CHAPTER V

SUMMARY, FINDINGS & CONCLUSION

5.1.0 INTRODUCTION

Education promotes competence, well-being, and personal development, which in turn transforms society and individuals. The National Curriculum Framework (2005) promotes creativity and critical thinking, whereas the Kothari Commission (1964–66) highlighted the significance of educating pupils for future difficulties. Despite this, academics like Meghani and Desai have pointed out that India's educational system continues to use antiquated techniques that inhibit creativity. Divergent thinking and innovation should be encouraged in modern education in order to adapt to a changing reality. In order to assist students come up with unique ideas and tackle difficult problems, scholars like Raghunathan and Aggarwal emphasize the importance of creativity-focused instruction, especially when it comes to creative English teaching strategies.

5.2.0 CREATIVE THINKING

Creative thinking is a learned skill that transforms experiences into new ideas through divergent and convergent thinking, fostering problem-solving, originality, and flexibility. Patel (2010) and Rhodes (1961) highlight creativity's role in generating novel solutions, building individual abilities, and reducing mental blocks. Sam (2018) emphasizes creativity as a core educational goal to prepare students for the 21st century. Arieti (1976) considers creativity vital for scientific and artistic progress, while Lakshmi (1998) and Mochahary (2003) stress its societal and cultural impact. Effective education, as noted by the National Policy of Education (1986), nurtures creativity by creating an engaging, supportive environment.

Flexible settings that allow for emotional freedom foster creative thinking, which improves cognitive and learning abilities through emotional control, problem-solving, and imagination. Creative people are thinkers who are motivated by their skills and experience. Bhattacharya and Shukla (1982) contend that conventional teaching techniques are inadequate and emphasize the necessity of creative ways to foster creativity. While Lakshmi (1998) underlines the complexity of teaching, needing behavioral skills and creativity to facilitate holistic child development, Oza (1995) emphasizes the relationship of family and school in fostering learning.

5.3.0 COMPONENTS OF CREATIVE THINKING

Creative thinking empowers individuals to explore alternatives, take risks, and push boundaries. Guilford (1956) identified creativity as a form of divergent thinking within his theoretical model of intellect. Ramani (2017) highlights key components that gauge innovative thinking and assess creative work quality. Torrance (1964) emphasizes using these components as evaluation criteria for teachers. Chauhan (1977) identified several creative components through component analysis, including fluency, flexibility, inventiveness, elaboration, creative production, clever problem-solving techniques, problem sensitivity, and redefinition. These elements serve as essential benchmarks for assessing students' creative thinking abilities in their work. These are the following components of creative thinking.

FLUENCY
FLEXIBILITY
ORIIGNALITY
ELABORATION
COMMUNICATION & SELF EXPRESSION
MOTIVATION
COLLABORATION

5.4.0 INSIGHTS ON POLICY ABOUT CREATIVE THINKING

The Mudaliar Commission (1952) sought to enhance secondary education by encouraging creativity, critical thinking, and problem-solving. For dynamic learning, it promoted incorporating creative thinking into the curriculum. Creativity is emphasized as a critical 21st-century skill that is necessary for both academic and personal development in the National Curriculum Framework (2005) and the National Curriculum Framework for Teacher Education (2009). NEP 2020 promotes transdisciplinary and student-centered learning while highlighting creativity and critical thinking at all educational levels. Promoting creativity in English lessons is emphasized by CBSE (2023), which emphasizes innovative, perspective-based literary engagement, communication, and language development.

5.5.0 ROLE OF TEACHERS IN THE PROCESS OF ENHANCING CREATIVE THINKING

Teachers play a significant role in encouraging creativity by meeting students' learning requirements with varied, imaginative activities that improve cognitive flexibility. Despite the

fact that many educators fail to recognize this potential, Bhattacharya and Shukla (1982) emphasize the value of fostering creativity in the classroom. In a nurturing setting, good teachers promote self-expression, investigation, and inquiry. In order to foster creativity through techniques like project-based learning, brainstorming, and open-ended questions, educators must engage in on-going professional development. Including narrative, the arts, and practical exercises encourages creativity by letting kids try new things and grow from their errors.

5.6.0 CHALLENGES FACED BY TEACHERS

Teachers have a number of challenges when it comes to encouraging creativity, such as strict curricula and evaluation methods that value memorization over original thought. Inadequate resources impede experimentation, and time constraints restrict project-based learning opportunities. It is challenging to encourage risk-taking in students since many of them have fixed mindsets and think innovation comes naturally. While maintaining student attention, particularly in traditionally strict topics, is difficult, teachers frequently lack the necessary skills and support to foster innovation. Making accommodations for different learning styles and striking a balance between structure and flexibility make creative teaching even more challenging. In order to overcome these obstacles, educators need to be creative, flexible, and encouraged by the educational system.

