

Impact of Constructivism on Learning Outcomes in English at



Upper Primary Level in DMS Bhopal

(PAC 16.04)



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A REPORT

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Prof. Nidhi Tiwari

Dr. Shruti Tripathi

Preface

The National Curriculum Framework (2005) stresses the importance of the constructivist approach in classroom learning. In a constructive perspective, learning is a process of construction of knowledge. Learners actively construct their own knowledge by connecting new ideas on the basis of materials or activities presented to them through their experiences.

The document on Learning Outcomes 2017 which is a pioneer step of NCERT, New Delhi establishes a linkage between pedagogical processes and Learning Outcomes. As an outcome of this document special training programmes were conducted from June 2017 in all parts of India to orient school teachers and different boards in the States as well as CBSE on Learning Outcomes. In this context, all the DM Schools were selected for implementation of Learning Outcomes and accordingly training programmes were conducted for the DM School faculty. The need to conduct research on the implementation of learning outcomes in DM Schools was emphasized.

There are several approaches which are used to develop language skills. Constructivism is a major paradigm shift in the field of learning. Language learning is facilitated through social interaction. Therefore, constructivism is an approach which promotes language learning. This research study on constructivism and its impact on learning outcomes in English at upper primary level in DM School, Bhopal is an attempt to conduct a meaningful research to showcase that an improvement in language learning, especially English is possible if constructivist strategies are adopted in English classroom and learning outcomes can be attained

The study is based on learning outcomes in English at Upper Primary Level and is also focused on the Demonstration Multipurpose School, Bhopal. It will serve as a role model to other researchers. Best practices and innovations to promote learning and improving performance in English at Upper Primary School Level can be shared which can mutually benefit school teachers and learners.

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5.2 Objectives

Chapter 1 Introduction

Chapter 1 Introduction

1.0 Background of the study

Teaching is a dynamic and well-planned process. Its objective is to acquire maximum learning experiences. A skilled teacher, while planning, thinks carefully about the teaching strategies. The operations of teaching depends upon contents task analysis, teaching objectives, and nature of learning, types of learning, learning experiences, interest of pupils, their attitudes, capacities, needs and entering behavior. Therefore, it is important to take decision about teaching operations; a teacher should perform in order to achieve the objectives of teaching. For this, it is necessary to select and use appropriate instructional strategy.

Behaviouristic view of knowledge-which insists upon assimilation through stimulus-response bond was not considered as an effective approach and severely refuted and opposed by constructivist view of giving more prominence to knowledge- construction. From ancient periods, whenever a strange concept or a novel idea has been proposed, there will be commotion and upsurge over it.

As swami Vivekananda rightly said-

"Every new activity evidently has to pass through the three stages-bitter ridicule, severe criticism and final acceptance".

This hold good even to constructivist approach of exploring learning. It is a drift from teachercentered to learner-centered education, prominence of learner autonomy over teacher involvement and active participation of babbling youth are considered to be the prominent qualities of constructivism. These glaring changes are to be invited and imbibed by all of us.

There are several approaches which are used to develop language skills. Constructivism is a major paradigm shift in the field of learning. Constructivist approach is a learner centered approach which emphasizes on collaborative learning. Language learning is facilitated through social interaction. Therefore, constructivism is an approach which promotes language learning.

1.1 Constructivism-Introduction

Constructivism is a philosophy founded on the belief that we construct our own understanding of the world by reflecting on our experiences. Learning is simple; the process of adjusting our mental models to accommodate new experiences. The emphasis of the constructivist theory is on the PROCESS rather than the PRODUCT of learning. It focuses that the learner in working memory constructs knowledge. In this approach, the students determine how much they have learned as well as the process by which they learned. It changes the dynamics of the traditional classroom by empowering the learner as the focus and architect of the learning process while redefining the role of the instructor to be a guide, a facilitator and helper, rather than the source and conduit of knowledge.

Constructivism says that learners construct their own understanding and knowledge of the world through experiencing things and reflecting on those experiences.

1.2 Theories of constructivism

"Constructivism is not a theory about teaching, it is a theory about knowledge and learning, the theory defines knowledge as temporary, developmental, socially and culturally mediated, and thus, non-objective".

Jean Piaget believed that learning is strongly influenced by the learner's developmental stage. He laid the foundation for constructivism. According to him learning occurs through adaptation to interactions with the environment.

Lev Vygotsky believed that the meanings are constructed and shared with references to social and cultural context which situate the individual in the classroom; learning involves interaction between learner and teacher and amongst learners.

Jerome S. Bruner theory says that learning is an active and social process in which students construct new knowledge on the basis of current knowledge.

David P. Ausubel theory says that learning new materials depends greatly on the existing cognitive structure or what the person already knows. New information is more meaningful if it is related to current knowledge.

E.Von. Glaserfeld believed in reconstruction of knowledge procedurally as unending series of processes of inner construction. Learners also want to assess the reliability of knowledge instrumentally in terms of the evolutionary viability of constructions.

