His Holiness, the Dalai Lama (1977) in his book "My Land and My People" wrote, "The children have been a special concern to me …… . We had to do something drastic to preserve their health, and their education is a matter of great importance. These children in India may be very important people, a nucleus to preserve their peaceful religion and culture which is being wiped out in Tibet".

With the support from the Indian Government separate Tibetan schools were set up throughout India to provide these children a balanced education (modern and traditional).

Educators and teachers of the 19th Century were of the view that the educational objectives could be achieved only by those who had an opportunity to attend the school. It was taken moral failure and lack of effort on the part of a student who could not achieve these objectives. With the dawn of movement in mental measurement during the first two decades of the present century, a change took place in thinking about the achievement of educational objectives. The teachers started believing that all students can not achieve all the objectives to the same degree and they also differ in their potentialities to learn. With this, the practice of grading the students on a normal probability curve got firmly established. However, recently
there has been a shift in this thinking and it has been shown that all can learn well under a set of certain conditions.

A modern approach to the notion that most students can learn what the schools have to teach, has been developed under the rubric of mastery learning. The mastery learning starts with the assumption that:

(i) almost all students can and will master a great deal of what they are taught in school if the instructions are approached systematically, if the students are helped when and where they have learning difficulties, if they are given sufficient time to achieve mastery;

(ii) gives the learner the idea of where he is going (terminal behaviour), makes the learner understand the nature of the task to be learnt and the procedure to be followed in learning;

(iii) is designed so that as many students as possible can achieve the objectives of education to the appropriate level; and

(v) grade each student on whether he has or has not achieved the course objectives to the appropriate level rather than how well he has achieved them relative to his peers.

Personalised system of instruction is the teaching strategy which makes use of the concept of mastery learning. The instructor who wishes to use PSI begins by subdividing his whole course into a series of teaching-learning units. The course
objectives to be mastered in each unit are determined. The instructor then develops teaching material in the form of a study guide for each unit through which all students can be initially exposed to the material. The simple feedback/correction procedures are also developed for each unit. The mastery standard which students are expected to achieve (usually 90/90) is fixed. The student begins his study of the first unit by following the procedure laid down in the unit’s study guide. His performance is judged by his proctor and after the attainment of mastery of the unit, he proceeds to the next unit. This procedure is adopted to teach the other units.

Besides personalised system of instruction, there are other curricular activities in the teaching learning process, namely, problem solving, project activity and quiz etc. which enhance the performance of students. Along with personalised system of instruction, project activity is another strategy whose effect is to be studied in the present investigation.

The project activity is the significant landmark in the history of the methodology of education. The project method is not totally new. This method owes its origin to the American philosophers belonging to the pragmatic school of philosophy. Project method was evolved by Kilpatrick as a modification of the idea given to the educational world by Dewey. According to him, "project is a whole hearted purposeful activity, proceeding in a social environment". The idea behind this method is to put a group of children on their own in the completion of a certain assignment. This is a method of combining education with activity and responsibility.
The project provides opportunity for learning through self-study, resourcefulness and doing. The main focus of this strategy is to socialise a child.

In project method, the teacher introduces the chosen subject matter to the group through conventional method of teaching. The students prepare a list of suitable projects/project activities, reject few, explain them and thus take a decision regarding the selection of the project activities. They define and explain each project activity in detail, take resources into considerations and frame a plan for their execution. Students distribute duties among themselves according to their individual interests and needs. Each student keeps a record of the proceedings of the project activity in his/her note book. The teacher provides guidance and direction towards completion of the activity. The teacher keeps the records of the mistakes committed and makes suggestions for improvement. Further, the teacher guides the students to complete the project report of each activity on the basis of the records of the proceedings.

From the survey of the related literature, it is evident that most of the studies were conducted to find out the effect of personalised system of instruction on the academic achievement of students; very few studies were conducted to study the effect of personalised system of instruction and project activity on the academic and affective variables. Apart from intelligence and teaching strategies, there are certain variables like academic motivation, attitude of students towards the subject and study-habits which are directly and positively related to the academic achievement of
students. Hence it was thought worthwhile to study the effect of personalised system of instruction and project activity on the academic and affective outcomes of Tibetan students.

5-1 Objectives of the Study

The following objectives were laid down for the present study:

1. To study and compare the effect of personalized system of instruction and the conventional method of teaching on the academic achievement of Tibetan students in social studies.