5.7.0 STRATEGIES FOR DEVELOPING CREATIVE THINKING

An effective teaching strategy establishes an environment where learning objectives are easily achieved. Thoughtful planning makes activities feel seamless, ensuring content delivery aligns with student interest and development (Pandey, 2024). In today's fast-paced world, fostering creative thinking is essential for success, encouraging innovation, adaptability, and problem-solving. Developing this skill involves open-mindedness and an inquisitive attitude, enabling students to tackle complex challenges. Effective strategies incorporate diverse techniques that engage both cognitive and emotional faculties, promoting risk-taking and collaboration. Literature reviews reveal various programs aimed at enhancing creative thinking, leading to the researcher's development of strategies that nurture creativity in the teaching-learning process. These are the strategies that help to develop creative thinking among students.

QUESTIONING

BRAINSTORMING
COLLABORATIVE LEARNING
CREATIVE ROLE PLAYING
CONCEPT MAPPING
IMAGINATIVE ART
ASSIGNMENT
CREATIVE PROJECTS
SCAMPER
FUTURE SEARCHING & DISCUSSION
GAMES
FORCED CONNECTIONS
DEBATE
PLOT BUILDING
DIALOGUE WRITING
COMPOSITION WRITING
POEM WRITING

5.8.0 ENGLISH LANGUAGE

The English language, as a global medium of communication, is vital for personal recognition and educational success. Its teaching and acquisition are complex but essential for both individual and national development. Modern language instruction emphasizes practical and creative skills, encouraging students to engage deeply with ideas and concepts. According to NCERT (2019), language shapes thought processes and is crucial for learners to understand new ideas. Schools should foster environments that promote exploration, problem-solving, and opinion articulation through active teacher-student engagement. English has been incorporated into secondary curricula, allowing students to express themselves creatively, enhancing their aesthetic appreciation and fostering innovative thinking.

5.9.0 TEACHING OF ENGLISH

Effective English teaching integrates a multifaceted approach that promotes students' linguistic, critical, and creative thinking. Teaching strategies significantly impact learning outcomes, evolving from traditional methods to more interactive, student-centered techniques over time. Over time, English language teaching has evolved from the Grammar Translation

method, emphasizing rote learning, to the Audio Lingual Method, which uses audiovisual aids to promote direct engagement and practical application of the language. Currently, English language instruction emphasizes developing students' language content and learning activities through innovative methods like the Interactive Approach, which boosts confidence and fosters effective communication. This method transforms the teacher's role into a facilitator, encouraging student engagement through activities like brainstorming and pair discussions. Despite limitations in literature teaching, the process can enhance creativity in language learning.

5.10.0 SCOPE OF CREATIVITY IN TEACHING OF ENGLISH

Language serves as a structured medium for expressing ideas and emotions, essential for creativity and divergent thinking. Encouraging students to develop original concepts enhances adaptability and problem-solving skills. Secondary education is a critical time for identity formation, where social and emotional support is vital. The National Curriculum Framework (2005) emphasizes tailored teaching to meet diverse learner needs. Fostering creative thinking in students equips them with essential skills for the future, such as innovation and confidence. By nurturing creativity, educators can prepare students to tackle complex issues and succeed academically and personally, highlighting the importance of unbiased teaching strategies.

5.11.0 REVIEW OF RELATED LITERATURE

The purpose of reviewing the related literature is to know about the researches conducted in the related area and to see what implications these have in the present study. For the present research, the investigator had reviewed a total of **52 studies**. Out of these total 52 studies, **29 studies** (Subramonia, 1976; Govindarajacharyulu, 1977; Shah, 1981; Singh, 1981; Desai, 1987; Prabhavathamma, 1987; Rajagopalan, 1988; Dabhi, 1995; Namdeo, 1995; Paltasingh, 1998; Reddy, 1999; Manohari, 2002; Nathalal, 2002; Pathak, 2002; Thabor, 2003; Vidyasagar, 2007; Tarannum, 2008; Patel, 2010; Hutchinson, 2011; Alghafri & Ismail, 2014; Pany, 2014; Priya et.al, 2014; Ramesh, 2015; Varugheses, 2015; George, 2016; Ozyaprak, 2016; Mali, 2017; Ramani, 2017; Gundogan, 2019) were related to creative thinking and programmes adopted to enhance creativity. Total **13 studies** (Joseph, 1983; Ludbe, 2002; Patel, 2009; Mussarrat, 2013; Kunvariya, 2015; Vaniya, 2015; Maity, 2016; Jahanshahi, 2017; Lakhera, 2017; Yogita, 2017; Vanguri, 2017; Shah, 2022; Vaghela, 2022))were related to **teaching of English** and **10 studies** (Meghani, 1999; Paily, 1999; Lakshmi, 2007; Seeja, 2012; Kumari,

2014; Vijayalakshmi, 2016; Pahuja, 2017; Joseph, 2018; Marak, 2020; Raipure, 2022) were related to the **thinking skills.**

5.12.0 IMPLICATION OF THE REVIEW OF RELATED LITERATURE

The literatures reviewed by the investigator have following implications.

