Summary and Conclusions
CHAPTER VI

SUMMARY AND CONCLUSIONS

In the preceding chapters, Introduction to the problem, development of tools, method of study and interpretation of results were discussed. The present chapter focuses around a brief description of the purpose, design and procedure of the study along with conclusion and suggestions for further research.

INTRODUCTION

With the impact of modern technology along with rapid strides of development in modern instructional techniques, there is a strong urge to refine and improve our teaching strategies and instructional techniques with a view to realize the fullest potentialities of the individual learner. Moreover pupils differ in their abilities and capacities to realize the specific objectives with the stipulated period. Here it is worth to be mentioned that the conventional method of teaching is group based in nature which does not care the individual difference at all and consequently the slow learners differ in their learning which generate a good deal of frustration among the slow learners. To encounter such type of problems of individual differences of slow learners, technologies of instructional techniques have come out with some innovations with the help of which teaching learning process has got revolutionized. The whole instructional technology work on two aspects i.e. individual difference and mastery of desired content.

Modern instructional techniques like programmed instruction, the model approach, learning packages, personalized system of instruction, modular approach emphasized the aspects of self learning as they maximize the learning. These instructional strategies provide self learning study materials to students so that they can learn and progress at their individual speed. Studies on the effective use of learning packages, personalized system of instruction and self-instructional strategies have attracted the attention of some researchers.
INSTRUCTIONAL STRATEGY

An Instructional Strategy means the organization of suitable instructional components with functions specified in relation to the specific goals to be achieved. These components in any system appear in the final form of the instructional strategy in an integrated fashion. It has four phases:

1. To identify specific objectives;
2. To develop suitable learning material for the objectives;
3. To validate the workability of the strategy; and
4. To integrate different components to form the instructional strategy.

THE CONCEPT OF MODULE

A module is Self-contained, Self-pacing and Self-learning by nature but a teacher has a positive role to play in its use. According to Husen (1985) "A module is a set of experiences designed to facilitate the learner demonstration of specified objectives". A module is a self-contained and independent unit of instruction with the primary focus on a few well-defined objectives. The substance of a module consists of materials and instructions needed to accomplish predetermined objectives. The boundaries of a module are definable only in terms of stated objectives (Creager & Murray, 1971).

A module consists of following components:

(1) Statement of purpose  (2) desirable pre-requisite skills
(3) Instructional objectives  (4) entry behaviour test
(5) Transaction of instructions  (6) criterion test
(7) Pre test  (8) post test

So, a self-learning module is so designed that it does not require the presence of a teacher. It is capable of standing alone and acts itself as a teacher.

6.1 SELF-LEARNING MODULE

A self-learning module is one type of instructional material with which a learner can acquire knowledge, skills and attitudes in the absence of a teacher. It is self-contained and independent of live instructions Abedor (1978).
A module contains three co-coordinated basic elements of instruction viz.
(a) Objectives,
(b) Learning activities and
(c) Evaluation.

> Developing of a Module

The following are the steps, which can be used for developing a module:

1. Identify the target group.
2. Identify learning needs of the group.
3. Decide terminal behaviour.
4. Identify entry behaviour.
5. Assessment of entry behavior through pre-test.
6. Teaching frames including objectives, learning activities, formative evaluation and summative evaluation.
7. Try-out of the module.
8. Revision and finalization of the module.

A learning module, therefore, is a package of selected information which focuses on a specified subject that has been appropriately designed to provide the learner an educational opportunity in a self-directed learning format and help solve key educational problems. This is largely because they satisfy the basic conditions to promote efficient learning, are extremely flexible in execution and are economical to use. Modules can be exportable from one campus to another so that the expense of preparation can be shared among institutions.

6.2 LEARNING OUTCOMES

The term learning outcome refers to the acquisition of behaviour being developed by the new S-R connections. It is a relatively permanent behaviour change tendency and is the result of reinforced practice (Kimble & Garmergy, 1963; Melvin, 1969; 1970). A learning outcome is the
Summation and Conclusion

specification of what a student should learn as the result of a period 

Dimensions of Learning Outcomes

- Skills outcomes
- Attitudes and values
- Knowledge outcomes
- Behavioral outcomes

Fig. 6.1 Overview of Learning Outcomes Structure
University of Exeter (2007) defines: Learning Outcome expression of what a student will demonstrate on the successful completion of a module. Learning outcomes:

- are related to the level of the learning;
- indicate the intended gain in knowledge and skills that a student will achieve;
- should be capable of being assessed.

Thus, in order for instructional learning and outcomes to be the product predictions to learn must be taken into consideration. The learning outcomes should structure the body of knowledge and sequencing the material may be quite effective for better learning outcomes.

In the present study the Learning Outcomes of IX graders in English studied in terms of:

6.2.1 Achievement
6.2.2 Attitude towards English
6.2.3 Self-Concept

6.2.1 ACHIEVEMENT

Page & Thomas (1979) in International Dictionary of Education defined achievement as, performance in school or college in a standard series of educational tests. The term is used more generally to describe performance in the subjects of the curriculum.

![Fig. 6.2: Measures to Improve Achievement](http://blogs.edweek.org/edweek/LeaderTalk/upload/2009/06//focus.gif)
Hawes & Hawes (1982) defined achievement as successful accomplishment or performance in particular subject, area or courses, usually by reasons of skills, hard work and interest, typically summarized in various types of grades, marks, scores, or descriptive commentary.

Achievement is an end product of all educational endeavors. The main concern of all educational efforts is to see that learners achieve something they had set out to accomplish. Achievement can be affected by various factors. For instance, environment, attitude and intelligence tend to influence the level of achievement. It is held that even hundred percent achievements can be ensured by Self Pacing techniques.