1.2.1 Types of constructivism

There are two types of constructivism which we address: cognitive constructivism and social constructivism. Few characteristics of both are as follows:

- 1. It is largely concerned with learners thinking and learning process.
- 2. Learning is self-directed and active.
- 3. Knowledge is constructed internally by the learner rather than transmitted from an external source.
- 4. Learning is marked by learner's capacities to explore and experiment.
- 5. What someone knows is not passively received but actively assembled by the learner.
- 6. Knowledge and understanding are constructed by the learner rather than imparted by the teacher.
- 7. Learning is a social, collaborative and interactive activity.
- 8. Learning involves higher order thinking.
- 9. Knowledge is socially, culturally mediated and located.
- 10. Learning is a search for meaning, looking for whole as well as part.
- 11. Learning is an individual and social activity.
- 12. We discover different perspective and shared meanings while learning and understanding.
- 13. Learners continuously organize, reorganize, and structure new experiences to fit them into existing schemata, knowledge and conceptual structures through an adaptation process of assimilation and accommodation to accord with new views of reality, in striving for homeostasis (equilibrium) the balance between assimilation and accommodation.
- 14. Intelligent thought involves metacognition.

1.2.2 Principles of constructivism

- 1. Learning is not a passive receptive process but instead is an active meaning making process required solving meaningful problems meaningfully.
- 2. New learning depends on learner's previous knowledge, which may sometimes interfere with the understanding of new information.
- 3. Learning implies the reorganization of prior conceptualization conceptual schemes.
- 4. Learning is facilitated by social interaction.
- 5. Meaningful learning occurs within authentic learning tasks.

Brooks and Brooks (1993) opined that there are two basic principles of constructivism. They are as follows:

- 1. What a person knows is actively assembled by the learner and learning serves as an adaptive function of storage of useful information.
- 2. Learning serves as an adaptive function of storage of useful information.

1.2.3 Characteristics of constructivist approach

- 1. Learning is an active meaning making process required to solve meaningful problems. It is not a passive receptive process.
- 2. Meaningful learning occurs within authentic learning task.
- 3. New learning depends on the learner's previous knowledge and experience.
- 4. Social interactions facilitate learning.

1.2.4 Advantages of constructivism

- 1. Children learn more, and enjoy learning more when they are actively involved, rather than passive listeners.
- 2. Education works best when it concentrates on thinking and understanding rather than on rote memorization. Constructivism concentrates on learning how to think and understand.
- 3. Constructivist learning is transferable. In constructivist classrooms, students create organizing principles that they can take with them to other learning settings.
- 4. Constructivism gives students ownership of what they learn, since learning is based on student's questions and explorations.
- 5. By grounding learning activities in an authentic, real-world context, constructivism stimulates and engages students. Students in constructivist classrooms learn to question things and to apply their natural curiosity to the world.
- 6. Constructivism promotes social and communication skills by creating a classroom environment that emphasizes collaboration and exchange of ideas. Students learn how to articulate their ideas clearly. Students exchange ideas and learn to "negotiate" with others and to evaluate their contributions in a socially acceptable manner. This is essential to success in the real world, since they will always be exposed to a variety of experiences in which they will have to cooperate and navigate among the ideas of others.

1.3 Constructivism as a learning approach

Language plays a dynamic role in learning a concept or an ides etc. They provide a bank of memories and symbols inherited from one's fellow speakers and created in one's own lifetime. They are also the medium through which most knowledge is constructed, and hence they are closely tied to the thought and identity of the individual. Effective understanding and use of languages enable the child to make connections between ideas, people and things and to relate to the world around.

Language education is not confined to the language classroom, a science, social science or mathematics class is ipso-facto a language class. Learning the subjects means learning the terminology, understanding the concepts and being able to discuss and write about them critically. Any genre of language links children to cultural heritage and also gives them an opportunity to understand their own experiences and develop sensitivity to others.

So, it is important to view language education as everybody's concern at school and not as a responsibility of the language teacher alone. And development of language skills such as listening, speaking, reading, and writing along with life skills such as critical thinking skills, interpersonal communication skills, negotiation/refusal skills, decision making, problem solving skills and coping and self management skills is also very critical for dealing with the demands and challenges of everyday life.

In India, English is treated as a global language and for providing the learner's a good command

on English, the goals of English language learning set are twofold: attainment of a basic proficiency acquired in natural language learning and the development of the language into an instrument for an abstract thought and knowledge acquisition through literacy. English language, as a constellation of skills, thought encoders and markers of identity- cuts across school subjects and disciplines. Hence, an effective method for English language learning is required.

1.4 Constructivism and English teaching

The whole process of structuring, organizing and developing explanatory sequences in the class should aim to interest and stimulate the students to think. In order to increase attention span, engage the students and encourage the students to think, intersperse with students activities that can provide opportunities for active learning and interaction. (Exley and Reg, 2004) the language teachers can become effective instruments in inculcating the thinking skills of the students. If the pupils are to learn to think for themselves, teachers must offer them opportunities by providing language tasks and life like situations. In order to profile oracy in practice and provide increased access to learning, the teachers need to plan carefully- to model and intervene, to extend their pupil's use of language and increase the complexity of their thinking.

Teachers can modify their style of talk and they may need to adapt more reflective and speculative stances, demonstrating and modeling increased tentativeness and negotiation, through thinking aloud and using more reciprocal and hypothetical talk. (Haworth, 1992) (Quoted by Grainger)

Teachers who use dialogue must value the dynamic, ever changing character of meaning making that results when children are called upon to think for themselves. They must themselves be willing to maintain a healthy uncertainly, to be open to facilitate whatever emerges within the interaction. (Cole, 1995)(Quoted by Grainger)

Such teachers will not abandon the notion of teaching but will understand the relationship between language and learning and prompt them to reconceptualise their role as one, more focused upon facilitating active knowledge construction, and their classrooms as forums for critical debate and dialogue. Such reformations in action might begin to reduce the existing gap between theory and practice in this area.

