V SUMMARY AND CONCLUSION

The instructional methods and materials are imperative as they make valuable contribution to the quality of student learning. They aid the growth of specific learning abilities and positively improve the students’ achievement. The application of instructional methods and materials become the most powerful tool for teachers to target the specific needs of individual students. Effective instruction involves the organization of content, the selection of appropriate learning strategies and the ongoing assessment of student progress toward learning objective. The goal of effective instruction is to improve student achievement and produce independent, self-regulated learners. Hence, the use of effective teaching method is imperative in order to achieve the goal of improving students’ achievement. A study entitled “Efficacy of instructional methods and materials prepared and used in the selected schools of Manipur State”, was taken up with the following objectives: To

- analyze the extent to which the instructional methods and materials are used in the selected high schools
- examine the attitude of teachers and students towards teaching learning practice
- develop instructional package (methods and materials)
- capacity building of the teachers on the application of instructional methods and materials
- evaluate the impact of instructional methods and materials on teaching learning process
- analyse the response of the students and teachers on the application of instructional methods and materials
Based on the above objectives, the following hypotheses are framed:

- There will be a significant difference in the students’ score among the experimental groups and control group.
- There will be a significant difference in the students’ score among the experimental groups.
- There will be a significant difference in the students’ score of pre test and post test among the experimental groups irrespective of students’ achievement level.
- There will be positive response from the students on the application of instructional methods and materials.
- There will be a significant difference in the scores obtained by the retention test among experimental groups and control group.
- There will be a significant difference in the scores obtained by the retention test among experimental groups.
- There will be a significant difference in the attitude of B.Ed. and non B.Ed. teachers towards instructional methods and materials.

The sample constituted for the preliminary study was 30 schools randomly selected from a list of schools prevailing in and around Imphal East and Imphal West district. Each school has 3 teachers teaching the subject social studies, one each for History, Geography and Civics. So a total of 90 teachers participated in the pre-survey and in addition 10 students were selected randomly, totally 300 students.

For the experimental study four schools were selected using purposive sampling method.

The criteria for the selection of the above schools were

- Government Co-education schools
- Facilities available in the school (power supply, hanging facilities, white board and space for using projector)
• Feasibility to conduct experiment
• Willingness of teachers to extend cooperation for the experiment
• Students with similar sets of academic performance

The data collection was done through questionnaire specially constructed for the preliminary survey. A five point likert type scale was used to examine the attitude of teachers and students towards teaching learning practice. An achievement test was developed to assess the impact of the developed package on the knowledge gained by the students after the completion of the programme. The opinionnaire was designed to evaluate the developed Instructional Package (CAI, Learner Centered Teaching Methods and Visual aids) through the opinion of experimental group students.

The salient findings of the study are summarized below:

A. PROFILE OF THE SELECTED SCHOOLS AND TEACHERS

• Twenty schools were found to be instructing the students through Manipuri language and the remaining ten schools through English.
• Regarding the classroom strength, thirteen schools had student strength of 40-59, nine schools had 20-39 and remaining eight schools had strength of above 60. Regarding the type of school, out of 30, 15 schools were government and another fifteen were private schools. And all the schools were equally distributed in rural and urban areas.
• Out of 90 teachers, 57 per cent belonged to the age group of 20-30 years, whereas thirty two per cent were in the category of 31-40 years and the remaining 11per cent was above 40 years. Majority (71 per cent) of the teachers were females.
• Regarding the educational qualification, 31 per cent were holders of graduate degree, 22 per cent and 30 per cent were holders of graduate degree with B.Ed. and post graduate with B.Ed.
respectively. And the remaining 17 per cent were only post graduates.

- In case of teaching experience, fifty per cent of teachers had an experience of up to 5 years whereas 39 per cent of them had 6-10 years experience and 11 per cent had more than 11 years of experience.

B. AWARENESS ABOUT INSTRUCTIONAL METHODS AND MATERIALS

- Majority of the teachers (87 per cent, 89 per cent) were aware of instructional methods and materials available for teaching learning process.

C. INSTRUCTIONAL METHODS AND MATERIALS USED

- All the selected teachers had used the traditionally oriented methods like lecture method followed by question and answer in teaching social studies. Sixty per cent of teacher revealed that they used interactive method like discussion for quick learning, which motivated the students to learn effectively and interestingly. And very few of them (11 per cent) had used field trip.