Methods of assessing academic achievement can be categorized into one of four types:

- Standardized Norm-Referenced Tests,
- Criterion-Referenced Tests,
- Performance-Based Assessment and
- Curriculum-Based Assessment.

Achievement is a powerful source, which can result in making the student's a powerful learner. Most importantly, teacher's behavior and instruction can have an impact on achievements of the students. Thus, we can say teacher directly or indirectly by using self learning modules can play a major role in helping the children to achieve their goals.

6.2.2 Attitude towards English

Attitude is a hypothetical construct that represents an individual's like or dislike for an item. Attitudes are positive, negative or neutral views of an "attitude object" i.e. a person, behaviour or event.

International Encyclopedia of Psychology (2000) defines attitude as a positive or negative evaluation of a person, place of thing. Attitude may be based on direct personal experience with the object or person in question or an indirect second hand experiences.
FUNCTIONS OF AN ATTITUDE

Katz’s (1960) formulates four functions of an attitude, they we
1. The instrumental, adjective, or utilitarian function,
2. The ego-defensive function,
3. The value-expressive function,
4. The knowledge function.

Determinants which play an effective part in originating o
person’s attitude are classified into two categories:

<table>
<thead>
<tr>
<th>Psychological Determinants:</th>
<th>Cultural Determinants</th>
</tr>
</thead>
<tbody>
<tr>
<td>motivation,</td>
<td>Home influence / Ati</td>
</tr>
<tr>
<td>emotion,</td>
<td>Information,</td>
</tr>
<tr>
<td>need,</td>
<td>Education,</td>
</tr>
<tr>
<td>mental set,</td>
<td>Generation change</td>
</tr>
<tr>
<td>dominance, and submission</td>
<td></td>
</tr>
</tbody>
</table>

Effect of Attitude towards English

A positive attitude towards English as a national language to the integration of people into Indian society. There would be virtually no disagreement in the community about the importance of language skills. Using English we will become a citizen of the naturally. English plays a dominant role in the media. It has been the medium for inter-state communication and broadcasting both before India’s independence. India is, without a doubt, committed to national language. So in order to maximize the learning results of students, certain issues have often focused on issues including teaching, learning theories, teaching materials, teaching methodologies, syllabus design, etc. Little research has been done on the topic of how the local educational/teaching environment has affected students’ learning when the students are studying English as a
Summary and Conclusions

and the fears of learning English may have grown out of previous
experiences. They recognize the importance of the English language but
interestingly do not reveal high level orientation towards learning the
language. On the other hand, they have mildly positive attitudes towards the
English based culture but they are not tolerant to people speaking English
among themselves. A better understanding of language learners can have a
beneficial effect on the process of attempting to help language learners in
learning English as a foreign language and developing a positive Attitude
towards English.

It is the general perception of educators that attitudes are largely
responsible for the intensity of student’s responses in the classroom and are
both predictors of, and contributors towards, student’s achievement in
language learning. While improved instructional materials, syllabus design,
and teaching approaches all play a major role in improving learner
achievement, such achievement is not maximized if the students do not exhibit
a positive attitude towards their subject. In the language learning context,
motivation (to learn the language) refers to the combination of effort, desire to
achieve the goal of learning the language plus favorable attitudes towards
learning the language (Gardner, 1985).

6.2.3 Self-Concept

"One of the deepest desires of human being is the desire to be
appreciated. The feeling of unwanted is very hurtful".

A person’s self-concept is his knowledge about himself. Similar to how
he can know other people, and know facts about how they tend to think, and
what they enjoy doing, and what their temperament is like, he can also know
these things about himself. Some people have much stronger self-concepts
than others, probably because possessing a self-concept in much detail
requires reflection on one’s own self and behavior Kristen (2009).

According to Dictionary of Education by Good (1959), self-concept
refers to those parts of the phenomenal field which the individual has
differentiated as relatively stable and definite parts or character himself.

Fig. 6.3 Syntax of Self Concept Attainment Model

A Ladder for Self Concept Attainment by Khan Zeenath Muzaffar (2008)

Aspects of Self-Concept

There are six aspects of Self Concept. They are: Perceived-Self (Cognized-Self), Material-Self (Bodily-Self), Real-Self, Spiritual-Self, and Ideal-Self.

Self Concept is conscious reflection of one's own being or identity, an object separate from others. A person's perception of himself or herself is often defined by self-description of oneself. Self concept enhances the personality of an individual and lends him to high self esteem. Every child has the potential of "tare zameen par" and the only need is that the teacher should identify their hidden potential. Thus education has a great role to play in polishing the talents of children through self-concept. Self-concept is not an inherited trait but is learnt and developed through interaction with the different components of the environment. So the education should create a congenial and congenial environment, which promotes self-concept among the children.
6.3 ANXIETY

"Anxiety is a psychological construct, commonly described by psychologists as a state of apprehension, a vague fear that is only indirectly associated with an object" (Hilgard, Atkinson, & Atkinson, 1971), Scovel (1991).

Anxiety can be defined as an emotion based on an appraisal of a threat; a state of uneasiness, apprehension or an intense fear resulting from the anticipation of a threatening event (Houghton Mifflin Company, 2001)

➢ Types of Anxiety

Anxiety can be either a short term "state" or a long term "trait."

It means that 'state' anxiety is the anxiety state we experience when something causes us to feel appropriately and temporarily anxious and this anxiety then retreats until we feel 'normal' again.

"Trait anxiety denotes relatively stable individual differences in anxiety proneness and refers to a general tendency to respond with anxiety to perceived threats in the environment." Spielberger (1972 – 1983).