1.4.15 E Model of constructivism

Rodger W.Bybee (1980), who is among the innovators of BSCS (Biological science curriculum study), developed the 5E instructional Model. The BSCS model is a direct descendant of the Atkins and Karplus learning cycle which was used in the science curriculum improvement study (SCIS). The BSCS model has five phases: engagement, exploration, explanation, elaboration, and evaluation. At BSCS there was two additional phases from the SCIS, an initial phase designed to engage the learner's prior knowledge and a final phase to evaluate the students understanding.

1.4.2 Phases of 5 E Model:

New designs for elementary school science and health (BSCS, 1989) describe the phases of the 5E instructional model. Phases of the 5E model can be applied at several levels in the design of curriculum materials and instructional sequences.

Engagement:

The teacher or a curriculum task accesses the learners prior knowledge and helps them become engaged in a new concept through the use of short activities that promote curiosity and elicit prior knowledge. The activity should make connections between past and present learning experiences, expose prior conceptions and organize students thinking towards the learning outcomes of current activities.

Exploration:

Exploration experiences provide students with a common base of activities within which current

concepts (i.e., misconceptions, processes, and skills are identified and conceptual change is facilitated. Learners may complete lab activities that help them use prior knowledge to generate new ideas, explore questions and possibilities, design and conduct a preliminary investigation.

Explanation:

The explanation phase focuses student's attention on a particular aspect of their engagement and exploration experiences and provides opportunities to demonstrate their conceptual understanding, process skills, or behavior. This phase also provides opportunities for teachers to directly introduce a concept, process, or skills. Learners explain their understanding of the concept. An explanation from the teacher or the curriculum may guide them towards a deeper understanding, which is a critical part of this phase.

Elaboration:

Teachers challenge and extend students conceptual understanding and skills. Through new experiences, the students develop deeper and broader understanding, more, information and adequate skills. Students apply their understanding of the concept by conducting additional activities.

Evaluation:

The evaluation phase encourages students to assess their understanding and abilities and provides opportunities for teachers to evaluate student progress towards achieving the educational objectives.

1.4.3 Assumptions of 5E Model

The studies on 5E Model revealed the following assumptions about the model:

- 1. The 5E Model targets at the discovery and the association with previous knowledge of new concepts by students. With the aid of planned and applied learning-teaching activities, students form themselves their own knowledge about a specific problem.
- 2. 5E Model motivates students to be included into a topic by several phases of learning, to explore a subject, to be given a definition for their experiences, to obtain more detailed information about their learning and to evaluate it (Wilder and Shuttle worth, 2005)

1.4.4 Role of the student

In this approach the students behavior will also have a novel change and they turn into active participant's rather passive listener. In this approach, students

- Question about the phenomenon.
- Give explanations for observed phenomenon.
- Manipulate objects, do activities.
- Discuss the result of activities.
- Draw conclusions.
- Apply new concepts to familiar situations.
- Apply new concepts to unfamiliar situations.

1.4.5 Classroom climate in constructivism

- The teacher is the leader of the democratic learning group.
- Students work in groups. Discuss results of activities. No rigid seating plan is observed.
- Class is not noisy, though students talked about the ideas, activities, etc.
- Pupil participation is encouraging.

- All students engage in some kind of activities.
- Students work in group.

1.5 English learning in India

A variety and range of English —teaching situations prevail here owing to the twin factors of teacher proficiency in English and pupil's exposure to English outside school. The level of introduction of English is now a matter of political response to people's aspirations rather than an academic or feasibility issues. The goals for a second language curriculum are two-fold; attainment of a basic proficiency, such as is acquired in natural language learning, and the development of language into an instrument for abstract thought and knowledge acquisition through literacy. This argues for across-the-curriculum approach that breaks down the barriers between English and other subjects, and English and other Indian languages. At the initial stage, English may be one of the languages for learning activities that create the child's awareness of the world. At the later stages, all the learning happens through language. Higher-order linguistic skills generalize across languages is a transferable skill. Improving it in one language improves it in others, while reading failure in one's language adversely affects second language reading.

Input rich communication environments are a pre requisite for language learning, whether first or second. Inputs include textbooks, learner-chosen text, and class libraries, allowing for a variety of genres; print, parallel books and materials in more than one language, media support, and authentic materials. A variety of successful innovations exists whose generalisability needs exploration and encouragement. Approaches and methods need not be exclusive but may be mutually supportive within a broad cognitive philosophy (incorporating Vygotskian, Chomskyan and Piagetian principles). Higher order skills can be developed once fundamental competencies are ensured.

1.6 Approaches in teaching English

Language teaching methodology has undergone changes from grammar- translation through audio-lingual and structural to the communicative form. The communicative approach uses authentic and contextualized tasks. Krashan (1981) proposed that learners will acquire language Design experiments to test ideas and Compare their ideas with others' ideas.

Design ways to test other's ideas. When they are exposed to 'comprehensible input' and are motivated to attend to the input. Learning with pedagogic rationale require learners to do things which are unlikely be done outside the classroom. Linguists argue that acquisition is best served when learners participate in the negotiation of meaning.