- A good number of researches had been conducted in the area of creative thinking skills but there is lack of studies in the area of enhancement of creative thinking through teaching of English.
- There are very less number of studies where enhancement of creative thinking is integrated in the teaching learning process of English.
- Educators should integrate project-based learning into the curriculum to promote higher-order thinking skills.
- It was reflected in the researches that creative thinking has positive correlation with the achievement of the students. So, the strategy should be developed that uplifts thinking skills along with achievement of the students.
- The importance of fostering a supportive and open classroom environment for creative thinking development.
- Teachers should focus on building trust, encouraging experimentation, and reducing fear of failure to enhance students' creative thinking.
- The reviews highlight the need for teachers to be energetic, democratic, and proactive in creating a creativity-conducive environment.
- Group-based learning activities to enhance thinking skills and teamwork among students.
- This shift in instructional strategy will require teachers to facilitate collaborative projects and discussions that challenge students to think creatively.
- Schools may need to support teachers by providing guidance on how to structure and assess group work effectively.
- Reviewed researches emerged the need of a strategy by which creative thinking can be enhanced through the shift in thinking at each step.
- The studies highlight that integrating creative teaching methods improves communication skills across both genders.

- Teachers should incorporate more creative and multimedia-based strategies in English language teaching to improve both communication skills and student motivation in creative thinking skills.
- Teachers and school administrators should prioritize professional development that focuses on creative and technology-enhanced teaching techniques, especially in language instruction.
- Fostering creative thinking in students can have a broader impact on their ability to think productively and tackle real-world challenges. Curriculums should therefore integrate both creative and critical thinking exercises to develop well-rounded cognitive abilities in students.
- The effectiveness of creative teaching methods in improving communication skills for both genders implies that integrating creative approaches can lead to more effective language learning.
- Creative techniques, such as SCAMPER, Brainstorming role-playing, discussions, and storytelling, to enhance communicative competence, particularly in English, across diverse students.
- The research has revealed that student-centred teaching approaches positively emerge that engage learners and enhance their thinking skills.
- Teachers should also be trained to move beyond textbook-based instruction, employing innovative techniques to bridge gaps in language learning.
- The positive shift in students' attitudes toward language learning through the use of multimedia, audio-visual materials, and task-based activities highlights the effectiveness of incorporating technology into language teaching.
- The effectiveness of task-based learning in developing English language skills suggests that real-world; practical activities can improve students' application of language skills.

These researches suggest that a combination of creative teaching, technology integration, diverse reading and writing activities, and multimedia resources can significantly enhance students' communicative competence, language comprehension, and creative thinking in English learning.

5.13.0 RATIONALE OF THE STUDY

Creative thinking is an essential skill for the 21st century. As our society is developing at an astounding pace, we must prepare ourselves to be flexible and never stand still. We must succeed greatly not only by taking on obstacles and approaching them with fresh perspective and confidence but also by applying innovative thinking skill. Along with problem solving and critical thinking, enhancing creative thinking skill is essential to building a successful profession. As recommended by UNESCO, creativity contributes to the building open, inclusive, vibrant, innovative and prosperous knowledge societies.

However, in today's scenario, the learning of language functions with rote learning. It leaves no scope for free thought process and the student is bound to learn the facts to produce them when required. The students are not having opportunities to solve an issue by considering multi perspectives. This is truly based on the exam oriented classroom discourse which leaves no scope for creativity. As a result, students act as meek listeners that are only one way communication in which students' response is in one or two words. Not only this but over restrictive criticism from the teacher demotivates the students to think and they rely on the usual response. Our current process is examination oriented rather than life or child centred which has created disastrous effects on the creative thinking process. These are some of the instances occurring in the classroom during the teaching learning process which refrains the child to become creative thinker.

So we need to develop creative thinking which deviates from the normal classroom practices. As emphasised by Ramani (2017) mentions that the creative thinking ability remains as an interesting mystery either in science, literature, music, painting or any other area of life. It is beneficial in every aspect of life. The development of a creative personality that is aware of his surroundings is not only crucial but also vital in a world that is changing quickly. The explosion of information is a result of the information technology era in which students have a plethora of options these days for obtaining knowledge. Therefore, the emphasis of teaching and learning should be on how to think about the topic, investigate its novel applications and understand them rather than on the content itself. Patel(2010) mentions that the present system of education depends heavily on the matter of sorting, reviewing, describing and absorbing existing knowledge. This indicates that skill in action demands far more than the knowledge alone. Adolescents who possess creative thinking skills are better able to tackle problems from several angles and come up with novel ideas, which help them solve challenges successfully in

both academic and practical contexts. Not only that they are more able to adjust to changing circumstances and obstacles. They get skills in accepting change, handling ambiguity, and coming up with creative solutions for problems. Also they can develop self-confidence and a good self-image by thinking creatively and outside the box, as well as by participating in creative activities and developing their sense of accomplishment.