➢ Contrast between State and Trait Anxiety

Trait anxiety is the temporary, uncomfortable experience that occurs when a person feels threatened by a situation. Trait anxiety is the potential, or tendency to experience state anxiety. A person can be either high or low in trait anxiety depending on how often they tend to experience state anxiety. A person high in trait anxiety experiences state anxiety more often.

There’s nothing abnormal about a child being shy, but children with anxiety experience extreme distress over everyday activities and situations such as playing with other kids, reading in class, speaking to adults, taking tests, or performing in front of others.

➢ Situations Leading to Anxiety

The following situations are often stressful for students which lead to anxiety:
• Meeting new people
• Being the center of attention
• Being watched while doing something
• Making small talk
• Public speaking
• Performing on stage
• Being teased or criticized
• Talking with “important” people or authority
• Being called on in class
• Going on a date
• Making phone calls
• Using public bathroom
• Taking exams
• Eating or drinking in public
• Speaking up in a meeting
• Attending parties or other gatherings

Anxiety-Provoking Situation

Physiological
- Increased heart rate
- Muscle tension
- Sweating, blushing
- Dizziness
- Nausea or stomach ache

Cognitive
- “What ifs?”
- Worries about physiological symptoms
- Worries about anxiety-provoking situations

Emotional
- Fear, dread, panic
- Frustration, anger, disappointment, sadness

Behaviour:
- Reduced performance due to anxiety
- Avoidance

Fig. 6.4: Anxiety Provoking Situation

Source: www.gregdorter.com/toronto-therapist-blog/vicious-cycle-of-

➢ Treatments for Anxiety

Five types of therapy have been used successfully to symptoms of anxiety disorders. They include:
Summary and Conclusions

1) Behavior therapy,
2) Cognitive-behavioral therapy,
3) Psychodynamic psychotherapy,
4) Drug therapy, and
5) Biofeedback therapy.

➢ Need for Treatment for Anxiety
1) A person may continue to have panic attacks for years.
2) The disorder can seriously interfere with a person’s relationship with their family, friends, and co-workers.
3) Life may become severely restricted because the person may start to avoid certain situations where their fear will cause them to experience a panic attack.
4) In extreme cases, people with untreated panic disorder grow afraid to leave the house, a condition known as agoraphobia.
5) The person may become severely depressed and find it difficult to be productive at school and work.
6) A person may begin to have thoughts about suicide (Love, 1987; Federici & Tommasini, 1992).

Teachers are in the position to promote positive emotional health and possibly reduce the occurrence of anxiety among adolescents within the classroom, in several ways. Teachers need to praise and encourage students through learning experiences and make them learn how to accept responsibility for their own behavior. The rapport a teacher and student establish can influence student’s perceptions about acceptance, trust, support, self-esteem, competency, and independence. Further, a teacher needs to be an active and effective listener and patient observer and provide students opportunities to express their feelings and thoughts openly (Love, 1987).

6.4 SELF ESTEEM

“Self-esteem is how much a person likes, accepts and respects himself overall as a person”
Summary and Conclusions

The term self-esteem comes from a Greek word meaning "reverence for self." The "self" part of self-esteem pertains to the values, beliefs and attitudes that we hold about ourselves. The "esteem" part of self-esteem describes the value and worth that one gives oneself. Simplistically self-esteem is the acceptance of us for whom and what we are at any given time in our lives.

Branden (1969) defined self-esteem as "...the experience of being competent to cope with the basic challenges of life and being worthy of happiness."

- **Levels of Self Esteem**
  - Early Childhood
  - Middle Childhood
  - Adulthood

- **Experiences that damage Self-Esteem**
  - Repeated negative evaluation by others.
  - Severe or repeated criticism
  - Negative humour, putdowns and 'barbed kidding'
  - Mistakes, errors or failures
  - Embarrassment
  - Messages from others determine one's self-worth (Van, 1995).

- **Enhancement of Self Esteem**

  (Beane, 1993) state that a school that enhances self-esteem could be characterized as promoting the following:

  - Humanistic and democratic climate;
  - Student participation in Governance;
  - Heterogeneous grouping; and
  - Positive expectation
Summary and Conclusions

Table 6.1
Enhancing Self-Esteem

- Value and accept all pupils for their attempts as well as their accomplishments;
- Create a climate that is physically and psychologically safe for students. Become aware of your own personal biases (every one has some biases) and expectations;
- Make sure that your procedures for teaching and grouping students are really necessary not just a convenient way of handling problem-students or avoiding contact with some students;
- Make standards of evaluation clear help students learn to evaluate their own accomplishments;
- Model appropriate method of self-criticisms perseverance and self-appraisals;
- Avoid destructive comparisons and competition, encourage students to compete with their own prior levels of achievement;
- Accept a student even when you must reject a particular behaviour or outcome;
- Students should feel confident;
- Remember that positive self-concept grows from success in operating in the world and from being valued by important people in the environment;
- Encourage students to the responsibility for their reactions to events; show them that they have choices in how to respond;
- Set up support groups or "Study buddies" in school and teach students how to encourage each other;
- Help students set clear goals and objectives. Brainstorm about resources they have for reaching their goals. and;
- Highlight the value of different ethnic groups, their cultures, and accomplishments


Summary and Conclusions

So putting self-esteem as a goal, rather than letting it become a natural consequence of good behavior is what the debate is all about. As a parent, as an educator or as a responsible citizen of the society we should guide our youth to be responsible, competent, compassionate, just and kind and love them without promoting narcissism and selfish behavior. Hence in the present investigation effect of self learning modules on learning outcomes in relation to Anxiety and self-esteem is being studied.

6.5 STATEMENT OF THE PROBLEM

“Effect of Self Learning Modules on Learning Outcomes of IX graders in relation to Anxiety and Self-Esteem.”

