CHAPTER 1

INTRODUCTION OF THE PROBLEM

1.1 INTRODUCTION

1.2 CLASSROOM CLIMATE AND CREATIVITY

1.3 CAN CREATIVE THINKING BE DEVELOPED?

1.4 TEACHER'S ROLE IN DEVELOPING CREATIVITY IN CLASSROOM

1.5 THE PROBLEM

1.6 MEANING AND DEFINITION OF THE TERMS

1.7 OBJECTIVES OF THE PRESENT INVESTIGATION

1.8 HYPOTHESES OF THE STUDY

1.9 VARIABLES OF THE STUDY

1.10 LIMITATIONS OF THE STUDY

1.11 SIGNIFICANCE OF THE STUDY

1.12 SCHEME OF CHAPTERIZATION
CHAPTER 1
INTRODUCTION OF THE PROBLEM

1.1 INTRODUCTION
1.2 CLASSROOM CLIMATE AND CREATIVITY
1.3 CAN CREATIVE THINKING BE DEVELOPED?
1.4 TEACHER'S ROLE IN DEVELOPING CREATIVITY IN CLASSROOM
1.5 THE PROBLEM
1.6 MEANING AND DEFINITION OF THE TERMS
1.7 OBJECTIVES OF THE PRESENT INVESTIGATION
1.8 HYPOTHESES OF THE STUDY
1.9 VARIABLES OF THE STUDY
1.10 LIMITATIONS OF THE STUDY
1.11 SIGNIFICANCE OF THE STUDY
1.12 SCHEME OF CHAPTERIZATION
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1.1 INTRODUCTION

In our country high percentage of school going children are experiencing perceptual, cultural and emotional blocks. The environment available in the home and school is not conducive to free inquiry and divergent production. Conformity is very often rewarded and promoted over creativity and questioning, ignoring the fact that human behaviour is circular and follows a non-linear pattern of learning. The teacher and teacher educators organize teaching and learning, mostly in a linear and sequential fashion. This approach to Education is antagonistic to the way, the brain functions. Besides, there is much less scope for such activities and programmes that are compatible to the nature of creative people contribute to the growth and development of a society and its culture. Teachers come across creative talent in the pupils but do not find it easy to understand either the creative pupils or the creative talent.

Creativity can be considered to be the ability to discover new situations to problems or to produce new ideas, inventions, or works or arts. When a song is composed, a beautiful picture is painted or an interior decoration is designed, it involves aesthetic type of creativity. When a scientific problem is solved in a new way or some original solution is brought out to solve the economic problem of the country, it involves intellectual creativity. Whatever be the nature of creativity, it is fundamental to the enhancement and enjoyment of human beings.

Since J. P. Guilford presented his presidential address on creativity at the American Psychological Association convention in 1950, studying and teaching creativity in schools and industry has become increasingly popular.

A human being right from his life in society is creative. He learns new things. Each learning is based on the utilization of past experiences. Each
problem evolves and finds its roots in the past experiences. Thus, man makes progress continuously.

Charles F. Kettingl (1961) has rightly said, “every times you tear a leaf of a calendar, you present a new place for new ideas and new progress.”

The development of a country depends both on the availability of resources and on the channelization and utilization of its human resources to the maximum level, in the desired direction. India being a developing country faces this challenge since independence. If we Indians are determined to achieve this national goal, we need to attend the process of development and utilization of such human resources. Therefore, we need to pay special attention to the creative potential of individuals.

This is quite apparent when we go through the History of advancement and progress. Whilst rapid progress in the field of science and technology takes place continually, the urgency of this situation constantly challenges India. Through Education “India aims to build a dynamic nation and to provide its people opportunities to create better future and more purposeful life.”

The developed societies also stress more changes in education to build up a new-creative society wherein all members are expected to be creative. Being on the shoulder of the 21st century, our country is endeavours to review and reshape the educational system to enable it to meet the challenges of the future and also to improve its efficiency and quality. Since 1985 the Indian Government has involved the Educational planners, teachers, students, parents, intellectuals and citizens interested in Education, to add their views and suggestions. This would be to provide the basis for a nation vide debate, which would facilitate the formulation of a new Education policy.

Creative talent has been one of our great national resources. We need better ways than we now have to discovering these creative persons and of exploiting and cultivating their talents. This is something that, as educators concern us greatly today and it will greatly concern us tomorrow.
There is an urgent need to plan our curricula and methods so that Creative thinking is systematically encouraged in the classroom instead of being stifled due to an over emphasis on convergent thinking. Isn’t it true today those school teachers by and large discourage creativity of our children and reward conformity and obedience? Our education at the school level in India is in a pathetic condition. For it makes the students passive imitators and caters greatly to their memory work. Students have developed apathy to studying because of the usual dreary classroom is geared to being purely exam oriented and creating merely block-headed persons. Periodically students are evaluated on the basis of rote learning and memorizing. Understanding and assimilating the subject seems to have no place in this system our education system needs to be revamped and revolutionized now! We need to think of various ways and means to bring about an all-round development of our children.