Gujarat is very important in terms of education since it places a strong emphasis on developing skills, encouraging innovation, and providing high-quality education. Gujarat's educational system combines ancient and modern methods, which supports the intellectual and socioeconomic advancement of the state. The curriculum of the Gujarat State Board of Education places a strong emphasis on the development of creative thinking by combining a multidisciplinary approach, project-based learning, and experiential activities. In order to stimulate students' creativity, the board supports creative teaching strategies, critical thinking, and the integration of arts and cultural education. Gujarat's educational system strives to develop well-rounded people who can think creatively and adjust to the demands of the modern world by emphasizing both academic and extracurricular activities. The educational authority in charge of regulating the school system in the Indian state of Gujarat is known as the Gujarat State authority. The Gujarat Secondary and Higher Secondary Education Board (GSHSEB) is a government body that oversees advancement, control, and encouragement of secondary and post-secondary education in Gujarat. The researcher has taken the students of standard IX as they belong to the formal operational stage and capable of abstract thinking. One of the purposes of the English language is to develop creativity and this can be developed through the teaching learning process of language.

The review of related literature reveals that a lot of research is being done on creative thinking and its significance and necessity are continually being recognised. However, the field of creative thinking through language has only seen a small number of studies published so far. So, realizing the value of creativity throughout one’s educational journey and the critical necessity of creative thinking skill, the investigator felt a need to enhance the creative thinking through teaching of English. In this line of thought, the investigator aims at the development of creative thinking skill of standard IX students through teaching of English.

5.14.0 STATEMENT OF THE PROBLEM

ENHANCEMENT OF CREATIVE THINKING AMONG STANDARD IX STUDENTS THROUGH TEACHING OF ENGLISH

5.15.0 OBJECTIVES

1. To develop a strategy for creative thinking among students of standard IX through teaching of English.
2. To implement the developed strategy of creative thinking among students of standard IX through teaching of English.
3. To study the effectiveness of the developed strategy in terms of developing creative thinking among the students of standard IX.
4. To study the effectiveness of the developed strategy in terms of the achievement test in English among the students of standard IX.
5. To study the effectiveness of the developed strategy in terms of the reaction of students towards the developed strategy.

5.16.0 HYPOTHESES

The following null hypotheses were developed to accomplish the stated objectives of the current study to be assessed at the 0.05 level of significance.

$H_0$1: There will be no significant difference between the mean fluency score of the experimental group and the control group.

$H_0$2: There will be no significant difference between the mean flexibility score of the experimental score and the control group.

$H_0$3: There will be no significant difference between the mean originality score of the experimental group and the control group.

$H_0$4: There will be no significant difference between the total mean score of creative thinking of the experimental group and control group.

$H_0$5: There is no significant difference between the pre-test and post test scores of achievement test in English of the experimental group.

5.17.0 OPERATIONAL DEFINITIONS OF THE TERMS

Creative Thinking: Creative thinking is the score obtained by the secondary school students in creative thinking scale developed by Baqer Mehdi's Verbal and Non-verbal Test of Creativity.

Effectiveness: Effectiveness of the strategy is the significant difference of post test scores between the experimental and control groups in creative thinking.

Effectiveness in terms of reaction: Effectiveness of the strategy is the average intensity index of 3.5 and higher on a five point reaction scale prepared by the investigator towards the developed strategy.

5.18.0 DELIMITATION

The study was delimited to English Medium Secondary school students of standard IX affiliated to the Gujarat Secondary and Higher Secondary Education Board (GSHSEB). The creative thinking skills was delimited to three components namely fluency, flexibility and originality for the present study.

5.19.0 DESIGN OF THE STUDY

The current study is classified as experimental research, and the investigator's goal was to improve secondary school pupils' capacity for creative thinking by integrating strategy into English instruction. Since random assignment to the experimental and control groups was not feasible, the investigator opted for a quasi-experimental method. To make the study stronger, the investigator matched the groups according to their performance on the English pretest. The following is a summary of the study's design:

O1 X O2

O3 C O4

Where, O1 and O3 were pretest,

O2 and O4 were posttest

X stands for Experimental Group and

C stands for Control Group

In the present study, the experimental design was followed. The investigator was able to conduct the experiment on two groups that were selected from the school. The achievement of students in the English test of the experimental and control groups was measured through the pretest. The score thus obtained by the experimental and control groups in the pretest was used to make the groups equal. Experimentation was carried out with the experimental group, and the control group studied through the traditional method. At the end of the experimentation, the achievement of students in English was measured as a posttest. A pretest and posttest of the creative thinking test was also taken to see how effective the developed strategy was in enhancing the creative thinking among the secondary school students through the teaching of English. The analysis and result of the data are used to see the effectiveness of the developed strategy on enhancing creative thinking among secondary school students.

5.20.0 POPULATION

The population for the present study comprised all the students of standard IX studying in English-medium secondary schools affiliated with the Gujarat Secondary and Higher Secondary Education Board (GSHSEB) in Gujarat state during the academic year 2023–24.