2. To study and compare the effect of project activity and the conventional method of teaching on the academic achievement of Tibetan students in social studies.

3. To study and compare the effect of personalized system of instruction and the project activity on the academic achievement of Tibetan students in social studies.

4. To study and compare the effect of personalized system of instruction and the conventional method of teaching on the academic motivation of Tibetan students.

5. To study and compare the effect of project activity and the conventional method of teaching on the academic motivation of Tibetan students.
6. To study and compare the effect of personalised system of instruction and the project activity on the academic motivation of Tibetan students.

7. To study and compare the effect of personalized system of instruction and the conventional method of teaching on the attitude of Tibetan students towards social studies.

8. To study and compare the effect of project activity and the conventional method of teaching on the attitude of Tibetan students towards social studies.

9. To study and compare the effect of personalized system of instruction and the project activity on the attitude of Tibetan students towards social studies.

10. To study and compare the effect of personalized system of instruction and conventional method of teaching on the study habits of Tibetan students.

11. To study and compare the effect of project activity and conventional method of teaching on the study habits of Tibetan students.

12. To study and compare the effect of personalized system of instruction and the project activity on the study habits of Tibetan students.
5-2 Hypotheses of the Study

The following hypotheses were formulated for the present study:

1. The academic achievement of Tibetan students in social studies taught through personalized system of instruction differs significantly in comparison to the students taught through conventional method.

2. The academic achievement of Tibetan students in social studies taught through project activity does not differ significantly in comparison to the students taught through conventional method.

3. The academic achievement of Tibetan students in social studies taught through personalized system of instruction does not differ significantly in comparison to the students taught through project activity.

4. The academic motivation of Tibetan students taught through personalized system of instruction does not differ significantly in comparison to the students taught through conventional method.

5. The academic motivation of the Tibetan students taught through project activity does not differ significantly in comparison to the students taught through conventional method.

6. The academic motivation of the Tibetan students taught through personalized system of instruction does not differ significantly in
7. The attitude of the Tibetan students towards social studies taught through personalized system of instruction does not differ significantly in comparison to the students taught through conventional method.

8. The attitude of the Tibetan students towards social studies taught through project activity does not differ significantly in comparison to the students taught through conventional method.

9. The attitude of the Tibetan students towards social studies taught through personalized system of instruction does not differ significantly in comparison to the students taught through project activity.

10. The study habits of Tibetan students taught through personalized system of instruction do not differ significantly in comparison to students taught through conventional method.

11. The study-habits of Tibetan students taught through project activity do not differ significantly in comparison to students taught through conventional method.

12. The study-habits of Tibetan students taught through personalized system of instruction do not differ significantly in comparison to students taught through project activity.
5-3 Delimitations

The present study was delimited in the following aspects:

1. The study was delimited to the following teaching strategies:
   (a) Personalized System of Instruction - PSI,
   (b) Project Activity,
   (c) Conventional method of teaching.

2. The study was confined to VIIth grade Tibetan students studying in schools meant for Tibetans in Himachal Pradesh.

3. The study was restricted to the subject of social studies and further to the units of "Our Law Making Bodies", "Our Parliament in Action", and "Who Execute Laws".

4. The study was delimited to affective outcomes, namely, academic motivation, attitude of students towards social studies and study habits.

5-4 Tools Used

The following tools were used to achieve the objectives of the present study.

5-4.1 Study Guides

Ten study guides on the content 'Our Law Making Bodies', "Our Parliament in Action", and "Who Execute Laws", were developed by the investigator herself.

The entire content was divided into following ten units:
1. Lok Sabha
2. Rajya Sabha
3. State Legislative Assembly
4. Types of bills and passing of an ordinary bill
5. Money bill, procedure for passing the money bill
6. Speaker and chairman of Rajya Sabha
7. Chief Executive
8. Prime Minister and Council of Ministers
9. Chief Minister in a State
10. Governor in a State.

5-4.2 Formative Tests

For all the ten units, formative tests and their parallel forms were developed by the investigator herself to diagnose the learning errors of those who failed to achieve mastery and for reinforcing the learning of those who have mastered the material.

