning and concept of Learning.

14. ICAI programme and traditional method of teaching were equally effective at lower level of learning viz. knowledge and understanding level, whereas ICAI programme was more effective than the traditional method of teaching in terms of objective wise achievement of the pupil-teachers at higher order learning namely application and skill.

15. ICAI programme was more effective than the traditional method of teaching with regard to the total achievement of pupil-teachers.
16. Attitude of the pupil-teachers became more favourable towards ICAI when they were taught through ICAI programme than those taught through traditional method of teaching.

5.1.6 Comparative Effectiveness of ICAI Programme-Cum-Lecture Method & Traditional Method of teaching

17. ICAI programme-cum-Lecture method was more effective than the traditional method of teaching in terms of section wise achievement of the pupil-teachers.

18. ICAI programme-cum-Lecture method was more effective than the traditional method of teaching in terms of objective wise achievement of the pupil-teachers.

19. ICAI programme-cum-Lecture method was more effective than the traditional method of teaching with regard to total achievement of the pupil-teachers.

20. Attitude of the pupil-teachers became more favourable towards ICAI when they were taught through ICAI programme -cum-Lecture method than the pupil-teachers taught through traditional method of teaching.

5.1.7 Comparative Effectiveness of ICAI Programme & ICAI Programme-cum-Lecture Method

21. ICAI programme and ICAI programme-cum-Lecture method were similar in terms of section wise achievement of the pupil-teachers.

22. ICAI programme and ICAI programme-cum-Lecture method were similar in terms of objective wise achievement of the pupil-teachers.

23. ICAI programme and ICAI programme-cum-Lecture method were equally effective with regard to total achievement of the pupil-teachers.

24. ICAI programme and ICAI programme-cum-Lecture method were equally effective in terms of pupil-teachers attitude towards the ICAI programme.
5.2 EDUCATIONAL IMPLICATIONS

The findings of the present study have a number of implications for planners, administrators, teacher-educators and pupil-teachers. These are as under:

1. Interactive computer assisted instructions are found to be more effective than the traditional method of teaching. Therefore, different programmes having different contents related to other aspects of Educational Psychology and other subjects should be developed and provided to the students.

2. Teachers-Educators should get orientation in teaching through computer and pupil-teacher should be oriented to the computer based learning on the newly as well as technically introduced curriculum.

3. Extension lectures by prominent educationists, experienced computer teachers and technical experts should be arranged frequently to highlight the importance and usages of ICAI.

4. Workshops for teacher-educators should be arranged to develop necessary skills in developing Interactive computer assisted instructions.

5. The university and college Libraries should have resource material based on ICAI on different topics related to education i.e. Educational Psychology, Educational Philosophy, Educational Technology etc.

6. The curriculum of the different courses should be connected to the uses of computers in education.

7. Students should be encouraged to use interactive computer assisted instructions in preparing their projects, seminars, assignments etc.

8. The needed infrastructure such as provision of computer lab., internet facility, audio and video conferencing and other electronic devices should be provided to the students to get the optimum benefit of ICAI programmes.
9. Theoretical and practical aspects of ICAI should be included in pre-service and in-service training programme for teacher-educators.

5.3 SUGGESTIONS FOR FURTHER STUDIES

It is not only customary to give some pertinent suggestions and recommendations at the end of any research reporting. Obviously, an attempt has been made here to offer some specific, relevant, important and major recommendations in a concise form, on the basis of the investigation in hand, and it is deemed that these will find consensus of opinions among the persons who go through them.

On the basis of this intensive study, the investigator would like to highlight some suggestions for the researchers so that further studies can be conducted in the area:

1. In order to substantiate the findings of the study, a similar study can also be conducted on a large sample.

2. A similar study can also be conducted to study the effectiveness of the retention of learning in the students.

3. Effectiveness of ICAI programme can also be studied on different variables such as academic anxiety, academic self efficacy, self confidence etc.

4. A similar study can also be conducted to examine the effectiveness of Interactive Computer Assisted Instructions (ICAI) on the achievement of students pursuing graduation and post-graduation in different streams.

5. A similar study can be conducted to study the effect of ICAI programme in educational psychology on the achievement of students differentiated on the basis of locality, gender, socio-economic status etc.

6. A study can also be undertaken to examine the attitudes of parents towards ICAI programme.
7. ICAI programme in different subjects for special need learners can also be developed and its effectiveness can also be explored in terms of achievement and attitude of such students.

8. A study can also be undertaken to see the effect of ICAI programme in different teaching subjects at different levels.

9. A similar study can be conducted by taking the sample from other universities of Haryana or other states of India.

10. The status and role of Interactive Computer Assisted Instructions in the field of Teacher - Education can also be studied.