- Methods preferred by the social studies teacher are lecture method (74 per cent) lecture cum demonstration (66 per cent), lecture cum discussion (55 per cent),assignment (53 per cent), and question answer (50 per cent). And the remaining methods are group study, field trip, quiz, debate, project method and student extempore. This shows the teachers’ willingness to try out other instructional method besides lecture.

- All the selected teachers used textbook and chalkboard while 78 per cent of teachers used map. However, only 11 per cent of teachers had reported using computer in teaching. This shows that till
now, all the selected teachers had not yet received the modern technology.

- Social studies teachers mostly preferred computer (100 per cent), slide projector (94 per cent), whiteboard (90 per cent), film (80 per cent), television (80 per cent), charts, pictures and graphs (74 per cent), bulletin board (70 per cent), radio (65 per cent), and models (61 per cent). Majority of teachers (90 per cent) revealed that they would like to have whiteboard instead of chalkboard.

- Majority of the teachers (60 per cent) expressed that they were in need of instructional materials to teach effectively whereas very few teachers (8 per cent) were fully satisfied and the remaining 22 per cent of them were partially satisfied with the existing teaching materials.

- Teachers are willing to use instructional methods and materials and are aware of their potential to facilitate teaching learning process but they expressed the following problems in adopting instructional methods and materials. Problems are: lack of time (80 per cent), insufficient teaching materials (72 per cent), lack of financial assistance and inadequate infrastructure facilities (68 per cent), irregular power supply and lack of training (64 per cent and 63 per cent), lack of support from school authorities (56 per cent) and high cost of teaching materials (21 per cent).

- Regarding the facilities available for using instructional materials in schools, out of 30 schools, 25 schools had enough ventilation while 20 schools had hanging facilities in classroom. However, it is also noted that only eleven schools had access to adequate power supply or possessed power generator while fifteen schools had darkening facilities.
E. EXTENT OF THE UTILIZATION OF INSTRUCTIONAL METHODS AND MATERIALS

- All the selected teachers always used lecture method, followed by question answer, discussion and tutorial method. The rarely used methods are demonstration, dramatization, field trip and debate and group work.

- The instructional materials which always used in classroom teaching were textbook, chalkboard followed by maps and globes and white board. Majority of teachers (90 per cent) reported that textbook was the only tool for teaching and learning which the teacher used all the time than other teaching materials. The rarely used materials are charts, pictures, posters, models, photographs, scrapbook, flesh card, T.V, film, computer and projector.

F. ATTITUDE TOWARDS TEACHING LEARNING PRACTICE

- About 70 per cent of teachers had favourable attitude towards instructional methods/materials. Positive attitude would definitely influence the teachers’ acceptance of the usefulness of instructional technology and also the available instructional resources and include them in their classroom.

- A significant difference was found in the attitude of B.Ed. and non-B.Ed. teachers towards the instructional methods. Hence, B.Ed. teachers have more favourable attitude than non B.Ed. teachers towards instructional methods and materials.

- No significant difference was found in the attitude of government and private teachers towards instructional methods and materials.

- It was also found that urban teachers are more inclined towards instructional methods and materials than their counterparts in the rural areas.
• No significant difference was found in teachers’ attitude towards instructional methods and materials based on teaching experience. This indicates that teaching experience does not affect the perception of the teachers regarding instructional method and materials.

• Majority of students (73 per cent) had favorable attitude towards instructional methods. It is further indicated that the students reacted positively towards using a variety of instructional methods and activities during the social studies class to reduce monotony and boredom. Students were in favour of working in groups and they would like to share their opinion and views concerning the subject matter. This shows that students are more likely to bring change in the existing teaching practice.

G. EFFECT OF INSTRUCTIONAL PACKAGE ON THE ACADEMIC PERFORMANCE OF STUDENT

Overall academic performance between experimental groups and control group

• Students who were taught by the computer assisted instructions learned more and showed higher achievement than those who were taught with conventional method of teaching. This is due to the favorable impact of computer assisted instruction on the achievement of students.

• Students who were taught with selected visual aids performed significantly better than the control group.

• The performance of experimental group III who was exposed to learner centered teaching methods was significantly better than those of the control group. This indicates that student centered teaching method created a better learning atmosphere and improved students’ perception and motivation towards subject matter.

• Among the three variables, computer assisted instruction is the most effective instructional method followed by learner centered teaching
methods and selected visual aids. All the 3 independent variable has its own impact on students’ performance.

- Computer assisted instruction has resulted in good retention among the students followed by learner centered teaching methods and visual aids. Therefore, it can be concluded that the three instructional methods had an impact on memory retention.