Some creative educationalists are highly dissatisfied with the present processes and means adopted to develop the creative potential of learners. They criticize the classroom process as being generally dull and a futile exercise in spoon-feeding. They also say that it never allows learners the freedom to be actively involved in finding out solutions to given problems. Often the teacher approaches the class with a problem and also with a ready solution. This process makes the learner a passive and dull spectator. Is it then a wonder that he never developed thinking habits?

Thinking habits make a person looks for a better solution. The present stereotype process in the classroom tries to make the learners wear blinkers so that they hardly recognize possible solutions. The present educational approach seems mainly to develop convergent thinking, which needs only mental potential to memorize and store up the facts, which could be faithfully reproduced as and when called upon without any creative involvement. When the students come out of school, they are not able to solve the problems, which are unique. Rousseau (1980) made an apt remark “In every
underdeveloped country potential Einstein’s and fords are herding cattle or breaking stones.”

Can we utilize the ideas that are implemented in classroom processes in other countries? On the occasion of the 400th anniversary of “Ratio Studiorum” (techniques of Jesuit Education as laid out by Loyola and faithfully followed in all the St. Xavier Educational Institutions, the world over since then), speaking about this learning processes, we are told by the present Jesuit’s Superior General in Rome, “Growth in the maturity and independence that are necessary for growth in freedom depends on active participation rather than passive reception. Important steps towards this active participation include personal study, opportunities for personal discovery and creativity, and an attitude of reflection. The task of the teacher is to help each student to become independent learner, to assume the responsibility for his or her own Education. (Peter-Hans Kolvenbach, 1986)

The present study attempted to find the effect of Synectics method of teaching on development of language creative ability of school going children of class IX. It is basically experimented in design and has been undertaken to find out the effect of Synectics method of teaching on Creative components. The study explains that Synectics method of teaching must be a natural, spontaneous and enjoyable, which is said to be brought about natural changes in physiology and functions by releasing pent up energy and accommodate awareness to eradicate the creative thinking obstacles and strains. Creative imagination is itself a basic tool in the acquisition of knowledge, becomes more usable when imagination synthesized and dynamically extended.

According to Alex F. Osborn (1971) “The harnessing of automatic energy was a spectacular triumph of human imagination.”

It is also important to note that the scientists, industrialists, politicians, artists, writers and medical researchers of the future are currently students in our school. Present educational practices typically fail to foster creative growth. They perhaps even stifle the imagination of our learning aspects.
This clarion call has moved the researcher to make a humble contribution developing creativity for the uplift of the school children of Anand.

1.2 CLASSROOM CLIMATE AND CREATIVITY

Education means a special training to a person, which helps to bring out his abilities that are lying in innate. All kinds of abilities including intelligence and creativity can also be developed through education. A. H. Maslow believes that education can provide creative calisthenics to counteract this atrophying of talents.

In the beginning of this century madam Montessori was the first educationalist who developed creativity of a child in her own way. She was firm in her conviction that only the creative person can reshape the world in a better way. She believed that God’s blessings are instrumental in the development of our abilities. Therefore, she formed a poem to that effect an insisted that all the teachers should sing it as a prayer regularly. The gist of the poem suns as

“O God gives us the strength to
Understand the talents of the child.”

More and more research project has been printing up the part education play in the development of creative efficiency. A good number of studies agree with the statement that environment is a major factor that enhances our curtails the development of creative thinking.

Torrance argues that “perhaps the most promising area if we are introduced in what can be done to encourage creative talent to unfold, is that of experimentation with teaching procedure which will stimulate students to think independently to test their ideas and communicates them to others.”

He himself conducted a number of studies about classroom climate for development of creative thinking and he found that engaging in a large variety of creative activities might result in greater word fluency. He also found that differential rewards influence originality of thinking.
Education in our country is too easy to get, but it does not effectively carry over to adulthood. The people of India are proud of quantitative aspect of their education and rightly so, but they are after accelerated production of done-to-order educational conformists and mediocre. National anxieties about the quality and nation needs are in the creative intelligence and inventive people. It is need to take into account urgently in the present time of crisis.

So let us go to the schools and into the classrooms. Each classroom has its own distinct atmosphere and climate, which may help or mitigate this development. This climate depends upon the classroom interaction, which in turn depends upon the classroom practices, and conditions created there by this lend considerable significance to the study of critical issue of classroom teaching.