6.6 DELIMITATIONS OF THE STUDY

The present study has been delimited with respect to the following:

1. Two Instructional Strategies has been administered i.e. Self Learning Modules in Individualized Situation and Conventional Learning in group situation

2. The total sample consisted of 250 students only.

3. The study was confined to class IX only on normal children.

4. The study was conducted only in the subject of English Grammar.

5. The duration of the experiment was 65 sessions and each session was of forty five minutes.

6. The study was confined to co-educational English Medium Public Schools affiliated to C.B.S.E. Board from Distt. Fatehgarh Sahib.

6.7 OBJECTIVES

1. To study the effect of instructional strategy (SLM in Individualized situation/Conventional Learning) on learning outcomes (Achievement/ Attitude towards English/ Self-concept) of IX grade students.
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2. To study the effect of Anxiety on Learning Outcomes (Achievement/ Attitude towards English/ Self-Concept) of IX grade students.

3. To study the effect of Self-Esteem on Learning Outcomes (Achievement/ Attitude towards English / Self-Concept) of IX grade students.

4. To study the interaction effect of instructional strategy (SLM in Individualized Situation/Conventional Learning) and Anxiety on Learning Outcomes (Achievement/ Attitude towards English/ Self-Concept) of IX grade students.

5. To study the interaction effect of Instructional Strategy (SLM in Individualized Situation/Conventional Learning) and Self Esteem on Learning Outcomes (Achievement/ Attitude towards English/ Self-Concept) of IX grade students.

6. To study the interaction effect of Anxiety and Self-Esteem on Learning Outcomes (Achievement/ Attitude towards English/ Self-Concept) of IX grade students.

7. To study the interaction effect of Instructional Strategy (SLM in Individualized Situation/Conventional Learning) and Anxiety and Self-Esteem on Learning Outcomes (Achievement/ Attitude towards English/ Self-Concept) of IX grade students.

6.8 HYPOTHESES

Ho.1: SLM and CL (Instructional Strategies) yield equal means for Achievement, Attitude towards English, Self Concept, Self Esteem and Anxiety scores of IX grade students.

- **Ho.1.1:** SLM and CL (Instructional Strategies) yield equal means for Achievement scores of IX grade students.
- **Ho. 1.2:** SLM and CL (Instructional strategies) yield equal means for Attitude towards English scores of IX grade students.
- **Ho. 1.3:** SLM and CL (instructional strategies) yield equal means for Self Concept scores of IX grade students.
Summary and Conclusions

- **Ho. 1.4:** SLM and CL (instructional strategies) yield equal means for Self Esteem scores of IX grade students.
- **Ho. 1.5:** SLM and CL (instructional strategies) yield equal means for Anxiety scores of IX grade students.

**Ho. 2:** Achievement scores yield equal mean for High, Average and Low Self Esteem of IX Grade students.

- **Ho. 2.1:** High and average level of Self Esteem yield equal means of Achievement scores of IX Grade students.
- **Ho. 2.2:** High and low level of Self Esteem yield equal means of Achievement scores of IX Grade students.
- **Ho. 2.3:** Average and low level of Self Esteem yield equal means of Achievement scores of IX Grade students.

**Ho. 3:** Achievement scores yield equal mean for High, Average and Low Anxiety of IX Grade students.

- **Ho. 3.1:** High and average levels of Anxiety yield equal mean of Achievement scores of IX Grade students.
- **Ho. 3.2:** High and low levels of Anxiety yield equal mean of Achievement scores of IX Grade students.
- **Ho. 3.3:** Average and low levels of Anxiety yield equal means of Achievement scores of IX Grade students.

**Ho. 4:** Attitude towards English scores yields equal means for High, Average and Low Self Esteem scores of IX Grade students.

- **Ho. 4.1:** High and average levels of Self esteem yield equal means of Attitude towards English scores of IX Grade students.
- **Ho. 4.2:** High and low levels of Self esteem yield equal means of Attitude towards English scores of IX Grade students.
- **Ho. 4.3:** Average and low levels of Self esteem yield equal means of Attitude towards English scores of IX Grade students.

**Ho. 5:** Attitude towards English scores yields equal means for High, Average and Low Anxiety of IX Grade students.

- **Ho. 5.1:** High and average levels of Anxiety yield equal means of Attitude towards English scores of IX Grade students.
Summary and Conclusions

- **Ho. 5.2**: High and low levels of Anxiety yield equal means of Attitude towards English scores of IX Grade students.
- **Ho. 5.3**: Average and low levels of Anxiety yield equal means of Attitude towards English scores of IX Grade students.

**Ho. 6**: Self Concept scores yield equal means for High, Average and Low Self Esteem of IX Grade students.
- **Ho. 6.1**: High and average levels of Self Esteem yield equal means of Self Concept scores of IX Grade students.
- **Ho. 6.2**: High and low levels of Self Esteem yield equal means of Self Concept scores of IX Grade students.
- **Ho. 6.3**: Average and low levels of Self Esteem yield equal means of Self Concept scores of IX Grade students.

**Ho. 7**: Self Concept scores yield equal means for High, Average and Low Anxiety of IX Grade students.
- **Ho. 7.1**: High and average levels of Anxiety yield equal means of Self Concept scores of IX Grade students.
- **Ho. 7.2**: High and low levels of Anxiety yield equal means of Self Concept scores of IX Grade students.
- **Ho. 7.3**: Average and low levels of Anxiety yield equal means of Self Concept scores of IX Grade students.