5.21.0 SAMPLE

Two English-medium schools in Vadodara city were selected for the study as per the convenience to do the experiment. Both the selected schools were considered equal in standard as both the schools were affiliated with the same board and located within the city area. The first school in Vadodara city was used as the control group, and another school, was used as the experimental group of Vadodara city. The students of one section of standard IX from each of the selected schools were selected as the sample for the study. After matching; the equivalent group consists of 30 students each for both experimental and control groups. Therefore, a total of 60 students constituted the sample for the present study.

5.22.0 VARIABLES OF THE STUDY

- **Independent Variable:** The developed strategy for enhancing creative thinking among the secondary students was considered as independent variable.
- **Dependent Variable:** Creative thinking, Achievement in English and Reaction of students towards the developed strategy were considered as the dependent variables.

5.23.0 TOOLS OF DATA COLLECTION

Following tools were used by the investigator for the purpose of collection of data.

- **Achievement Test in English:**

To study the effectiveness of the developed strategy in terms of the achievement of the students in English, the investigator prepared and used the achievement test in English for both schools. The test was developed by the investigator, followed by the validation of experts. The test was for 50 marks. The investigator collected achievement test scores in English from experimental and control group schools after the completion of second term.

- **Creative Thinking Scale: Baqer Mehdi's Verbal and Non- Verbal Tests of Creativity:** This test was developed by Dr. Baqer Mehdi (1989). It was published by the National Psychological Corporation, Agra. It consists of 4 verbal and 3 non-verbal sub tests. For the present study, only Verbal test of creativity was administered.
- **Reaction Scale:**

The investigator developed a five-point Likert type reaction scale to gauge students' reactions to an integrated strategy for creative thinking. The scale included 20 statements related to English teaching and learning experiences. Students rated each statement on the scale, with weights ranging from 5 to 1. Experts evaluated the scale's validity, and after six months, students' responses were collected to evaluate the method's efficacy.

5.24.0 DEVELOPMENT OF STRATEGIES

The investigator developed an instructional strategy for English language teaching focusing on creative thinking. The strategy includes brainstorming, role play, creative writing, SCAMPER, questioning, and concept mapping. It encourages imaginative inquiry and critical thinking to improve creative thinking.

a) Brainstorming- It is a creative method that involves presenting a problem and a timed session to generate ideas. Osborn's four rules emphasize quantity, withholding judgment, encouraging unconventional ideas, and refining ideas. Encouraging cooperation and creativity in children is crucial.

b) SCAMPER: The strategy encourages students to explore new ideas through seven techniques: Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, and Rearrange, fostering problem-solving skills and innovative thinking.

c) Concept Map: Concept mapping is a visual aid that uses diagrams to organize concepts around a main topic, promoting connection discovery, deeper learning, critical thinking, and problem-solving abilities. It encourages students to generate ideas, investigate unusual links, and work together to create original solutions.

d) Creative Writing: Creative writing encourages children to generate unique ideas, plots, and characters, fostering innovation and originality. It encourages exploration of different perspectives, emotions, and viewpoints, improving ideation and production capacity.

e) Questioning: Probing questions stimulate students' thinking, fostering creativity by examining ideas from multiple perspectives. They stimulate imagination, curiosity, and generate fresh concepts. Careful questioning encourages dialogue, argumentation, and teamwork, promoting original thought and creative problem-solving.

f) Role play: Role play helps students think creatively and imaginatively by allowing them to view problems from various perspectives. It encourages empathy, fostering original problem-solving techniques. Incorporating role play into learning creates a dynamic experience, allowing students to experiment, collaborate, and express themselves imaginatively, leading to more effective problem-solving.

An integrated strategy was developed by the integration of the mentioned strategies at the different stages of the creative thinking process. It was then reviewed and refined through discussion with experts in the field ensuring content validity and effectiveness in fostering creative thinking skills within the devised approach.

5.25.0IMPLEMENTATION OF STRATEGY TO ENHANCE CREATIVE THINKING

The study aimed to develop an integrated teaching strategy for standard IX students and assess its effectiveness in stimulating creative thinking. Two GSHSEB schools, Vidyakunj High School and University Experimental School, were chosen for the research. The control group was taught by their regular subject teachers, while the experimental group was taught English using an integrated technique. Lesson plans were created using the strategy and creative thinking syntax. The investigator also ensured students' academic progress and

corrected their notebooks. Regular classes were led, covering topics fostering creative thinking. A posttest and reaction scale was used to evaluate the strategy's efficacy.

5.26.0 DATA COLLECTION PROCEDURE

The investigator visited Gujarat state board schools in Vadodara city to conduct an experiment. Data was collected through Baqer Mehdi's Creative Thinking Scale and personal instruments. Pretests were given to both control and experimental groups to gauge their creative thinking levels. The experimental group was taught English, while the control group remained unattended. Posttests and English achievement tests were administered to gauge the effectiveness of the integrated strategy.

- **Administration of Pretest:**

The academic session 2023-24 began from April 2023, and the second semester started from October 2023.The investigator administered the pretest of Achievement test in English and Creative thinking skills test to both experimental and control group. Administration of the pretest took place in the English subject classes that were scheduled in the timetable. The purpose of the administration of pretest was explained and informed to the students prior to its administration.