In a constructivist language learning class, the students become effective learners, learn more and enjoy learning because learning is based on student's thinking and understanding and producing language needed for the particular situation. 'Effective learners' are reflective learners, who not only consider critically what they have learnt, but are also aware of their own learning. They come to realize the need for language, Lexus and grammar for oral competence. Knowledge and reflection are crucial aspects of learning and development which can contribute substantially to the profile of oracy. To develop the profile of oracy, pupils should be encouraged to adopt a reflective, analytical instance towards their own language use and that of others. As pupils learn how to work together, they can develop their own strategies to keep themselves on tasks, share the workload and make negotiated decisions. (Grainger, 2000)

1.7 Adolescents (Challenges in growth and learning)

The period from infancy to adolescence is one of rapid growth and change. The curriculum must have a holistic approach to learning and development that is able to see the interconnections and transcend divisions between physical and mental development, and between individual development and interaction with others. The precondition for all development is healthy physical growth of all children. This requires that basic needs in terms of adequate nutrition,

physical exercise and other psycho-social needs are addressed. Participation of all children in free play, informal and formal games, yoga and sports activities is essential for their physical and psycho-social development. Physical development supports mental and cognitive development, especially in young children. The capacity to think reason and make sense of the self and the world, and to use language, is intimately connected with acting and interacting- doing things by oneself and with others.

Adolescence is a critical period for the development of self-identity. The process of acquiring a sense of self is linked to physiological changes, and also learning to negotiate the social and psychological demands of being young adults. Responsible handling of issues like independence, intimacy, and peer group dependence are concerns that need to be recognized, and appropriate support be given to cope with them. The physical space of the outside world, one's access to it, and free movement influence construction of the self. This is of special significance in the case of girls, who are often constrained by social conventions promote the opposite stereotype for boys, which associates them with the outdoors and physical process. These stereotypes get especially heightened as a result of biological maturational changes during adolescence.

These physiological changes have ramifications in the psychological and social aspects of an adolescent's life. Most adolescents deal with these changes without full knowledge and understanding, which could make them vulnerable to risky situations like sexually transmitted diseases, sexual abuse drugs and substance abuse.

It is a time when the given and internalized norms and ideas are questioned, while at the same time the opinions of the peer group become very important. It is important to recognize that the adolescence needs social and emotional support that may require reinforcement of norms of positive behavior, acquisition of skills essential to cope with the risky situations that they encounter in their lives, manage peer pressure and deal with gender stereotypes. The absence of such support can lead to confusion and misunderstanding about these changes, and after their academic and extracurricular activities.

1.8 English at upper primary level

Activities and materials that promote language growth at the upper primary level providing a basis for action and interventions in schools. In general, vocabulary development, reading with comprehension and writing activities of higher order are main goals of teaching /learning at this stage. The general objectives at this stage are:

- To negotiate their own learning goals and evaluate their own progress, edit, revise, and review their own work.
- To understand, enjoy and appreciate a wide range of texts representing different cultures, ways of living.
- To be able to articulate individual or personal responses effectively.
- To use language and vocabulary appropriately in different contexts and social encounters.
- To be able to organize and structure thoughts in writing/speech, to develop production skills.
- · To use dictionary suitable to their needs.
- To understand and enjoy jokes, skits, children's films, anecdotes and riddles.

Following objectives are attained

- Understand the central idea and locate details in the text
- Use the critical/thinking faculty to read between the lines beyond the text
- Narrate simple experiences, describe objects and people, report events to peers

- Speak accurately with appropriate pauses and clear words/sentences stress to be intelligible in familiar social contexts
- Write simple messages, invitations, short paragraphs, Letters, applications, simple narrative and descriptive pieces, etc.
- Use his/her proficiency in English to explore and study other areas of knowledge through print and non print media.
- To understand small projects on a regular basis.

At the upper primary level, knowledge of grammar remains a process of discovery combined with conscious effort to explicit understanding and name grammatical items. However, these should not be taken out of contexts to be treated as discrete teaching items. In addition to consolidating the items learnt earlier, the following will be introduced and recycled through the upper primary stage: Determiners, Passivisation, Adjectives, Reported speech, Modal auxiliaries, Word order in sentence types, Clauses, Tense forms, Adverbs, Linking words.

Method and techniques used in Classroom interaction would be such as to promote optimal learner participation leading to an urge to use language both in speech and writing. The selection of actual classroom procedure is left to the discretion of the teacher. The following methods and techniques are recommended as role play, dramatization, reading aloud, recitation of rhymes, poems and making observations on a given topic/theme, telling and retelling stories, anecdotes, and jokes, discussion, debate, simple projects, interpreting pictures, sketches, cartoons., activities, tasks, and language games, pair work, group work, and short assignments with individual and group, exploring the electronic media.

1.9 Learning Outcomes

The National Policy on Education (NPE) 1986, revised in 1992 and The Programme of Action (PoA) 1992 emphasized that the Minimum Level of Learning (MLLs) should be laid down and children's learning should periodically be assessed to keep a track of their progress towards ensuring the achievement of NPE goal that 'all children should acquire at least minimum levels of learning'. The MLLs developed class- wise and subject- wise for primary stage in 1992 in the form of competencies were highly product—oriented and had a limited scope for assessment of overall development of children. A radical shift came almost a decade ago when the child's capacity to construct knowledge as a natural learner was recognized as central to the transaction of the curriculum, and the teacher's role was primarily as a facilitator of the learning process. The knowledge, thus gained, is an outcome of their engagement with the world around when they explore, respond, invent, and make meaning of it. It means that the focus shifted to the process of learning.

The document, Minimum Level of Learning at Primary Stage, too recognized this, yet it expressed difficulty in dealing with the psychomotor and affective domains. The reasons for this were mentioned as: difficulty of assessing affective qualities with precision and through paper pencil test as they are intangible and subjective influenced by personal preferences and prejudices besides the uncertainty of their full development. The document considered them to be part of the process of development and change in the student's personality rather than being the final product of specific inputs and processes. Against this backdrop, an exercise was undertaken to relook into the whole process with a fresh perspective and devise learning outcomes for the curricular areas of the elementary stage.