But cursory glance into the present classroom will reveal that most of the classroom practices and conditions are of such a nature that they mostly impede or drive off the course the free flow of creative thinking of children. This is because we still emphasize on drill and grill in teaching both in the acquisition of new data and in their utilization.

This may be assumed as precise description of our classroom today. Individual ideas are submerged by concern for a poorly justified conformity. In the classroom, the child is perceived as an object for intellectual and social nourishment rather than a thinker. The non-significant status of the child in the classroom and the imposed passivity on him are the most dangerous pitfalls in contemporary education.

The ultimate result can be seen in the rigorous implementation of these policies by the teachers in their classroom where to promote ordinariness rather than creativeness, become the main concern. The plain fact is that there is a crying need for nurturing creativity in every classroom.

1.3 CAN CREATIVE THINKING BE DEVELOPED?

English composition and speech, Science, Mathematics, History and Social studies are not always taught is such a way as to promote thinking
by students. While such teaching may not be considered as obstacle to learning as habit formation. (Skinner 1954), it is held to impede learning by many other educators-for examples, by those who focus on discovery techniques and other problem solving strategies. (Bruner 1960) The suggestion has often been made that thoughtfulness in the classroom can be combated by presenting students with genuine problems to solve. (Dewey, 1916: Hullfish &Smith, 1961). While this approach to classroom procedures have been and will continue to be a productive one. Moreover, other fields, such as Social Studies, which are relevant to many problems concern to students, do not always lend themselves to problem solving within the classroom. However, based on what has already been discussed, it is clear that thoughtful participation can be effective in areas where the more traditional problem solving techniques are inappropriate. Such situation can be organized to promote curiosity and to have an aesthetic impact on students. (Arnstine 1967. Che.9)

The use of game, the implementation of role-playing, and the employment of the arts-to mention but a few examples - can facilitate learning in any area of the curriculum. All these devises appeal to the students’ curiosity, engender dramatic involvement, and in confronting students with perceived discrepancies of concern to students, can result in thoughtful behaviour. What is important is that the criterion for devising and selecting such situations and techniques must be an aesthetic one. Thus, in considering whether to teach a particular subject, a teacher might well ask, “what sort of impact will it have on students? How will they feel in response to the situation that is initiated?” The students’ responses, frustrations, perplexity or immediate satisfaction-all constitute a dramatic involvement, which has aesthetic qualities, all will thus foster thinking.

Thinking and learning may have consequences that are but dimly foreseen in the present. Yet, only a present made directly meaningful and worthwhile has a future that is only instrumental, a mere servant to some
hoped for future, creates as it. In a class where not only habit but also reasoning is required, the present becomes valuable; the impact of the class is aesthetic, whether the content of study is Science, Mathematics or art. Given such a present, the worth of the future can be depended on if the teacher can critically guide the thinking that has begun.

Therefore, the question arises whether creative Thinking can be taught in the classroom. This question has met with much speculation. There is a justifiable scepticism as to the practicability of a teaching course in creativity.

Kubie (1967) believes that “Thinking cannot be taught. The function of education is rather to show how not to interfere with thinking capacity which is inherent in human mind”. It suggests the feasibility of efforts to remove internal blocks to creativity rather than to increase the native talent.

Creativity seems to be something that cannot be taught but paradoxical thought it seems, creativity cannot spring from the untaught. Since individual variations in creativity are those of degree and not a kind, the process is capable of education. Many psychologists and educationists conceive creativity as a learned behaviour that can be practiced and mastered through manipulation of environmental conditions, (Guilford1952; Maltzman1969; Torrance1965; Parnes 1976; De Bono believe lateral thinking is a skill closely related to creativity and since it is a skill, it may be mastered. Guilford (1952) is convinced that creative thinking skills can be taught. He writes: “Like most behaviours, creative activity probably represents to some extent many learned skills. There may be limitations set on these skills by heredity, but I am convinced that though learning one can extend the skills within those limitations.”

Guilford views learning as acquisition of new information. He argues: “The creative Thinker generates new products or old products in new connection; hence creative thinking like all problem solving is an instance of learning.”
Guilford deviates from Kubie in suggesting the possibilities of learning creative skills whereas Kubie stresses the facilitation aspect of creativity by removing blocks to its development.

1.4 TEACHER'S ROLE IN DEVELOPING CREATIVITY IN CLASSROOM

Educationists are interested in understanding different school environments. They are also interested in understanding the school conditions that affect creativity development positively. Researchers have shown that the school conditions satisfy the child's needs and motivations. Teacher's behaviour in the class, teacher-pupil relationship, and methods of teaching and materials of teaching are important factors to help develop creativity of the child. The degree of intellectual environment of school directly affects the level of growth of child's creativity.

The teacher's role in the classroom is very important which influence the children in many ways. The teacher's classroom behaviour and approach to the topic of learning. Teacher's controlling strategies, open-mindedness, authoritarianism and other teaching characteristics, affects the children. Teacher's level of creativity directly influences student's creativity, incentive and behaviour.