5-4.3 Summative Criterion Test

A summative criterion test for measuring the academic achievement of students was developed by the investigator herself. The preliminary draft of the test was evaluated in terms of:

(i) criterion difficulty of the test items,
(ii) sensitivity to instructional effect(s),
(iii) Reliability, and
(iv) Validity.
5-4.4 Raven’s Standard Progressive Matrices

Since three groups namely PSI, project activity and control were to be matched on intelligence, Raven’s Standard Progressive Matrices developed by Raven, Court, and Raven (1977) was used.

5-4.5 Academic Motivation Questionnaire

The Keela’s Academic Motivation Questionnaire developed by J. Hartley, J. Holt and F. Hogarath (1971) was adapted by the investigator on the population of Tibetan students. The suitability and appropriateness of items was judged by the experts. The experts for this purpose were drawn from the Faculty of Education, Himachal Pradesh University, Shimla and teachers teaching in the schools meant for Tibetans. Test retest reliability was calculated after a gap of one month by using Pearson’s Product Moment Method. The test-retest reliability came out to be 0.78.

5-4.6 Attitude Towards Social Studies Scale

Attitude towards social studies scale was constructed and standardised by the investigator herself. The preliminary draft of the scale was subjected to item analysis. Split-half reliability for the final draft was determined which came out to be 0.829. The content validity of the scale was also ascertained by getting the opinion of the experts.
5-4.7 Study Habits Inventory

For measuring the study habits of Tibetan students Study-Habits Inventory (English version) by B.V. Patel (undated) was used.

5-5 Methodology

5-5.1 Design of the Study

Three groups: Randomised Matched Subject Design was used in the present study which included following variables:

a) **Independent Variable:** Instructional strategies namely PSI, project activity and conventional method.

b) **Dependent Variables:**

- Academic achievement
- Academic Motivation
- Attitude towards social studies
- Study habits.

c) **Pertinent Control Variables**

- Level of academic achievement before the application of treatment variable
- Level of academic motivation before the application of treatment variable
Level of attitude towards social studies before the application of treatment variable

Level of study habits before the application of treatment variable.

5-5.2 Sampling

The present study based on 'Three groups randomised matched subject design' was conducted on a sample of 90 VIIth grade students of Central School for Tibetans, Shimla, Himachal Pradesh. The sample was divided into three groups using the technique of matching and randomisation. Three equivalent groups, namely, Keller’s PSI, project activity and control were formed on the non-verbal intelligence by using Raven’s Standard Progressive Matrices (1977). Since it was difficult to get exactly the same score for combination, a match was obtained within a range of ±5. Finally the sample consisted of 90 students with 30 students in each group. The three groups were assigned randomly to three experimental treatments.

5-6 The Experiment

The experiment was conducted in the following three phases:

Phase 1

In the first phase of the experiment, the summative criterion test, academic motivation questionnaire, attitude towards social studies scale and study-habits inventory were administered to all the three groups. All the tests were scored and the scores were recorded to serve as 'pre-test' scores.
Phase II

In the second phase of the experiment, the groups were assigned randomly to different teaching strategies. Out of the three groups one group was imparted instruction through personalised system of instruction; the second through project activity; and the third through conventional method of teaching. The investigator herself taught all the three groups to eliminate the ‘teacher effect’.

Phase III

After the completion of the instruction, all the three groups were readministered summative criterion test, academic motivation questionnaire, attitude towards social studies scale and study habits inventory. The scores thus obtained were recorded and termed as ‘post-test’ scores.

The experiment was carried out for ten weeks.

5-7 Analysis and Interpretation of Data

In the present study the groups were equated on the basis of subject to subject matching on the intelligence. It was thought worthwhile to test the significance of differences among means of the post-test scores of three groups of students on the variables under study by using the statistical technique of Analysis of Covariance, so as to adjust the initial mean differences in the pre-test scores of the different treatment groups, if any.
Before starting with the actual procedure of analysis of covariance, the assumptions of normality, randomness, homogeneity, additivity, correlation and regression were tested for the data. After testing the data for all assumptions, the technique of analysis of covariance was employed to test the significance of differences between means of the summative criterion test, academic motivation questionnaire, attitude towards social studies scale and study habits inventory after the completion of the instruction.