The document includes learning outcomes mentioned distinctly for each class in languages, mathematics, environmental studies, science and social science up to the elementary stage. The document is meant for all stakeholders especially the parents/guardians, teachers and community members. Some features of the document are given below:

• To make it user -friendly, simple language has been used as far as possible across the

document.

- · The section under each curricular area comprises a brief understanding about the nature of the subject, followed by the curricular expectations, which are the long term goals that students need to acquire over a period of time, and are therefore spelt out stage wise.
- · The learning outcome defined class-wise are process based which provide the check-points that are measurable in a qualitative or quantitative manner to assess the progress of a child as per the expected holistic learning for the overall development of child.
- · To help the teachers understand and achieve the learning outcomes as per the curricular expectations, some suggestive pedagogical processes are provided in the columns adjacent to that of learning outcomes.
- · Using contextual resources and appropriate learning processes, the teachers can design and provide a variety of learning situations/opportunities as per the curricular expectations, some suggestive pedagogical processes are provided in the columns adjacent to that of learning outcomes.
- The pedagogical processes are suggestive and do not correspond one-to-one with the learning outcomes mentioned in the adjacent column but may be looked at holistically. The teachers may adopt/adapt and can even design many more as per the availability of resources and local
- · Care has been taken that the learning outcomes defined in each curricular area are spirally linked in terms of age appropriateness and complexity within and across curricular areas and
- The class-wise section may not be viewed in isolation. Holistic perspective will help accomplish the goal of overall development of a child.

1.10 Learning outcomes for the English language at upper primary level

English language is taught and learned as a second language in varied contexts and resources for teaching learning in terms of the proficiency of the English language teacher, materials (textbooks and other supplementary materials), the English language environment in the school and so on. Language learning is meaningful when it is connected with the immediate environment of children. The activities/tasks in the textbook and the tasks carried out by the teacher need to take into consideration the lived-in experiences of learners.

The English language learning outcomes are intended to be achieved by every child so as to enable them to be proficient users of language in real life situations. Broadly, the goal of language learning which could be achieved includes- attainment of basic proficiency in language for effective communication and development of language for knowledge acquisition, i.e., using language as a tool for learning the content subjects. However, the teacher should have flexibility and consider the pace of learning of children as well as their opportunities of learning of children as well as their opportunities of learning English at home and in school.

The learning outcomes are listed are not restrictive or limited, they are the launching pads for developing skills and competencies in learners of English language in class VI &VIII. Teachers may add activities to achieve outcomes. Pedagogical processes along with the learning outcomes to emphasize the survey of the su to emphasize the process of learning and active participation of learners. The suggested activities exercises are to support teachers in creating learning opportunities for learners.

Curricular expectation

- Acquire the ability to listen and respond orally and in writing/lip reads where necessary.
- Speak about self, simple experiences, report events to peers, accurately and appropriately make connections and described make connections and draw inferences.
- Recite poems, dialogues, speak and write language chunks(phrases, sentences from stories,

plays, speeches etc)

- Understand the central idea and locate details in the text (familiar and unfamiliar).
- Use his/her critical/thinking faculty to read between the lines and go beyond the text.
- Comprehend and uses the form and functions of grammar in context.
- Write coherently and with a sense of audience (formal and informal).
- Write simple messages, invitations, short paragraphs, letter (formal and informal), applications, personal dairy, dialogue from story and story from a dialogue/conversation in English.
- Engage in creative writing e.g. composition of poems, jokes, short stories, etc.
- Develop sensitivity towards their culture and heritage, aspects of contemporary life, gender and social inequality.

1.11 Learning outcomes in English for class VI & VIII

As stated in the NCERT Document on Learning Outcomes

CLASS VI

Suggested pedagogical processes

The learner may be provided opportunities in pairs/groups/individually and encouraged to—

- Become familiar with songs/poems/prose in English through input-rich environment, interaction, classroom activities, discussion etc.
- Listen to English news(TV, Radio) as a resource to develop listening comprehension
- Watch/listen to English movies, serials, educational channels with sub-titles, audio-video materials, talking books, teacher reading out from materials and to understand and respond
- Participate in individual talk viz. introducing oneself and other persons, participate in role play/make a speech, reproduce speeches of great speakers
- Summarize orally the stories, poems and events that he/she has read or heard
- Locate sequence of ideas, events and identify main idea of a story/poem through various types of comprehension questions
- Read different kinds of texts such as prose, poetry, play for understanding and appreciation and write answers for comprehension and inferential questions
- Raise questions based on their reading
- Interpret tables, charts, diagrams and

Learning outcome

The learner -

- Participate in activities in English like role play, group discussion, debate, etc.
- Recites and shares poems, songs, jokes, riddles, tongue twisters, etc.
- Responds to oral messages, telephonic communication in English and communicates them in English or home language.
- Reads a variety of texts in English/Braille and identifies main ideas, characters, sequence of ideas and events and relates with his/her personal experiences.
- Reads to speak information from notice board, newspaper, internet, tables, charts, diagrams and maps etc.
- Responds to a variety of questions on familiar and unfamiliar texts verbally and in writing
- Uses synonyms, antonyms appropriately deduces word meanings from clues in context while reading a variety of text
- Writes words/ phrase/simple

- maps and write a short paragraph
- Think critically and try to provide suggestion/solutions to the problems raised
- Read/discuss the ideas of the text for critical thinking
- Use dictionary as a reference book for finding multiple meanings of a word in a variety of contexts
- Take dictation of words, phrases, simple sentences and short paragraphs
- Understand the use of antonyms(impolite/polite) synonym (big/large) and homonym(tail/tale)
- Understand the grammatical forms in context/through reading e.g. noun, pronoun, verb, adverb, determiner, etc.
- Understand the context for various types of writing such as messages, notices, letters, report, biography, dairy entry, travelogue etc.
- Draft, revise and write in English/ Braille with punctuation and with focus on appropriate beginning, middle and end.
- Use ICT (Net, mobile, website, YouTube, TED talks etc) to browse for information, for projects/PPT etc.
- Look at cartoons/ pictures/ comic strips with or without words, and talk/write about them
- Visit a language laboratory
- Write a book review.