Sparnes and Harding have listed twenty principles for developing creative thinking through school experiences that are worth to be noted for this study. Behlar (1975) has quoted in his book as below:

- Be on the alert for new ideas and encourage the pupils to develop all their creative talents.
- Make children more sensitive to environment stimuli.
- Encourage manipulation of objects and ideas.
- Teach how to test systematically each idea. Starting from as early as third grade. Show pupils how to define a problem and keep testing each idea. The heuristics described by Polga might be used as a guide.
- Development of tolerance of new ideas.
• Beware of forcing a set-pattern.
• Develop creative classroom atmosphere, a free, relaxed and unhurried one.
• Teach the child to value his creative thinking. Encourage students to note their ideas in concrete from whenever possible perhaps in a special notebook set aside for that purpose.
• Teach skills for avoiding peer sanctions. If a highly creative pupils rubs too many classmates the wrong way, help him to become more aware of feeling of others.
• Give information about the creative process. You might do this by acquainting students with Wallach’s four steps in problem solving and by noting some of the heuristics.
• Dispel the sense of awe of master-pieces. Indicate some of the methods and difficulties, experience brilliant and perfect insight of the first try.
• Encourage and evaluate self-learning. Avoid over-structuring the curriculum.
• Create “Thorn in flesh”! Ask controversial questions and call attention to disturbing data.
• Create necessities for creative thinking. Confront your students with provocative problems. You might use those suggestions of Burner and Biggs as guide.
• Provide for active and quite periods. Remember the impact of habitual set and functional fixedness.
• Make available resources for working out ideas.
• Encourage the habits of working out the full implications of ideas.
• Develop constructive criticism and not just criticism.
• Encourage the acquisition of knowledge in a variety of fields.
• Develop adventurous, spiritual teachers.
1.5 THE PROBLEM

The problem of the present study was:
"EFFECT OF SYNECTICS METHOD OF TEACHING ON DEVELOPMENT OF LANGUAGE CREATIVITY IN ENGLISH."

1.6 MEANING AND DEFINITION OF THE TERMS

It is essential to know and clarify first the meaning of certain terms known as key words in the problem to be undertaken.

Creativity:

If creativity is to be studied scientifically, it must be defined in a way that makes possible objective measurement and find out whether it is compatible with common and historical usage. If educators are to improve their effectiveness in assessing, motivating and guiding creative young people, they must, of course; understand the nature of phenomenon they are dealing with.

In the past, numerous scholars have referred to creativity as a constellation of generalized abilities that is manifested in particular ways depending upon interests, sensory deficiencies or acuities and opportunity.

Torrance (1962) based his definition of creativity on an analysis of diverse way of defining creativity and requirements for definition, which keeps a performance of research focused on factors affecting creativity growth in context. He defines creativity as "The process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies and so forth: identifying the difficulty: searching for solutions, making guesses or formulating hypothesis about the deficiencies, testing and retesting these hypothesis and finally communicating the results."

This definition describes a natural human process and strong human needs that are involved at each stage. If a person senses some incompleteness or disharmony, tension is aroused. He is uncomfortable and wants to relieve the tension. Since, habitual ways of behaviour are inadequate, he tries to get away from the common place and obvious solution by investing, diagnosing,
manipulating and making guesses or hypothesis have been tested, modified and retested, he is still uncomfortable and the tension remain unrelieved until he tells somebody of his discovery.

This definition is useful for number of reasons. It makes it possible to define operationally the kinds of abilities; mental functioning and personality characteristics that facilitate inhibit the creative process. It provides an approach for specifying the kinds of products that result from the process, the kinds of persons who engage most successfully in the process. The definition also seems to be in harmony with historical usage and equally applicable in scientific, literary, dramatic and interpersonal creativity.

Spearman (1931) asserted that because the human mind was able to create new content by transferring relations and thus generative new correlates-its sphere included not only representation of ideas but also fully sensuous presentation-such as those in ordinary seeing, hearing and touching.

Simpson defined creative ability as the initiative that one manifests by his power to break away from the usual sequence of thought. He believed that researchers should be concerned with identifying the searching, combining, synthetic type of mind and argued that they should add tests of creative thinking ability to traditional tests of intelligence. He stated that intelligence tests call for reproductive kinds of abilities and do not evaluate what he termed a vital creative energy. Simpson conceded that people would probably respond more creatively to an auditory stimulus. He argued however, that in test one gets an image of an object one wishes to draw, but that the whole thinking process is involved in forming this image or association of anemograms. He held that visual imagery auditory, personal, organic or verbal reference.