- **Administration of Posttest:**

After the implementation of the integrated strategy in the teaching learning process, the investigator conducted the posttest on both experimental and control group during the month of March to collect the data. Creative Thinking skills test was administered to both the groups: Experimental and Control. Achievement test in English was also conducted as posttest to both the groups: Experimental and Control to gauge their academic performance in English subject.

- **Administration of the Reaction Scale:**

The investigator developed a five-point Likert type reaction scale to gauge students' reactions to an integrated strategy for enhancement of creative thinking. The scale included 30 statements related to the strategy incorporated during the teaching and learning of English. Students were asked to rate each statement honestly. The scale was validated by experts and administered to the experimental group. The study aimed to assess the effectiveness of the integrated strategy over six months.

5.27.0 DATA ANALYSIS

The data gathered throughout the intervention period was examined and interpreted in order to determine how effective the developed strategy was. Based on the post-test results of the control group and the experiment group, statistical techniques such mean, statistical deviation, standard error of mean, and U-test were computed. Since the study was quasi-experimental in nature, the non-parametric Mann-Whitney U-test—the t-test's counterpart—was employed. The frequency, percentage, and intensity index were computed in order to examine the reaction scale.

5.28.0 MAJOR FINDINGS OF THE STUDY

On the basis of the analysis and interpretation of the data gathered in the present study following major findings were drawn.

1. The developed strategy was found to be significantly effective in terms of enhancing the creative thinking skills among secondary students.
2. The developed strategy was found to be better in fluency component of creative thinking among secondary students.
3. The developed strategy was found to be better flexibility component of creative thinking among secondary students.
4. The developed strategy was found to be on a much higher level of originality component of creative thinking among secondary students.
5. The developed strategy was found effective in terms of reaction of the students towards the integrated strategy.

Along with these major findings, the investigator also found the following points on enhancing creative thinking through integrated strategy:

1. The strategy was found effective in enhancing creative thinking among secondary school students.
2. The strategy used in the teaching of English was found effective in terms of mean score of achievement test in English. Students taught through these strategies performed better on Achievement test compared to students who were taught through traditional classroom teaching.

3. The strategy was found effective significantly in terms of thinking pattern of secondary school students as more number of students from experimental group responded towards creative thinking as compared to control group.
4. Students' reactions were found strongly positive towards the developed strategy through the activities that were conducted in the classroom.
5. The SCAMPER technique facilitated effectively in the generation of divergent ideas, encouraging students to think in new and varied ways.
6. The brainstorming strategy proved to be successful in stimulating the production of creative ideas.
7. A conducive classroom environment, combined with a teacher's motivational behaviour was identified as a crucial factor in supporting the creative thinking process.
8. Evaluative discussions emerged as a key component in enhancing creative thinking and were also found to improve the quality of students' ideas.

5.29.0 DISCUSSION

The present study aimed to evaluate the effectiveness of a developed strategy in enhancing creative thinking skills among secondary school students. It is clear from the experiment's results in Chapter IV that students in the experimental group, who were instructed to utilize the devised technique, showed an improvement in their capacity for creative thought when compared to the control group. According to the results, the approach was very effective in enhancing fluency, adaptability, and originality—with a particular focus on originality—among other aspects of creative thinking. This implies that the approach not only inspired students to come up with a lot of ideas but also to think in more creative and original ways.

The study showed that the method was effective in enhancing creative thinking, especially in terms of originality, fluency, and flexibility. The findings that different creative teaching approaches enhance students' capacity for original thought and divergent thinking are supported by the literature. Dabhi (1995), for example, discovered that the Attribute Listing Program had a favorable impact on creativity, especially in the areas of fluency and flexibility. This finding is consistent with the strategy's effectiveness in fostering these qualities. Additionally, studies by Subramonia (1976) and Govindarajacharyulu (1977) showed that creative teaching methods enhance students' ability to evaluate logically, which boosts academic achievement without compromising subject comprehension. The

enhancement of the fluency component is consistent with the fact that innovative teaching strategies boost students' capacity to come up with numerous ideas and tackle issues from various angles.

The experimental group suggests that the students were relatively homogeneous in their performance in the fluency component of creative thinking. Students' creative thinking was positively impacted by the integrated strategy in English teaching, especially in the fluency component, as evidenced by the higher mean score and significant difference between the experimental and control groups. This suggests that the method can be ascribed to the variety of exercises that allow for the development of the fluency element of creative thinking over the course of the school year. Similar to this, the experimental group's post-test scores in the flexibility component showed more homogeneity, indicating that the created technique offered a consistent and organized method of encouraging students' flexibility, whereas the control group's scores showed more variation.