- sentences and short paragraphs as dictated by the teacher
- Uses meaningful sentences to describe/narrate factual/imaginary situations in speech and writing
- Refers to dictionary to check meaning and spelling, and to suggested websites for information
- Writes grammatically correct sentences for a variety of situations, using noun, pronoun, verb, adverb, determiners, etc.
- Drafts, revises and writes short paragraphs based on verbal, print and visual clues
- Writes coherently with focus on appropriate beginning, middle and end in English/Braille
- Writes messages, invitations, short paragraphs and letters9formal and informal) and with a sense of audience
- Visits a language laboratory
- Writes a book review

Suggested pedagogical processes

The learner may be provided opportunities in pairs/groups/individually and encouraged to—

- Participate in classroom activities/school programmes such as morning assembly/extempore/debate etc by being exposed to input-rich environment
- Speak about objects/ events in the class/school environment and outside surroundings.
- Participate in grammar games and kinaesthetic activities for language learning.
- Use English news (newspaper, TV. Radio) as a resource to develop his/her listening and reading comprehension, note-taking, summarizing etc
- Watch/listen to English movies, serials educational channels with sub-titles, audio-video/ multi-media materials, for understanding and comprehension
- Interview people from various professions such as doctors, writers, actors, teachers, cobblers, newspaper boy, household helps, rickshaw pullers and so on.
- Use formulaic expressions/instructions such as 'could I give you...' shall we have a cup of tea? To develop communication skills.
- Participate in individual activities s u c h a s i n t r o d u c i n g personalities/guests during school programmes.
- Learn vocabulary associated with various professions and use them in different situations.
- Read stories/plays (from different books/newspapers in education (NIE)/ children's section in magazines in English/Braille) and narrate them
- Locate main idea, sequence of events and correlate ideas, themes and issues in a variety of texts in English and other languages.

Learning outcome

The learner-

- Respond to instructions and announcements in school and public places viz. railway station, market, airport, cinema hall, and act accordingly.
- Introduces guests in English, interview people by asking questions based on the work they do.
- Engages in conversations in English with people from different professions such as bank staff, railway staff, etc. using appropriate vocabulary.
- Uses formulaic/ polite expressions to communicate such as 'May I borrow your book?',. 'I would like to differ' etc.
- Speak short prepared speech in morning assembly.
- Speaks about objects/events in the class/environment and outside surroundings.
- Participates in grammar games and kinaesthetic activities for language learning.
- Reads excerpts, dialogues, poems, commentaries of sports and games speeches, news, debates on TV, Radio and expresses opinions about them.
- Asks questions in different contexts and situations (e.g. based on the text/beyond the text/out of curiosity/while engaging in conversation using appropriate vocabulary and accurate sentences.
- Participates in different events such as role play, poetry recitation, skit, drama, debate, speech, elocution, declamation, quiz, etc., organized by school and other such organizations,
- Narrates stories(real or imaginary) and real life experiences in English
- Interprets quotations, sayings and proverbs
- Reads textual/non textual materials in English/Braille with comprehension

- Interpret quotations, saying and proverbs.
- Interpret photographs/sketches, tables, charts, diagrams and maps and incorporate in writing.
- Think critically, compare and contrast characters/events/ideas/themes and relate them to life and try to give opinions about issues.
- Refer sources such as dictionary, thesaurus and encyclopedia for meaning in context and understanding texts.
- Use grammar in context such as active and passive voice, reported speech, tenses, parts of speech, etc.
- Notice punctuation marks in a variety of texts and appropriately use in editing his/her own writing.
- Understand the context for various types of writing: messages, notice, letter, report, biography, travelogue, dairy entry etc.
- Take dictation of a passage with specific attention to words pronounced, punctuation and spelling.
- Attempt various types of writing: notice, letter, report, etc as well as personal/biographical experiences and extrapolative writings.
- Use ICT (Net, mobile, website, YouTube, TED talks etc) to browse for information, for projects/PPT discussion, debate, class seminar etc.
- Attempt creative writing, like stories, poems, dialogues from a story and story from dialogues.
- Visit a language laboratory
- Write a book review.

- Identifies details, characters, main idea and sequence of ideas and events While reading.
- Reads, compares, contrasts, thinks critically and relates ideas to life.
- Infers the meaning of unfamiliar words by reading them in context.
- Reads a variety of text for pleasure e.g. adventure stories and science fiction, fairy tales, also nonfiction articles, narratives, travelogues, biographies, etc.(extensive reading)
- Refers dictionary, thesaurus and encyclopedia as reference books for meaning and spelling while reading and writing
- Prepares a write up after seeking information in print/online, notice board, newspaper, etc
- Communicates accurately using appropriate grammatical forms9e.g., clauses, comparison of adjectives, time and tense, active and passive voice, reported speech etc.)
- Writes a coherent and meaningful paragraph through the process of drafting, revising, editing and finalizing.
- Writes short paragraphs coherently in English/Braille with a proper beginning, middle and end with appropriate punctuation marks.
- Writes answers to textual/non textual questions after comprehension/ inference, draws character sketch, attempts extrapolative writing
- Writes email, messages, notice, formal letters, descriptions/narratives, personal diary, report, short personal/ biographical experiences etc.
- Develops a skit (dialogue from a story) and story from dialogues
- Visits a language laboratory
 - Writes a book review.