The Encyclopedia of Human Behaviour clarifies creative thinking in these words: "A form of directed thinking applied to the discovery of new solutions to a problem."
Jess Stein (1967) defined creativity as, “the state or quality of being creative, creative ability or process; creativity in performing arts.”

According to Indian Philosophers- Creativity can be defined as “man’s ability to create new forms.”

J.P. Guilford (1968) believes creativity “to be divergent thinking ability involving sensitivity to problems, flexibility, fluency, originality and elaboration.”

Rawt and Gary (1971) believe creativity to be “as the invention of something that is new, rather than accumulation of skills or the exercise of books’ learned knowledge.”

As stated by Mednick (1962) “Creative thinking consists of forming new combination of associative elements and this mutual combination of associative elements leads to the emergence of associative process.”

Parker (1963) describes “Creativity is the art of seeking out, trying out and combining knowledge in new ways.” He stresses the value of the production of something new to the individual performing the act.

According to Piers and others (1970) “Creativity is the capacity of an individual to indulge in ways of thinking and doing things and to produce a quality of ideas and of products which are original, novel or uncommon and which are workable.”

According to A Dictionary of Education Language Creativity means- “Referring to writing assignments given to pupils with a view to allowing them opportunity for greater self-expression that certain other writing assignments would do.”

In the present study Language Creativity means Scores obtained by the students in Creative Writing Test constructed by the Researcher i.e.

- Scores of Fluency and Originality in Plot Building,
- Scores of Fluency and Originality in Dialogue Writing,
- Scores of Fluency and Originality in Poetic Diction,
• Scores of Fluency, Flexibility, Originality and Elaboration in Descriptive Style, and
• Scores of Fluency, Flexibility and Originality in Vocabulary Style.
• Scores of Total Fluency, Total Flexibility, Total Originality and Total Elaboration in Language Creativity Test in English.

And Creative Thinking means scores obtained by the students in Creative Thinking Test constructed and standardized by Dr. Baqer Mehdi i.e.
• Scores of Fluency
• Scores of Flexibility
• Scores of Originality
• Total Creative Thinking Scores

Synectics Method:

The word “Synectics” has been derived from the Greek word “Synecticos”, meaning fitting together diverse elements. This technique was found by a brilliant thinker named William J.J. Gordon and it was George Prince. It is a very remarkable technique of group problem solving, and to a non-initiative. It looks like a mad method of finding solutions. This may look like madness, but there is a method in it.

The founders of synectics have devised systematic ways of acceding to and harnessing the preconscious. They have found out that “to do” is “to imitate” the process of incubation in the preconscious mind. (Incubation is the phase of problem solving in which the preconscious mind is working out the solution of a complex problem without the conscious mind being aware of this.) The preconscious mind does not think logically, it thinks analogically, associatively and visually.

Synectics is a group technique and it thrives on the diversity of its members. The role of the leader is not to set and agenda or assesses members’ contributions or assesses and announces the consensus. His role is rather that of keeping group members stimulated by shifts in focus through calling for different kinds of analogies. Also he has to be good at sensing a solution and
calling for a force fit at the right time. His role is that of building up a cerebral charge so that an illumination can become highly likely. For this, he may not ask for various kinds of analogies, but he may also encourage group members to play with words, try to invent perspectives (for example, by suggesting that is iron that attracts the magnate rather than vice versa), repeat inconvenient laws of nature, and juxtapose colliding analogies, and so on.

Synectics is not nearly a technique for solving difficult problems. It may also be a powerful technique for training people to become more flexible and original, and to tolerate ambiguity and irrelevance. Practice with synectics tends to make the mind supple, capable of rapid and breathtaking shifts of focus, a capability that may considerably increase originality.

There are actually two strategies or models of teaching based on synectics procedures. One of these (creating something new) is designed to make the familiar strange, to help students to see old problems, ideas or products in a new, more creative light. The other strategy (making the strange familiar) is designed to make new, unfamiliar ideas more meaningful.

Development:

(i) The act or process of developing progress.
(ii) A development state, form, or product.

In a comprehensive dictionary of psychological and psychoanalytical terms defined development as follow:

- A sequence of continuous change in a system extending over a considerable time; specifically such change, or related and enduring particular change, as follow one another in an organism from its origin to maturity or to death.
- Such sequence leading to irreversible change.
- Such sequence leading to progressive change for a higher degree of differentiation and complexity in the system.
The outcome of change in any of the proceeding senses. The changes may be in structure, function or organization; they may be in size, differentiation, complexity, integration, or efficiency.

In the present study development means the development of creative language writing in terms of plot building, dialogue writing, poetic diction, descriptive style and vocabulary test and fluency, flexibility, originality and elaboration.