**Ho. 8**: SLM and CL (instructional strategies) yield equal gain means for Achievement scores of IX Grade students.

**Ho. 9**: High and Low levels of Self Esteem yield equal gain means for Achievement scores of IX Grade students.

**Ho. 10**: High and Low levels of Anxiety yield equal gain means for Achievement scores of IX Grade students.

**Ho. 11**: SLM and CL (Instructional Strategies) and Self Esteem do not interact in respect to gain means for Achievement scores of IX Grade students.

**Ho. 12**: SLM and CL (Instructional Strategies) and Anxiety do not interact in respect to gain means for Achievement scores of IX Grade students.

**Ho. 13**: SLM and CL (Instructional Strategies), Self Esteem and Anxiety do not interact in respect to gain means for Achievement scores of IX Grade students.
Summary and Conclusions

Ho. 14: SLM and CL (instructional strategies) yield equal gain means for Attitude towards English scores of IX Grade students.
Ho. 15: High and Low levels of Self Esteem yield equal gain means for Attitude towards English scores of IX Grade students.
Ho. 16: High and Low levels of Anxiety yield equal gain means for Attitude towards English scores of IX Grade students.
Ho. 17: SLM and CL (Instructional Strategies) and Self Esteem do not interact in respect to gain means for Attitude towards English scores of IX Grade students.
Ho. 18: SLM and CL (Instructional Strategies) and Anxiety do not interact in respect to gain means for Attitude towards English scores of IX Grade students.
Ho. 19: SLM and CL (Instructional Strategies), Self Esteem and Anxiety do not interact in respect to gain means for Attitude towards English scores of IX Grade students.
Ho. 20: SLM and CL (instructional strategies) yield equal gain means for Self Concept scores of IX Grade students.
Ho. 21: High and Low levels of Self Esteem yield equal gain means for Self Concept scores of IX Grade students.
Ho. 22: High and Low levels of Anxiety yield equal gain means for Self Concept scores of IX Grade students.
Ho. 23: SLM and CL (instructional Strategies) and Self Esteem do not interact in respect to gain means for Self Concept scores of IX Grade students.
Ho. 24: SLM and CL (Instructional Strategies) and Anxiety do not interact in respect to gain means for Self Concept scores of IX Grade students.
Ho. 25: SLM and CL (Instructional Strategies), Self Esteem and Anxiety do not interact in respect to gain means for Self Concept scores of IX Grade students.
Ho. 26: There will be no significant relationship between Achievement and Self Esteem scores of IX Grade students.
Ho. 27: There will be no significant relationship between Achievement and Anxiety scores of IX Grade students.
Summary and Conclusions

**Ho. 28:** There will be no significant relationship between Attitude towards English and Self Esteem scores of IX Grade students.

**Ho. 29:** There will be no significant relationship between Attitude towards English and Anxiety scores of IX Grade students.

**Ho. 30:** There will be no significant relationship between Self Concept and Self Esteem scores of IX Grade students.

**Ho. 31:** There will be no significant relationship between Self Concept and Anxiety scores of IX Grade students.

**Ho. 32:** Interactional effect of the Self Esteem and Anxiety yield linear and significant effect on Achievement scores of IX Grade students.

**Ho. 33:** Interactional effect of the Self Esteem and Anxiety yield linear and significant effect on Attitude towards English scores of IX Grade students.

**Ho. 34:** Interactional effect of the Self Esteem and Anxiety yield linear and significant effect on Self Concept scores of IX Grade students.

### 6.9 METHODOLOGY

#### 6.9.1 Tools Used

The following tools were used for collecting the data:

- **Instructional Material:** Self Learning Modules (SLM) (developed and validated by the Investigator).

- **An Achievement Test** (standardized by the investigator).

- **Personality Word List test for Self Concept** by Deo (1998).

- **Scale of Attitude towards English** (developed and validated by the investigator).

- **State Trait Anxiety inventory** by Spielberger (1985)

- **Self –Esteem Inventory** by Coopersmith (1987)

#### 6.9.2 Sample

The sample in the present investigation was drawn at two levels:

- The School Sample and
- The Student Sample
The School Sample:

The school sample was drawn from the representative schools wherein the medium of instruction was English. A list of these schools under the administration of the district Fatehgarh Sahib was procured from the Director Public Instructions (Schools) through the District Educational Office. The names of the schools along with the number of students selected for the experiment have been listed in the Table below:

Table 6.2
School Wise Distribution of the Initial Sample

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the School</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Jesus Saviour School, Shemsher Nagar, Sirhind, Distt. Fatehgarh Sahib.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>St. Mary’s School, Mahadian, Distt. Fatehgarh Sahib.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Saffron City Smart School, Distt. Fatehgarh Sahib.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

The Student Sample

The study was conducted on 264 IX grade students studying in different schools at district Fatehgarh Sahib, which were affiliated to the Central Board of Secondary Education (CBSE), New Delhi. The age of these students ranged between 13+ to 16+ years.

During the process of experimentation that lasted for two months some students dropped out at one stage or the other. They were therefore dropped at the time of analysis. Thus the structure of the sample comprised of N = 250 students, GROUP-I of 125 students selected for experimental group (SLM) and imparted instruction through the use of Learning Modules. GROUP-II of 125 students were selected for Conventional Learning (CL) and taught by the investigator through conventional learning.
Table 6.3
The Structure of the School Wise Break – Up of the Sample

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the School</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>St. Mary’s School, Mahadian, Distt. Fatehgarh Sahib.</td>
<td>60</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Saffron City Smart School, Distt. Fatehgarh Sahib.</td>
<td>65</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Divine Light International School, Shemsher Nagar, Sirhind, Distt. Fatehgarh Sahib.</td>
<td>-</td>
<td>65</td>
</tr>
<tr>
<td>4.</td>
<td>Jesus Saviours School, Shemsher Nagar, Sirhind. Distt. Fatehgarh Sahib.</td>
<td>-</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>125</td>
<td>125</td>
</tr>
</tbody>
</table>

6.9.3 Design Of The Study

The present study employed an experimental method with posttest control group design. It employed a 2x2x2 factorial design in which the data were analyzed through 2x2x2 Anova. The variable under study was designed below:

- **Independent Variable** Instructional mode was treatment which was studied at two levels, viz. Self Learning Module and Conventional Learning.