1.12 Demonstration multipurpose school

A Demonstration Multipurpose Higher Secondary (Co-educational) School affiliated to CBSE is attached to the Regional Institute of Education Bhopal. It came to existence in 1965 and recognized by (NCERT, New Delhi). The school admits children locally

through a randomized computer draw to facilitate admission to children of all sections of society. It serves as a laboratory of the institute for carrying out action —research and innovative experiments in school education. It also provides opportunities to the interns to observe learn and participate in teaching through internship programme.

1.13 Need and significance of the study

The National Curriculum Framework (2005) stresses the importance of a constructive perspective in classroom learning. In a constructive perspective, learning is a process of construction of knowledge. Learners actively construct their own knowledge by connecting new ideas on the basis of materials or activities presented to them through their experiences.

The traditional method of teaching was based on Behaviouristic view of knowledge where the teacher transmits knowledge to the learners who are considered as passive receivers of knowledge. In contrast, the constructivist paradigm is based on the assumption that knowledge is subjective and learners construct knowledge in the social and cultural environment in which they are embedded.

English teaching should always be made an interesting one. Any learning aims at enabling the child to acquire the concepts. It depends on the context and situation in which the child learns. If the context and conditions are supportive it will create interest in learning. This is what the constructivist approach tries to provide. Activities should be performed by the students themselves, it creates confidence in students.

Therefore, there is a need to shift from the behavioral approach to constructivist approach of teaching. Therefore, a study is needed in the area of constructivist approach to find its effectiveness in terms of the variable related to cognitive and affective domain.

Constructivist approach helps child to construct their own ideas. From the constructivist perspective, as Piaget stressed, knowledge is an adaptive activity. This means that one should think knowledge as a kind of compendium on concepts and actions that one has found to be successful given the purpose one has in mind. The importance lies on the fact that mere book reading and rote memorization do not lead to meaningful learning. The idea that we construct in our cognition and its application is true learning. Thus constructivist approach is said to improve the students learning outcome and certain cognitive skills.

The present study gives importance to student's achievement in English and their reaction towards constructivist approach. Achievement in English can measure the understanding of the learner. The study plans to find out whether children taught through constructivist approach has there any difference in their achievement and reaction of children taught through constructivist approach.

The present investigation is undertaken with an objective that the findings will help in improving the teaching learning process, especially in English, wherein the attempts for strengthening the constructivist approach can be supported.

1.14 Statement of the problem

Impact of constructivism on learning outcomes in English at upper primary level in DMS, Bhopal.

1.15 Objectives of the study

1 To study impact of constructivism on the learning outcomes in

- Reading comprehension.
- Vocabulary in context.
- Grammar in context.
- Short composition
- 2 To study the pedagogical process which involves opportunities provided to learners by teachers.
- 3 To study how pedagogical processes affect learning outcomes.

1.16 Research questions

- 1 To what extent does constructivist pedagogy influence learning outcomes in English regarding grammar, vocabulary, short composition, reading comprehension?
- 2 Do the teachers provide opportunities to learners of English through constructivist pedagogical processes?
- 3 How effective are the constructivist pedagogical processes in achieving the desired learning outcomes?

Hypotheses

- 1 Constructivist pedagogy has a positive influence on learning outcomes in English in the area of grammar.
- 2 Constructivist pedagogy has a positive influence on learning outcomes in English in the area of vocabulary.
- 3 Constructivist pedagogy has a positive influence on learning outcomes in English in the area of Short composition.
- 4 Constructivist pedagogy has a positive influence on learning outcomes in English in the area of reading comprehension.

1.17 Operational definitions

Constructivism:

It is a philosophy founded on the belief that we construct our own understanding of the world by reflecting on our experiences. Learning is simple; the process of adjusting our mental models to accommodate new experiences. The emphasis of the constructivist theory is on the PROCESS rather than the PRODUCT of learning. It focuses that the learner in working memory constructs knowledge. In this approach, the students determine how much they have learned as well as the process by which they learned. It changes the dynamics of the traditional classroom by empowering the learner as the focus and architect of the learning process while redefining the role of the instructor to be a guide, a facilitator and helper, rather than the source and conduit of knowledge. Constructivism says that learners construct their own understanding and knowledge of the world through experiencing things and reflecting on those experiences.

Learning outcomes in English

The English language learning outcomes are intended to be achieved by every child so as to enable them to be proficient users of language in real life situations. Broadly, the goal of language

learning which could be achieved includes- attainment of basic proficiency in language for effective communication and development of language for knowledge acquisition, i.e., using language as a tool for learning the content subjects. However, the teacher should have flexibility and consider the pace of learning of children as well as their opportunities of learning English at home and in school. The learning outcomes are the launching pads for developing skills and competencies in learners of English language in class VI &VIII. Teachers may add activities to achieve outcomes. Pedagogical processes along with the learning outcomes to emphasize the process of learning and active participation of learners. Activities and exercises support teachers in creating learning opportunities for learners.