1.7 OBJECTIVES OF THE PRESENT STUDY
The following were the objectives of the present study:

1) To study the effects of Synectics method on Creative Thinking i.e.
   a) Fluency
   b) Flexibility
   c) Originality
   d) Creative Thinking (Total)

2) To study the effects of Synectics method on Fluency and Originality in Plot Building.

3) To study the effects of Synectics method on Fluency and Originality in Dialogue Writing.

4) To study the effects of Synectics method on Fluency and Originality in Poetic Diction.

5) To study the effects of Synectics method on Fluency, Flexibility, Originality and Elaboration in Descriptive Style.

6) To study the effects of Synectics method on Fluency, Flexibility and Originality in Vocabulary Style.

7) To study the effects of Synectics method on Total Fluency of Language Creativity Test in English.

8) To study the effects of Synectics method on Total Flexibility of Language Creativity Test in English.

9) To study the effects of Synectics method on Total Originality of Language Creativity Test in English.
To study the effects of Synectics method on Total Elaboration of Language Creativity Test in English.

1.8 HYPOTHESES OF THE STUDY

The following hypotheses are formulated in pursuance of the objectives of the study:

(A) **Comparison of Post test scores of Language Creativity Test in English of experiment group and Control Group of Experiment I and Experiment II**

1. There will be no significant difference between the mean scores of Post test of Fluency in Plot Building of Experiment group and control group.

2. There will be no significant difference between the mean scores of Post test of Originality in Plot Building of Experiment group and control group.

3. There will be no significant difference between the mean scores of Post test of Fluency in Dialogue Writing of Experiment group and control group.

4. There will be no significant difference between the mean scores of Post test of Originality in Dialogue Writing of Experiment group and control group.

5. There will be no significant difference between the mean scores of Post test of Fluency in Poetic Diction of Experiment group and control group.

6. There will be no significant difference between the mean scores of Post test of Originality in Poetic Diction of Experiment group and control group.

7. There will be no significant difference between the mean scores of Post test of Fluency in Descriptive Style of Experiment group and control group.
8. There will be no significant difference between the mean scores of Post
test of Flexibility in Descriptive Style of Experiment group and control
group.

9. There will be no significant difference between the mean scores of Post
test of Originality in Descriptive Style of Experiment group and control
group.

10. There will be no significant difference between the mean scores of Post
test of Elaboration in Descriptive Style of Experiment group and control
group.

11. There will be no significant difference between the mean scores of Post
test of Fluency in Vocabulary Style of Experiment group and control
group.

12. There will be no significant difference between the mean scores of Post
test of Flexibility in Vocabulary Style of Experiment group and control
group.

13. There will be no significant difference between the mean scores of Post
test of Originality in Vocabulary Style of Experiment group and control
group.

14. There will be no significant difference between the mean scores of Post
test of Total Fluency of Experiment group and control group.

15. There will be no significant difference between the mean scores of Post
test of Total Flexibility of Experiment group and control group.

16. There will be no significant difference between the mean scores of Post
test of Total Originality of Experiment group and control group.

17. There will be no significant difference between the mean scores of Post
test of Total Elaboration of Experiment group and control group.
(B) Comparison of Post test scores of Verbal Creative Thinking test of experiment group and Control Group of Experiment I and Experiment II

1. There will be no significant difference between the mean scores of Post test of Fluency of Experiment group and control group.
2. There will be no significant difference between the mean scores of Post test of Flexibility of Experiment group and control group.
3. There will be no significant difference between the mean scores of Post test of Originality of Experiment group and control group.
4. There will be no significant difference between the mean scores of Post test of Total Creative Thinking of Experiment group and control group.

(C) Comparison of Pre test scores and Post test scores of Language Creativity Test in English of experiment group of Experiment I and Experiment II

1. There will be no significant difference between the mean scores of Pre test and Post Test of Fluency in Plot Building of Experiment group.
2. There will be no significant difference between the mean scores of Pre test and Post Test of Originality in Plot Building of Experiment group.
3. There will be no significant difference between the mean scores of Pre test and Post Test of Fluency in Dialogue Writing of Experiment group.
4. There will be no significant difference between the mean scores of Pre test and Post Test of Originality in Dialogue Writing of Experiment group.
5. There will be no significant difference between the mean scores of Pre test and Post Test of Fluency in Poetic Diction of Experiment group.
6. There will be no significant difference between the mean scores of Pre test and Post Test of Originality in Poetic Diction of Experiment group.
7. There will be no significant difference between the mean scores of Pre test and Post Test of Fluency in Descriptive Style of Experiment group.
8. There will be no significant difference between the mean scores of Pre test and Post Test of Flexibility in Descriptive Style of Experiment group.

9. There will be no significant difference between the mean scores of Pre test and Post Test of Originality in Descriptive Style of Experiment group.

10. There will be no significant difference between the mean scores of Pre test and Post Test of Elaboration in Descriptive Style of Experiment group.

