CHAPTER – V

SUMMARY, FINDINGS AND CONCLUSION
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5.1 Summary
With the growing complexity of the educational system due to the tremendous achievement of information in various educational fields teaching learning system which accompanies with mechanism of it makes the teaching learning system more relevant and productive experimented with the model of teaching with the help of the components extracted from review of related studies followed by t-test and Chi Square analysis.

5.2 Objectives of the Study
1. To study the Effective Teaching Learning System in Physical Science at some selected secondary level schools in West Bengal.
2. To construct a standardize questionnaire of Physical Science regarding Effective Teaching Learning System.
3. To find out the components of Effective Teaching Learning System on the basis of review of studies.
4. To determine significance level for Effective Teaching Learning System on the basis of locality.
5. To determine significance level for Effective Teaching Learning System on the basis of gender.
6. To find out mechanism of Teaching Learning System by applying a model in an experimental condition.

5.3 Methodology
The study was survey type descriptive research.
Tools:

A standardized questionnaire regarding Effective Teaching Learning System was used for conducting the study.

Sample:

Ninth grade students of some selected schools of Bankura district in West Bengal were considered as sample for conducting the study. Sampling technique was purposive in nature. Two hundred samples were taken randomly for conducting the t-test and 90 samples were taken for Chi Square Test.

5.4 Findings

5.4.1 Findings–1: Effective Components extracted from Review of Related Studies

1. Instructional Strategy.
2. Policy and Goals.
3. Reasoning.
5. Student-Teacher Relationship.
6. Quality of Curriculum.
7. Effective Leadership.
8. Evaluation System

5.4.2 Inferential Statistics

Hypotheses:

1. There is no difference of Instructional Strategy between boys and girls.
2. There is no difference of Policy and Goals between boys and girls.
3. There is no difference of Reasoning between boys and girls.
4. There is no difference of School Environment between boys and girls.
5. There is no difference of Student-Teacher Relationship between boys and girls.
6. There is no difference of Quality of Curriculum between boys and girls.
7. There is no difference of Effective Leadership between boys and girls.
8. There is no difference of Evaluation System between boys and girls.
9. There is no difference of mean between urban and rural areas in relation to Instructional Strategy.
10. There is no difference of mean between urban and rural areas in relation to Policy and Goals.
11. There is no difference of Reasoning between urban and rural areas.
12. There is no difference of School Environment between urban and rural areas.
13. There is no difference of Student-Teacher Relationship between urban and rural areas.
14. There is no difference of Quality of Curriculum between urban and rural areas.
15. There is no difference of Effectiveness of Leadership between urban and rural areas.
16. There is no difference of Evaluation System between urban and rural areas.

### 5.4.3 Hypotheses Testing

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n = Total observations of 100 in each group.

$t$ at 0.05 level = 1.97, $t$ at 0.01 level = 2.60, df = 198

*Sig. at 0.05 level, **Sig. at 0.01 level,

5.4.4 Findings–2 from Hypotheses Testing

All the hypotheses are significant which are based on locality and gender differences and therefore accepted and the corresponding null hypotheses are rejected.

5.4.5 Interpretation from Chi Square Test

Interpretation: Table 27 shows that the value of $\chi^2$ is found to be 53.59 which is greater than the table value of 5.99. Hence, the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 28 shows that the value of $\chi^2$ (calculated) is 21.66 which is greater than the table value of 5.99. Hence, the result is significant at 0.05 level, Therefore, the statement is accepted.

Interpretation: Table 29 shows that the value of $\chi^2$ (calculated) is 2.86 which is less than the table value of 5.99 and the result is not significant at 0.05 level. Therefore, the statement is rejected.
Interpretation: Table 30 shows that the value of $\chi^2$ is found to be 17.86 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 31 shows that the value of $\chi^2$ is 29.26 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 32 shows that the value of $\chi^2$ (calculated) is 46.66 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 33 shows that the value of $\chi^2$ (calculated) is 61.66 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 34 shows that the value of $\chi^2$ is found to be 19.99 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 35 shows that the value of $\chi^2$ (calculated) is 29.26 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 36 shows that the value of $\chi^2$ (calculated) is 20.86 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 37 shows that the value of $\chi^2$ (calculated) is 38.46 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.
Interpretation: Table 38 shows that the value of $\chi^2$ (calculated) is 40.06 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 39 shows that the value of $\chi^2$ (calculated) is 10.39 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 40 shows that the value of $\chi^2$ (calculated) is 37.26 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 41 shows that the value of $\chi^2$ (calculated) is 26.66 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 42 shows that the value of $\chi^2$ (calculated) is 51.46 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 43 shows that the value of $\chi^2$ (calculated) is 45.00 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 44 shows that the value of $\chi^2$ (calculated) is 62.06 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 45 shows that the value of $\chi^2$ (calculated) is 5.06 which is less than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is rejected.
Interpretation: Table 46 shows that the value of $\chi^2$ (calculated) is 29.06 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 47 shows that the value of $\chi^2$ (calculated) is 55.39 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 48 shows that the value of $\chi^2$ (calculated) is 40.86 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 49 shows that the value of $\chi^2$ (calculated) is 26.59 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 50 shows that the value of $\chi^2$ (calculated) is 61.66 which is greater than the table value and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 51 shows that the value of $\chi^2$ (calculated) is 41.59 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 52 shows that the value of $\chi^2$ (calculated) is 37.06 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 53 shows that the value of $\chi^2$ (calculated) is 49.39 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.
Interpretation: Table 54 shows that the value of $\chi^2$ (calculated) is 4.86 which is less than the table value of 5.99 and the result is not significant at 0.05 level. Therefore, the statement is rejected.

Interpretation: Table 55 shows that the value of $\chi^2$ (calculated) is 19.99 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 56 shows that the value of $\chi^2$ (calculated) is 6.06 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 57 shows that the value of $\chi^2$ (calculated) is 9.60 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 58 shows that the value of $\chi^2$ (calculated) is 34.39 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 59 shows that the value of $\chi^2$ (calculated) is 55.26 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 60 shows that the value of $\chi^2$ (calculated) is 45.60 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.

Interpretation: Table 61 shows that the value of $\chi^2$ (calculated) is 16.26 which is greater than the table value of 5.99 and the result is significant at 0.05 level. Therefore, the statement is accepted.
5.5 Conclusion

It is observed from the present study, Effective Teaching Learning System requires multiple dimensions which involves a holistic approach for Teaching Learning System in a better way.

From Chi Square values, different aspects of Teaching Learning System were found for productive education.

From t-test it was identified that Teaching Learning System can vary with respect to gender and locality.

For mechanism of Teaching Learning System, a model was applied in an experimental condition on the basis of some strategies and it was found adjusted mean score was better in that experimental condition.