- Students who learnt lessons with three different methods could retain the information for longer time than the students taught with conventional method of teaching.

- There was no significant difference in students’ performance scores between boys and girls among three experimental groups. This implies that gender difference does not affect the performance of the pupils no matter the method used in the teaching.

- There was no significant difference in retention scores between boys and girls among three experimental groups.

Comparison by achievement level among experimental groups

- Students’ having different achievement level of experimental group I gained significantly higher score in the post test achievement. This is due to total involvement of the students in the computer assisted learning which helps in motivating the learners and arouses curiosity and ultimately enhanced the absolute learning.

- The achievement level comparison of experimental group II also shows that the performance score of experimental group II students in the post test is comparatively higher than that of the pre test which indicated the positive impact of visual aids in teaching social studies.

- The performance score of pre test and post test for experimental group III with regard to students’ achievement level was found to be significant at 1 per cent level.
Thus, the application of instructional package in classroom has a great impact on teaching learning process. Among the three methods, computer assisted instruction is the most effective method followed by learner-centered teaching method and visual aids. Focussing on the principle role of instructional methods and materials, it has significant value in the improvement of the quality of teaching learning process.

H. STUDENTS’ OPINION REGARDING THE APPLICATION OF INSTRUCTIONAL PACKAGE

The opinions of the students are summarized as under:

**Opinion about Computer Assisted Instruction**
- Graphic presentation was relevant and appropriate and easy to understand.
- Increase the level of interest in learning.
- Students rated computer assisted instruction better than the conventional method of teaching.

**Opinion about visual aids**
- Visual aids bring clarity of concepts and easy understanding.
- Students become active participants in classroom and increased the level of interest in learning social studies. This shows that students had high level of motivation after being introduced to visual aids.
- Learning is enjoyable.

**Opinion about learner centered teaching method**
- Develop deep understanding about the subject matter.
- Group activity enhances the development of individual confidence.
- Develop good relationship between students.
- It arouses interest and students become active participants.
- They favored learner centered teaching method.

**SUGGESTIONS AND RECOMMENDATIONS**

The following suggestions and recommendations may be considered by the government, schools and teacher for improving the quality of education:
Recommendations for government

1) Financial assistance should be given to schools for the purchase of instructional materials and equipment.

2) Every school should be well equipped with better known technology and necessary materials such as computer, projector, video recorder and visual materials since most of the schools were found to be lacking in this area.

3) Adequate electricity should be provided to schools. The supply should be made regular since power supply was found to be a main barrier in adopting instructional technology in schools. They should install the inverter in order to have regular power supply.

4) Provide adequate number of computers to every school since it has positive impact on students' achievement level.

Recommendations for school

1. Refresher course, seminars, speeches workshops, conference should be conducted to update the knowledge of teacher regarding the preparation and use of instructional methods and materials.

2. School administrators should make efforts to monitor school environment and teachers in the process of teaching and learning.

3. Instructional methods and materials need to be integrated in the curriculum of the entire subject.

4. The school principals should give necessary support to teachers for effective teaching and learning of Social Studies.

Recommendations for teachers

1. Proper training should be given to teachers on the application of instructional methods and materials.

2. Adequate time should be allotted to develop new technological and pedagogical skills.
3. Teachers should have a positive attitude towards the use and maintenance of the materials available in their schools.

4. Teachers should change from conventional lecture method to student centered teaching method to teach Social Studies at high school.

**Recommendations for future research**

1. Researcher should undertake a study to determine the effectiveness of various types of teaching methods for different subjects.

2. A similar study on the availability, utilization of instructional materials and methods to the Self Help Groups for imparting awareness programme.

**FIGURE 30: IMPACT OF INSTRUCTIONAL METHODS AND MATERIALS ON SCHOOL STUDENTS**
Conclusion

The results of the present study point out that the application of instructional package as supplementary strategy in teaching social studies was found to be effective and significant because the developed instructional package increased the interest and enhanced the motivation level of students. It was found to be equally effective for both low achievers, high achievers and average. The conclusion is evident that the computer assisted instruction (CAI) is the most effective method followed by learner centered teaching method and visual aids for teaching social studies at secondary level. Such educational materials can serve as either alternative or supplementary material to direct teaching. Therefore, the efficient use of instructional method and materials should be ensured at all the levels of education. The instructional method and materials can have an enormous effect on the academic performance of students if the standard quantity and quality of instructional material items are properly allocated, equalized per student and efficiently used.