- **Dependent variable** the effect of Independent Variable was studied. Dependent variable i.e. learning outcomes which included Achievement, Attitude towards English and Self Concept.

- **Classifying Variable** The students were classified on the basis of self Esteem and Anxiety. The variable of self esteem was studied at two levels, namely High, and Low Self Esteem. The variable of Anxiety was studied at two levels, i.e. High and Low Anxiety.

Pictorial presentation of the design for the present study has given in Fig. 6.5 below:

Where:
A1 stands for group exposed through Self-Learning Modules.
A2 stands for Conventional method of teaching.
B1 stands for High Anxiety
B2 stands for Low Anxiety
C1 stands for High Self Esteem
C2 stands for Low Self Esteem.

It can be derived that the treatment variable for instructional si was given code A, Anxiety was given code B and Self Esteem was given C. The total number of combinations was 2x2x2 which are given by Fig. 6.5 Showing Schematic Layout of the Factorial Design

6.9.4 Procedure

Two main stages were adopted as the procedure of the exp These stages were:

- **Stage I:** Selecting the sample
- **Stage II:** Conducting the experiment
- **Stage I:** Selecting the Sample:
Summary and Conclusions

The sample was selected at two levels: The School Level and the student Level. Four Schools with 264 students were selected for conducting the experiment. The procedures adopted for the selection of sample have already been discussed under the heading "Sample".

Stage II: Conducting the Experiment:

The experiment was conducted in four phases as stated below.

Phase I: Administration of Pre-Test: Achievement test, Attitude towards English Scale, Self Concept List, Anxiety and Self Esteem Inventory.

Phase II: Implementing the instructional programme: Implementing the Self Learning Modules (SLM) and Conventional Learning (CL).

Phase III: Administration of the Post – tests: Achievement test, Attitude towards English Scale, Self Concept List.

Phase IV: Scoring of Achievement Test, Attitude towards English Scale, Self Concept List, Anxiety and Self Esteem Inventory.

Phase I: Administration of Pre-Test (Achievement test, Attitude towards English Scale, Self Concept List, Anxiety and Self-Esteem Inventory)

The final analysis was done on the gain scores of the three dependent variables. Achievement Test, Attitude towards English scale, Self Concept list was administered to all the selected groups. Separate answer sheets were provided for Achievement test. Scoring was done to obtain the information regarding knowledge of the students on the topics to be taught through the experimental treatment. No time limit was imposed for completing pre-test so that a clear and exact level of students regarding instructional content is assessed. Time limit would have forced the learners to leave the test even if they knew the content. The sequence of the test was the same in all the four schools. All the students were exposed through the two classifying variables i.e. Self Esteem and Anxiety Inventory.

Phase II: Implementing the Instructional Programme

The experimental group was taught through Self Learning Module (SLM). The control group (CL) was taught by the investigator herself in the conventional way.
Summary and Conclusions

The experimental group SLM and control group (CL) were taught by the investigator herself so that a finer strategic differences could be taken care of. The sequence of events through SLM (Self Learning Modules) strategy of learning as well as CL (Conventional Learning) was as follows:

**For SLM**

**Step I:** Students were motivated for the novel method instruction.

**Step II:** Students were encouraged to participate.

**Step III:** Each lesson content was recapitulated and summarized at moderate intervals.

**Step IV:** Unit wise formative tests were administered at the end of each unit.

**Unit V:** Peer tutorial as a remedial prescription was used for those students who needed it.

**Unit VI:** The investigator herself taught the group following the guidelines developed in the lessons earlier. (These have been discussed in details in Chapter II).

**Step VIII:** The time schedule for SLM was similar to that of CL.

**For Control Group:**

**Step I:** This group was taught by the investigator herself (English) in the conventional manner. It generally refers to explaining rules on the black board explanations by the teacher with examples solving exercises and providing notes on all important rules of grammar related to the topic.

**Step II:** Objectives and content of five topics were available with the investigator.

**Step III:** No unit summative test was conducted after the completion of each unit.

**Step IV:** The time schedule followed for this group was similar to that of the other group.
Summary and Conclusions

Phase III: Administration of the Post – Test

After completion of all the five topics, the Achievement test was administered to all the students. Answer sheets were scored and converted into percentages. Time limit was one hour for 100 questions. Similarly the post-test was given to both the groups on Attitude towards English; 15 minutes were given for 22 questions. Further Personality Word List (PWL) test was administered on both the groups for one hour. Students, the subject teachers and Block Wing (s) and Mistress (es) were thanked for their cooperation during the entire period of the experiment.

Phase IV: Scoring

All the tools were scored according to their prescribed scoring keys and data thus, obtained was subjected to statistical analysis.

6.9.5 Statistical Analysis

The following statistical techniques were employed for the purpose of data analysis obtained from the experiment in order to test the hypotheses:

• Graphical presentation: Bar diagrams, Line graphs, Frequency curves, were drawn.

• Descriptive statistics (Mean, Median, Mode Standard Deviation, Skewness, Kurtosis of data).