11. There will be no significant difference between the mean scores of Pre test and Post Test of Fluency in Vocabulary Style of Experiment group.

12. There will be no significant difference between the mean scores of Pre test and Post Test of Flexibility in Vocabulary Style of Experiment group.

13. There will be no significant difference between the mean scores of Pre test and Post Test of Originality in Vocabulary Style of Experiment group.

14. There will be no significant difference between the mean scores of Pre test and Post Test of Total Fluency of Experiment group.

15. There will be no significant difference between the mean scores of Pre test and Post Test of Total Flexibility of Experiment group.

16. There will be no significant difference between the mean scores of Pre test and Post Test of Total Originality of Experiment group.

17. There will be no significant difference between the mean scores of Pre test and Post Test of Total Elaboration of Experiment group.

(D) Comparison of Pre test and Post test scores of Verbal Creative Thinking test of Experiment group of Experiment I and Experiment II

1. There will be no significant difference between the mean scores of Pre test and Post test of Fluency of Experiment group.
2. There will be no significant difference between the mean scores of Pre test and Post test of Flexibility of Experiment group.
3. There will be no significant difference between the mean scores of Pre test and Post test of Originality of Experiment group.
4. There will be no significant difference between the mean scores of Pre test and Post test of Total Creative Thinking of Experiment group.

(E) Comparison of Pre test and Post test scores of English Language Creativity Test of Control Group of Experiment I and Experiment II
1. There will be no significant difference between the mean scores of Pre test and Post test of Fluency in Plot Building of control group.
2. There will be no significant difference between the mean scores of Pre test and Post test of Originality in Plot Building of control group.
3. There will be no significant difference between the mean scores of Pre test and Post test of Fluency in Dialogue Writing of control group.
4. There will be no significant difference between the mean scores of Pre test and Post test of Originality in Dialogue Writing of control group.
5. There will be no significant difference between the mean scores of Pre test and Post test of Fluency in Poetic Diction of control group.
6. There will be no significant difference between the mean scores of Pre test and Post test of Originality in Poetic Diction of control group.
7. There will be no significant difference between the mean scores of Pre test and Post test of Fluency in Descriptive Style of control group.
8. There will be no significant difference between the mean scores of Pre test and Post test of Flexibility in Descriptive Style of control group.
9. There will be no significant difference between the mean scores of Pre test and Post test of Originality in Descriptive Style of control group.
10. There will be no significant difference between the mean scores of Pre test and Post test of Elaboration in Descriptive Style of control group.
11. There will be no significant difference between the mean scores of Pre test and Post test of Fluency in Vocabulary Style of control group.
12. There will be no significant difference between the mean scores of Pre test and Post test of Flexibility in Vocabulary Style of control group.
13. There will be no significant difference between the mean scores of Pre test and Post test of Originality in Vocabulary Style of control group.
14. There will be no significant difference between the mean scores of Pre test and Post test of Total Fluency of control group.
15. There will be no significant difference between the mean scores of Pre test and Post test of Total Flexibility of control group.
16. There will be no significant difference between the mean scores of Pre test and Post test of Total Originality of control group.
17. There will be no significant difference between the mean scores of Pre test and Post test of Total Elaboration of control group.

(F) Comparison of Pre test and Post test scores of Verbal Creative Thinking Test of Control Group of Experiment I and Experiment II

1. There will be no significant difference between the mean scores of Pre test and Post test of Fluency of control group.
2. There will be no significant difference between the mean scores of Pre test and Post test of Flexibility of control group.
3. There will be no significant difference between the mean scores of Pre test and Post test of Originality of control group.
4. There will be no significant difference between the mean scores of Pre test and Post test of Total Creative Thinking of control group.

1.9 VARIABLES OF THE STUDY

The variables used in the study are classified into Independent, Dependent and Controlled variables.
1) **Independent variable**
   Independent variable of the study was the teaching method, which has two levels:
   a) Synectics method
   b) Conventional method

2) **Dependent variable**
   a) Creative thinking which has four components
      - Fluency
      - Flexibility
      - Originality
      - Creative Thinking (total)
   b) Creative writing which has five components
      - Fluency and Originality in Plot building
      - Fluency and Originality in Dialogue writing
      - Fluency and Originality in Poetic diction
      - Fluency, Flexibility, Originality and Elaboration in Descriptive style
      - Fluency, Flexibility and Originality in Vocabulary Style

3) **Controlled variable**
   a) Subject i.e. English
   b) Standard – 9
   c) Content matter

1.10 **LIMITATIONS OF THE STUDY**

Even with specific objectives of the study, there are some limitations, too in every research study. This study has also the limitations- which are restricted in a particular way. They are mentioned below:

- This study was limited to 9th standard of secondary schools of English Medium of Anand district of Gujarat State.
Two schools namely I. B. Patel English Medium School, Vallabh Vidyanagar and Angel Secondary School, Anand were selected.