The findings of the study showed that the experimental group's success suggests that students acquire critical thinking, creativity, teamwork, and communication skills—all of which are vital life skills—when they are encouraged to actively participate in their education through activities like group brainstorming, creative project work, and idea presentation. Students may benefit from this move toward more creative teaching strategies by developing their ability to think independently. The success of this integrated strategy was further supported by George (2016) and Reddy (1999), who discovered that brainstorming enables students to produce a range of innovative ideas through group cooperation that is better suited to address complicated and multidimensional challenges.

Divergent thinking was also found to be greatly aided by brainstorming sessions and the SCAMPER technique. In particular, SCAMPER encouraged pupils to come up with a variety of original ideas by allowing them to escape from traditional thought patterns. Brainstorming sessions gave pupils a chance to experiment with different and fresh ways of thinking while also encouraging the generation of innovative ideas. The findings of Ozyaprak (2016) and Gundogan (2019) showed that the SCAMPER technique encourages creativity that improves fluency and enables pupils to think differently, corroborate the findings.

The results make it clear how important it is to use new teaching innovative methods in order to improve students' creative thinking skills, academic achievement, and readiness for solving problems in the real world. This finding was consistent with research by Rajagopalan (1988)

and Hutchinson (2011), which showed that a supportive classroom environment significantly promotes the development of creative thinking. This suggests that fostering an atmosphere that values experimentation, creativity, and free thought may enhance learning outcomes. This emphasizes how important it is to create vibrant, supportive learning environments where students can openly share their ideas without fear of rejection or failure. Teachers must give pupils the tools they need to think creatively and approach challenges from multiple perspectives.

According to Lakhera (2017) and Ludbe (2002), students' communicative abilities were positively impacted by the implementation of creative techniques in language acquisition, especially those that emphasize the fourfold skill (listening, speaking, reading, and writing). The reason was also given by Vaniya's (2015) study, which showed that while teaching students through interactive approaches, they were able to identify and apply creative writing features in both prose and poetry. This illustrates how incorporating creative thinking exercises into the English curriculum can improve students' linguistic skills while simultaneously developing their critical thinking, cognitive flexibility, and problem-solving skills. Indian schools must focus on integrating 21st-century skills like communication and creative thinking into their curricula in order to prepare students for the challenges of the modern world.

A more dynamic, project-based approach to education has been recommended by numerous studies as an alternative to rote learning and reproductive thinking. For instance, studies by Joseph (2018) and Raipure (2022) showed how the FIESI productive thinking model and task-based learning can significantly improve students' capacity for critical thought and problem-solving. Schools should therefore provide teachers with the resources and instruction they require to implement these strategies effectively.

Teachers play a crucial role in fostering creativity and critical thinking in the classroom. The study highlights how crucial it is that teachers replace the traditional textbook-based approach with more innovative and participatory teaching techniques. By incorporating creative thinking strategies into their lesson plans, teachers can significantly enhance their students' cognitive abilities, including fluency, flexibility, and originality (Patel, 2010). Teachers can assist students in gaining the self-assurance and flexibility necessary to think creatively by creating an environment that values open-ended inquiry and idea development. This emphasis on fluency might be especially helpful in preparing pupils for challenges in the future that

call for creativity and flexibility in solving problems. The literature provides strong evidence for the significance of the teacher's role in encouraging creativity. Students' creative development is greatly impacted by teachers who promote experimentation and foster a non-judgmental environment, as demonstrated by the studies of Reddy (1999) and Rajagopalan (1988). Similarly, in order to develop creative thinking skills to be fully incorporated into the curriculum, educational institutions must support this change by giving teachers professional development opportunities that emphasize innovative teaching strategies. This may entail rethinking the teacher training program to include more on fostering creativity because, as Vidyasagar (2007) and Pany (2014) note, classroom dynamics and teachers' motivational behavior play a crucial role in enhancing creativity.

According to the findings, teachers ought to give more weight to exercises that encourage creativity, like open-ended projects, creative writing assignments, and chances for pupils to study on their own. The experimental group's success in originality demonstrates the importance of student-centered, active learning strategies, whereas the control groups' lower results demonstrate how little the standard teaching methods can foster creative thinking. This shows that more interactive, inquiry-based teaching methods that allow students to freely explore, question, and develop their ideas are needed. Additionally, originality is a skill that can improve learning across the curriculum and shouldn't be restricted to specific areas.

The findings of the study showed that the evaluative conversations were shown to be a crucial component in raising the calibre of students' ideas. Students were inspired to critically evaluate and hone their ideas through these conversations, which produced more polished and creative results. The development of higher order creative thinking abilities depends on this participatory review and improvement process. In line with their emphasis on the value of reflection and critical evaluation in creative processes, the results were corroborated by Alghafri and Ismail's (2014) research on evaluative talks, which are essential for honing students' concepts and enhancing creative output.

According to the study's findings, a significant portion of students thought that learning via the created method was more engaging than learning in a traditional classroom. This demonstrates how innovative teaching techniques can enhance learning environments and make lessons more engaging for students, attracting their interest and promoting active engagement. The entire response scale thus shows a positive response to the created strategy,

which the students not only accepted but also valued the teaching methods, confirming the efficacy in fostering engagement and creative thinking.