• Inferential statistics includes t-test, ANOVA

• Significant F-ratios were followed by t-test wherever required

• Bivariate Coefficient’s of correlation

• Moderate - Multiple regressions

6.10 MAJOR FINDINGS

In the light of the interpretation of the results of the present study, the following conclusions were drawn:

Results based on the Analysis of Gain scores on Achievement

➢ The students studying through SLM achieved higher gain mean scores than those studying in CL situation.
Summary and Conclusions

- The students with High level of Self Esteem have higher Gain Achievement scores than the Low level of Self Esteem.
- The students with Low Anxiety Scores have higher Gain Achievement scores than the High level of Self Anxiety.
- There was Interaction among the Instructional Strategies (SLM/CL) of teaching and Self Esteem in respect of Gain means of Achievement scores.
- There was no Interaction among the Instructional Strategies (SLM/CL) of teaching and Anxiety in respect of Gain means of Achievement scores.
- There was no Interaction among the Instructional Strategies (SLM/CL) of teaching Self Esteem and Anxiety in respect of Gain means of Achievement scores.
- A positive correlation was found between achievement and self esteem.
- A positive correlation was found between achievement and anxiety.

Results based on the Analysis of Gain scores on Attitude towards English

- The students studying through SLM had higher Gain mean scores with respect to Attitude towards English than those studying in CL situation.
- The students with High and Low level of Self Esteem have same Gain scores with respect to Attitude towards English.
- The students with Low level of Anxiety have high Gain mean scores than High level of Anxiety with respect to Attitude towards English.
- There was no Interaction among the Instructional Strategies (SLM/CL) of teaching and Self Esteem in respect of Gain means scores of Attitude towards English.
- There was Interaction among the Instructional Strategies (SLM/CL) of teaching and Anxiety in respect of Gain means scores of Attitude towards English.
Summary and Conclusions

➢ There was no Interaction among the Instructional Strategies (SLM/CL) of teaching Self Esteem and Anxiety in respect of Gain means scores of Attitude towards English.

➢ A positive correlation was found between Attitude towards English and Self Esteem.

➢ A negative correlation was found between Attitude towards English and Anxiety.

Results based on the Analysis of Gain scores on Self Concept

➢ The students studying through SLM had higher Gain mean scores with respect to Self Concept than those studying in CL situation.

➢ The students with High and Low level of Self Esteem have same Gain mean scores with respect to Self Concept.

➢ The students with Low level of Anxiety have high Gain mean scores than High level of Anxiety with respect to Self Concept.

➢ There was no Interaction among the Instructional Strategies (SLM/CL) of teaching and Self Esteem in respect of Gain means scores of Self Concept.

➢ There was no Interaction among the Instructional Strategies (SLM/CL) of teaching and Anxiety in respect of Gain means scores for Self Concept.

➢ There was no Interaction among the Instructional Strategies (SLM/CL) of teaching, Self Esteem and Anxiety in respect of Gain means scores of Self Concept.

➢ A positive correlation was found between Self Concept and Self Esteem

➢ A negative correlation was found between Self Concept and Anxiety.

Overall Findings:

➢ A significant and positive correlation was found for Achievement, Attitude towards English and Self Concept scores with Self Esteem whereas significant and negative correlation was found for Anxiety
Summary and Conclusions

level.

➢ When we saw the effect of Self Esteem, Anxiety and Interaction between Self Esteem and Anxiety it was found that Self Esteem is a better indicator for Achievement and Attitude towards English. Anxiety independently does not affect Achievement and Attitude towards English but when combined with Self Esteem it has a positive effect on Achievement and Attitude towards English.

➢ Self Concept scores improved only with Self Esteem individually where as Anxiety as well as Self Esteem and Anxiety together do not have any positive effect on Self Concept.

6.11 EDUCATIONAL IMPLICATIONS OF THE FINDINGS

The result of the present investigation indicates that in teaching students through Instructional Strategies, it is better to prepare the Self Learning Modules according to the need of the situation and the learners. Self Directed Learning and moving at your own pace among other advantages, lead us to propose that such a strategy is more effective than Traditional method/Conventional Learning. Although both are highly effective in ensuring mastery, yet SLM offers a great new possibility to improve achievement, forms positive attitude of students towards English, enhance self concept and self esteem and reduces their anxiety. SLM can provide the highly favourable instructional component needed to promote equality in educational outcomes and to encourage individuality in student learning. Quality Instruction and equality of results can add to provide best and healthy experiences to children.

Experience of success or failure has important effect on the child’s perception and beliefs of their abilities and their future expectations in many achievement settings. Teachers need to provide many opportunities for children to experience success. Children must be encouraged to perceive themselves as capable learners, to set high standards, believe in themselves and to develop learning strategies to help them overcome difficulties. It is important that successful opportunities are provided for all students.
Educators must also look at what factors students attribute to their success or failure.

Most classrooms are highly complex and have dynamic environment that demands the use of techniques or strategies that help students to accomplish a variety of Instructional or learning tasks. Research has established that well designed and carefully monitored Instructional techniques of learning can be effective means to such ends. Choices about which technique to employ for various activities require a level of expertise that novice teacher can attain through knowledge, reflection and guidance. It is extremely important that textbook writers and teachers realize that children learn as much on their own as in the classroom, particularly in the case of language since it is there, all around them all the time.

At present the Indian Education system puts more emphasis on level of achievement hence; the classroom interaction remains passive for learners. Moreover the problem of teaching English as a second language to Indian students starts from the pre-schooling. Thus it should be a medium of instruction not just in some schools or at higher education level but in almost all the schools, rural as well as urban. To presume that poor cannot learn a difficult language like English because they have poor IQ level is to make a mockery of our own people.

So, right attitudes are to be induced in children, as these attitudes will be transmitted to later generations also by them. Therefore every curriculum should emphasize the importance of English Language proficiency. Today it is a language for better understanding, to regenerate and to renovate our scientific and technological approach.