5.8 General Conclusions

In the light of analysis of data and interpretation of results, following conclusions were drawn:

1. The three treatment groups of Tibetan students, namely, Keller’s PSI, project activity and control differ significantly with regard to their academic achievement. Personalised system of instruction and project activity were found to be significantly more effective in enhancing the academic achievement than the conventional method of teaching in social studies. The academic achievement of Tibetan students taught through personalised system of instruction does not differ significantly in comparison to Tibetan students taught through project activity. However, the PSI group had a tendency to have higher mean of academic achievement scores than the project activity group.
2. The three treatment groups of Tibetan students, namely, the Keller’s PSI, the project activity and the control differ significantly with regard to their academic motivation. Project activity was found to be significantly more effective in enhancing the academic motivation of students than the conventional method of teaching. The PSI and the control groups do not differ significantly with regard to the academic motivation of students. But PSI group had a tendency to have higher mean of academic motivation scores than the control group. Similarly, PSI and project activity groups do not differ significantly with regard to the academic motivation of students. However, project activity group had a tendency to have higher mean of academic motivation scores than the PSI group.

3. The three treatment groups of Tibetan students, namely, the Keller’s PSI, the project activity and the control do not differ significantly with regard to their attitude towards social studies. However, the project activity group had a tendency to have higher mean of attitude towards social studies scores than the PSI and the control group.

4. The three treatment groups of Tibetan students, namely, the Keller’s PSI, the project activity and the control differ significantly with regard to their study habits. The PSI and project activity groups had significantly better study habits than the control group. Though, PSI and the project activity groups do not differ significantly with regard to the study habits of students, yet, the PSI
group had a tendency to have higher mean of study habits score than the project activity group.

5-9 Educational Implications

On the basis of the conclusions, the following educational implications may be drawn for the present study:

1. The results of the present study indicate that Keller's personalised system of instruction and project activity were found to be significantly more effective in enhancing the academic achievement of Tibetan students than the conventional method of teaching. In the light of this, it would be worthwhile for teachers to make use of these teaching strategies in classroom situations. Here it may be pointed out that the introduction of personalised system of instruction may need lot of finances, because for each discipline additional material in the form of study guides has to be prepared. The schools which can afford to spend some extra finances in the preparation of material can safely make use of this strategy. The task of preparing the study guides of PSI in different subjects should be undertaken by NCERT at the national level and SCERTs at the state level and the same should be made available to the schools. By doing this the cost of preparing the study guides can be reduced and the use of PSI can be brought to the access of large number of school going children. School teachers should make extensive use of project activity
in their subjects. The state governments should provide in-service training to teachers in the use of project method at school level in different subjects. The use of project activity should form a part of the school curriculum.

2. Project activity was found to be significantly more effective in enhancing the academic motivation of Tibetan student than the conventional method of teaching. Keller's PSI group and control group do not differ significantly with regard to the academic motivation of students. However, PSI group had a tendency to have higher mean of academic motivation scores than the control group. It may be because of the reason that project activity makes extensive use of certain laws of learning i.e. law of readiness, law of exercise and law of effect. Project method is democratic way of learning and promotes cooperation and group interaction. It is a learner-centred approach in which more freedom is given to the students for selecting the activity of their choice and carry out the work to completion themselves. They get involved in the work of their own choice and completion of the work gives them a sense of achievement. So the teachers can make use of personalised system of instruction and project activity or the principles involved in these in enhancing the academic motivation of students and ultimately enhancing the academic achievement of students.

3. The three treatment groups namely the Keller's PSI, the project activity and the control do not differ significantly with regard to the attitude towards
social studies. This may be because of the fact that experiment was conducted for a short duration of ten weeks. Since the development of attitude takes longer time, hence, a longitudinal study may be undertaken to study the effect of these strategies on the attitude of students towards the subject.

4. The Keller's PSI and project activity group were found to have significantly better study habits than the control group. Though PSI group and project activity group do not differ significantly with regard to the study habits of students yet, the PSI group had a tendency to have higher means of study habits scores than the project activity group. Since the study habits are significantly positively related to the academic achievement of students, it will be better if the teachers make use of PSI approach and project activity in the classroom situations.

5-10 Suggestions For Further Study

1. The present study was conducted on a sample of VIIth grade Tibetan students. Similar study may be conducted on other grade students.

2. The present investigation was carried out for a period of 10 weeks only. A longitudinal study spread over six months to one year may be conducted by following the design of the present study.

3. The present study was confined to a course content of social studies only. Similar studies in other subjects may also be undertaken.
The present study was conducted on the Tibetan students. Similar studies may be conducted on students belonging to the other disadvantaged sections of the society like scheduled castes, scheduled tribe, and women.