5.30.0 IMPLICATION OF THE STUDY

The results of the current study demonstrated the efficacy of the technique designed to foster students' creative thinking in standard IX. Additionally, it was discovered that teaching English improved the elements of creative thinking. One could argue that the current approach was successful in fostering the higher order thinking abilities that are urgently needed. The following are the implications of this study for educators and policymakers.

- **Implication for the policy makers:** Curriculum planners ought to think about incorporating creative thinking techniques into a variety of disciplines in order to take a more comprehensive approach to student growth. School curricula should incorporate creative thinking techniques like brainstorming and SCAMPER to improve students' problem-solving abilities and creativity. Schools should better educate children for the complexity of today's world, where the capacity for creative thought is becoming more and more important. Teachers' professional development programs should emphasize creative teaching methods that encourage critical thinking, creativity, and constructive thinking. Assessment techniques that consider creativity and critical thinking in addition to academic performance should be implemented in schools. English teachers should receive timely training on instructional strategies that emphasize helping students develop their capacity for creative thinking through English instruction. Schools must receive strict and detailed instructions on how to apply thinking skills-enhancing activities. Enough encouragement and motivation should be provided for the teacher to actively participate in teacher training programs that refresh the fundamental life skills. Policies should support teachers' professional growth so they can successfully implement these strategies. Furthermore, as crucial 21st-century ability, creativity must be acknowledged by assessment systems in addition to academic performance.
- **Implication for the teachers:** The teacher has direct interaction with the pupils, they can influence how they think by emphasizing the benefits of implementing creative teaching methods in the classroom. Activities that improve students' thinking processes in terms of fluency, adaptability, and creativity should be given top priority by teachers. Students' creative potential and participation can be greatly increased by

employing evaluative discussions and fostering a pleasant, motivating classroom environment. Students in standard IX received integrated English instruction in the current study. In a similar vein, this approach might be applied to different subjects at different educational levels. The quality of students' thoughts can be further improved by incorporating evaluation discussions. Consistent feedback from both peers and teachers should be integrated into lessons to refine students' creative ideas and promote deeper engagement in the learning process.

In conclusion, cultivating 21st-century talents requires incorporating creative thinking techniques into the curriculum. Teacher training should be supported by policymakers, and educators should use creative approaches to encourage creativity. Students who actively participate in these activities improve their ability to solve problems and think creatively, which better equips them to handle obstacles in the classroom and in the real world.

5.31.0 SUGGESTIONS FOR FUTURE STUDIES

The current investigation was restricted to Vadodara city's standard IX GSHSEB school children. Standard IX students' creative thinking was observed to be enhanced when the investigator applied the integrated strategy at the Maharaja Sayajirao University of Baroda, Vadodara, University Experimental School. In the future, a comparable study might be carried out in the following field.

1. Other subjects could also be used to implement the integrated strategy.
2. It could be used to education at the elementary, middle, and upper secondary levels.
3. To evaluate the long-term effects of creative thinking techniques on students' academic and cognitive development over a number of years, long-term studies could be carried out.
4. A comparative analysis of how well various creative thinking methods—like mind mapping, brainstorming, and SCAMPER—improve students' creativity in English classes might be conducted.
5. A study on how to include digital technologies like multimedia, gamification, and online platforms into English instruction to foster more creative thinking.
6. A study on how students' cultural backgrounds affect the efficacy of creative thinking techniques, particularly in multicultural classroom environments.

7. A comparative study on the role of teacher attitudes and teaching styles in fostering creative thinking, identifying which approaches are most conducive to creativity in English classrooms.
8. Research on learning styles, gender, or socioeconomic status can be conducted to find out how various student groups react to treatments that encourage creative thinking in English classes.
9. New approaches to evaluate creative thinking in English classes can be developed and tested, making sure they capture fluency, adaptability, and originality in student work.

5.32.0 CONCLUSION

Teaching English to Standard IX students fosters their creative thinking, which is an important educational objective, particularly in the quickly changing world of today. Students who practice creative thinking are better able to think differently, solve issues creatively, and approach assignments from a variety of angles—skills that are crucial for success in school as well as in both personal and professional spheres. The study of English offers a special setting for encouraging creativity. Students can improve their fluency, adaptability, and creativity through exercises like storytelling, creative writing, and conversations. By pushing students to consider more than one solution to an issue and to think beyond the box, techniques like SCAMPER, brainstorming, and evaluative debates can help kids develop their creative potential, encouraging, inspiring, and supporting classroom environments are critical for fostering creative thinking, thus educators must embrace a more adaptable and student-centered teaching style. Moreover, using these innovative teaching techniques in English classes fosters students' capacity for critical thought and idea generation in addition to improving their language proficiency. Students are better equipped to handle the various issues they will encounter in both higher education and the workforce as they gain confidence in their ability to express themselves creatively. As a result, English instruction becomes a potent instrument for encouraging creativity in the contemporary classroom.