The study revealed the fact that the students have positive Attitude towards language learning. The activities for enhancing English language proficiency are very limited in our educational institutions. Therefore it is very essential that necessary changes should be made in the curriculum on all levels so that they can be enhanced. The learning modules are found to be very effective in learning the concepts easily and meaningfully. Students can achieve well when they learn with the help of learning modules. Students who
Summary and Conclusions

learned with the help of learning modules can retain what they have learnt for a longer time than those who learnt through the conventional way. Learning modules are self learning materials, where the students are asked to learn by themselves according to their pace, ability and interest. The motivation they get through self learning will give them encouragement to study further and thus the learning will become concrete and long-lasting. The learning modules in English Grammar gives an account of the code rules, facts and peculiarities, arranged in certain categories and stated in form of general rules. It develops reasoning and habit of correct observation among the pupils.

The results can also be useful for the school Administrators and teachers to have mixed groups of students adopting Self Learning Modules since the results reported that SLM has proved to improve the performance and enhance the self concept and self esteem of the students and reduce their anxiety level.

SLM Instructional Strategy can also be used as an aid to promote “Smart learning”. Every student can be given User name and ID and Password so that they can access the content, which is available 24x7, at their own pace. Students can access the content in teacher’s absence and vice-versa that if student is absent he/she can access from home at his/her convenience. Moreover SLM through internet services can cater to the need of masses at far flung areas, if introduced in Distance Learning Curriculum. Hence, SLM Instructional Strategy helps the teachers, students and Administrators to manage the time and resources more appropriately.

As teacher is the pivot of success of the educational process for the development of the child, the findings of the study can also be incorporated in teacher training programme to enhance their Learning Outcomes to:

- Develop, teach and present the Instructional material of English in such ways that provide an opportunity to the students to learn at their own pace.

- Develop assessment techniques that form positive Attitude of students towards Self Learning.
Summary and Conclusions

- Adopt Teaching Practices that boost Self Concept and Self Esteem of the students.
- Integrate various activities in teaching learning process to enhance achievement and reduce anxiety.
- Effectively integrate technology in teaching learning process to provide constructivist environment to the students.

It is suggested that even in-service teachers should be given Orientation /refresher course on SLM Instructional mode to make teaching learning more meaningful interesting and effective.

Last but not the least, Educational Administrators, managers, Instructional Designers, curriculum developers, implementers and teachers may use the findings of the present study for the development of new Instructional designs with new future vision involving technologies where the learner could learn to access information and transform it into knowledge. Thus the strategy of teaching should be pragmatic in approach. It should not create intellectual timidity in the pupils but should encourage the students a direct plunge into the language itself.

6.12 SUGGESTIONS FOR FURTHER RESEARCH

The investigator is quite aware of the limitations under which present research was conducted and therefore accepts that no sweeping generalizations could be made. These findings are only indicative of trends and hence are to be viewed in the light of following limitations:

- The sample of the children was drawn mainly from Public School.
- The sample was limited only to the District Fatehgarh Sahib.
- The study was limited to only grade IX of normal children rather than on any specific group of children.
- The variables studied were limited to Instructional Strategy (Self Learning Modules / Conventional Learning), Learning Outcomes
Summary and Conclusions

(Achievement, Attitude towards English, Self Concept), Anxiety and Self-Esteem.

- Study was conducted on both boys and girls in the subject of English only.

The researcher by virtue of her experience in the field of the study humbly offers the following suggestions for further research that could be undertaken by the prospective researchers.

- Based on the present research about Instructional Strategy (Self Learning Modules/conventional Learning), Learning Outcomes (Achievement, Attitude towards English, Self Concept), Anxiety and Self-Esteem, it is clear that an empirical connection between the four exist to compliment this research, further research is needed that will better capture the sources of Learning Outcomes in other subjects.

- For future study it is recommended that this research be replicated at other levels to determine if the results of the study were influenced by other environmental factors in the school or in the geographical area.

- Relative effectiveness of Instructional Strategies may be researched at large scale, especially for learners of different age groups, subject areas, ability levels, socio-economic status etc.

- Some experimental studies can be planned and conducted to study the effect of languages background, parent education programmes by the schools to improve parental involvement and Parent-child interactions and their impact on the competence of the children.

- It is recommended that further research be conducted on effectiveness of the Instructional Strategy used in this study in other content course areas, such as Sciences, Humanities, Commerce, Languages and Literatures etc.

- Studies may be undertaken to investigate the effect of different combination of Bloom’s mastery learning strategy and Keller’s personalized system of instruction.
Summary and Conclusions

- Other dimensions of parental involvement like consistency of management at home, work habits, study habits, cognitive styles of parents, helping their child to differentiate and become aware of himself, improving nature of discipline should be explored for their impact on Achievement, Attitude towards English and Self concept.

- Based on these current findings, future studies could be conducted to investigate the links between parent's educational status, Attitude towards second language, and their Child's second language learning.

- Research can be carried out to compare the effect of different instructional strategies in cooperative situation.

- Research can be carried out to compare the effect of instruction through SLM on the students of Government and Private Schools, of both rural and urban areas.

- Further Self Learning Modules can be designed to cater to the needs of special children.

- The effectiveness of providing online instructions by using Self Learning Modules can be studied at secondary and higher level.

- Similar studies may be planned on very large samples and on students of different age groups.

- Meta–Analysis of the studies with respect to Instructional Strategies can be conducted.

This is not an exhaustive list, however a few of them have been enumerated above in order to indicate the possible studies that could be undertaken immediately in this important area of instruction through Self Learning Modules and integrated development of adolescents. Thus research studies in this area evince good scope and will continue to make notable contribution in the future.