Independent variables Synectics method and Conventional method, dependent variables Creative thinking which has four components Fluency, Flexibility, Originality, Creative Thinking (total) and Creative writing which has five components Plot building, Dialogue writing, Poetic diction, Descriptive style, Vocabulary test.

The content area-selected topics of English were restricted.

1.11 SIGNIFICANCE OF THE STUDY

This study would be an eye-opener to those who deal with such creative children in teaching-learning strategy in school and every walk of life.

The present study would be of great significance to the teacher-educators in guiding the students to develop creative potentialities.

Creativity begins in the mind is urged by an irresistible force demanding expression. The child does not create in a vacuum. He must have experiences out of which to get the “stuff” for creating. Investigator used Synectics method of teaching because it is the responsibility of the adult to develop the understandings, methods and abilities necessary to guide school children in their track toward self-realization through creative learning and expression. It seems to be significant for suggesting the guidance for development of creative abilities in children.

According to Osborn (1961):

“The harnessing at automatic energy was a spectacular triumph at human imagination.”

It is today's students who must be prepared for the world in which their ability to function will not depend on their mastery of facts and principles now taught in school but rather on their ability to deal with new facts and principles that have not yet been imagined. So the primary aim of education is to raise the level of the academic achievement of individual in the school.
Now it is a fact that the academic achievement and intelligence of the pupils are positively and highly correlated. Every child has a common goal of society, consistent with Guilford’s suggestion of increasing mental ability through exercises. So, to keep pace with changing values in society, education also has to bring about a constant renewal in its objectives, methods and classroom processes. For this the Synectics method of teaching boosts up creativity in individual’s right from the initial stages and it can produce creative, dynamic, original and productive thinkers.

Besides, due to the progressive industrialization and scientific progress, rapid changes are influencing our lives. Consequently, we are required to make new adjustments, new habits and new ways of thinking. However, the introduction to better methods and advances pose new problems for the individuals. Conditions are changing. Hence simple conformity to the past as has been the case in our country may not be wholesome. Also, there is the increasing use of automation now-a-days and new problems arise, individuals face new challenges and we cannot think of withdrawal in the face of problems. We need to face them in a healthy manner. We have to search for some kind of solution to our problems. Our country is beset with problems of food, clothing, shelter, medicine and entertainment. In fact, great many of our compatriots are struggling these days to fulfil some of their basic necessities of life. How long can our independent country depend on other nations to find out solutions to some of these problems? Should we not spot creative people early in their school years so that we might arrange special climate to enhance their talents? Should we not train all our children to find original solutions to various problems? Isn’t it our duty to cultivate their talents for future growth? How appropriately Lenin (1975) has uttered, “Only he who believes in the spring of the vital creativity of the people can be victorious…”

It is very important for the educational planner and universities to guide to introduce creative writing and creative thinking methods at the university level to judge highest reward of man power.
This study will help the students because the person trained in the creative process has a greater chance of developing worthwhile innovative than the person without such specialized training.

1.12 SCHEME OF CHAPTERIZATION

The entire report of the present study is divided into seven chapters. A brief description of all the chapters is given here with a view to acquainting the reader with the treatment of the subject under investigation.

The first chapter is devoted to the introduction of the study. It reveals the problem, meaning and definition of some of the terms, objectives, hypotheses, variables of the study, limitations, significance etc. are discussed in this chapter.

The second chapter presents the theoretical perspective of the study. It presents theoretical discussion of creativity and Synectics model. It presents the creative urge, convergent thinking, divergent thinking, overcoming hurdles of creative thinking, techniques to develop creativity. It also deals with theoretical aspects of Synectics model of teaching.

The third chapter presents the brief review of related studies which enable the investigator to have proper perspective. The investigator reviewed the past studies done in the creativity and its related factors.

The fourth chapter describes the planning and procedure of the study. It deals with the population, tools used in the study, variables, research design of the study. The investigator thoroughly discussed about the procedure of equivalence of group and experimental procedure of the study.

The fifth chapter deals with test construction and try out of the test. It deals with the tools used in the study, the process of construction and standardization of Language Creativity Test in English, try out of the pre-pilot, pilot of the test. It also describes item analysis, validity and reliability of the test.

The sixth chapter contains the detailed analysis and interpretation of the data using F test one-way ANOVA computing SPSS.
The seventh chapter contains the summary of research work, results, findings, educational implications and recommendation for further study.

At the end of the report, bibliography containing books and references consulted is listed. The appendices include the Language Creativity Test in English, Verbal Creative Thinking Test for measuring hypotheses and lesson plan of a unit using Synectics Method of Teaching.