Upper primary level

Upper primary covers (11-14 years) age group of children. In most Indian states, this translates into the successful completion of prescribed educational requirement till Class VIII. The essence of the goal is for every 14 year old child is to have acquired foundation skills such as the ability to read and write with fluency, numeracy, comprehension, analysis, reasoning and social skills such as team work. It is believed that education at the age of 14 years is the basic minimum for the child to have effectively absorbed the capacity for formal and articulate thought and expression, so that the education obtained can serve as an effective means in life options.

The period of Elementary school (from class 1-8) is now also recognized as the period of compulsory schooling vide the constitutional amendment making education a fundamental right. The beginning of this period marks the formal introduction of the child to reading, writing and arithmetic, culminating in the introduction of the formal disciplines such as science and the social sciences towards the end of elementary school. This period of eight years is one of tremendous cognitive development, shaping reason, intellect and social skills, as well as the skills and attitudes necessary for entering the work place.

1.18 Scope and delimitations of the study

Scope

- The study can be undertaken with the large sample for precise result.
- · Different grade levels can be selected.
- The findings can be validated with other subjects as well.
- The rural environment can be consolidated with urban one for a wide scope.
- · Constructivist approach may be validated in prose and poetry to attain better learning outcomes.

Delimitations

- The CBSE syllabus of class VI and VIII is selected for teaching English but not the whole syllabus.
- The study is confined to only class VI and VIII students only.
- The study was delimited to the single school only i.e., Demonstration Multipurpose School, Bhopal.
- The treatment of only 10 days was given to the experimental group only.

Chapter 2 Review of related literature

Chapter2 Review of related literature

2.0 Introduction of reviewing

Research takes advantage of the knowledge which has been accumulated in the past as a constant human endeavour. It can never be undertaken in isolation of the work that has already been done. Problems which directly or indirectly relates to the study is proposed by the researcher. A careful review of the Research Journals, books, dissertation, thesis and other resourceful information on the problems to the investigated was done so that the proposed study could lead in the right direction. Review is important to organize the knowledge of the specific area of research to evolve an edifice of knowledge to show that the proposed study would be an addition to this field.

2.1 Studies in India

Studies related to constructivist approach

Adlak Chandrakantha G. (2012) conducted a study on the effectiveness of Constructivist approach for teaching English to VI class in terms of achievement and found that the constructivist approach was effective in terms of achievement in English of learners and gender did not produce any differential effect on the achievement in English.

Pal Vinita (2013) conducted a study on the effectiveness of Constructivist approach on the achievement in English of VII std. students and found that the Constructivist approach is effective in raising the achievement of the subject concerned. It is also experienced during the study that this approach is not only effective in cognitive development but also effective in interpersonal development. The skills, those practiced by the students can be further mastered

Makwana (2007) Influence of Constructivist approach on achievement of class 5th students in geometry.

Objectives: (1)To study the influence of Constructivist approach on the achievements of class 5th students in geometry.(2) To find out the difference between private school and government school in achievement of class 5th students in geometry.(3) To find out the gender wise difference on achievement of class 5th students in geometry. Major findings: 1. Teaching and learning through constructivist learning situations could definitely help students.2. There were significant increase in the post test scores of both boys and girls. 3. The intensity of improvement of government school students due to the intervention of constructivist learning situation were found better than that of private school. 4. Constructivist learning situation improved constructivist approach on achievement of class 5th students in geometry of private and government school.

Ojha N.C. (2000) conducted a study on Concept Attainment Model (CAM) for teaching economics in class IX with the objectives to study the effectiveness of the instructional material on achievement and reaction of the students. The findings revealed that the CAM was effective in terms of achievement and reaction of the students. Student's attitude towards Economics was significantly influenced by the treatment.

Padmanabhan J. (2005) conducted a research study on the effectiveness of Constructivist approach on the achievement and problem solving ability in science of VII standard students. The objectives of her study were (1) To develop constructivist based lessons on selected units of science for class seventh. (2) To study the effectiveness of Constructivist approach on the students achievement in science and problem solving ability and the reaction of students towards the Constructivist approach. The study revealed significant results on achievement and reaction.

Studies related to English teaching approaches

Khare (1986) conducted a study entitled "Traditional and Structural Approaches of teaching English with reference to Learning Outcomes". The objectives of the study were (i) To test the general level of performance of junior high school students in various aspects of English, namely spelling, comprehension, applied grammar and vocabulary. (ii) To make the comprehensive study of the average performance of the students taught through the structural approach and traditional. Sample of the study comprised of 253 boys and 300 girls from four districts in U.P. seven achievement tests for seven different dimensions of English were constructed. The following conclusion drawn - The students achievement under the Structural Approach was better than those under the traditional method areas of spelling, pronunciation and applied grammar.

Kudesia (1987) conducted a study entitled "An Experimental comparison of discussion method and lecture method in teaching technical English to first year students of polytechnic" (Bhopal). The objectives of the study were to compare the effectiveness of two methods of instruction i.e. the Lecture method and Discussion method in learning technique English. The sample comprised 30 students of Bhopal. An achievement test consisting of 30 questions was prepared on the basis of Blooms taxonomy. The major findings of the study were that the experimental group achieved significantly better results on achievement test.

Singh and Sarangi (2001) in their study "English language proficiency of students in different English language teaching system" made an attempt to find out the English language system of school education. The teaching methods in Traditional systems are accordingly text book oriented and focused on reading and writing alone. In contrast innovative system emphasis was on reading and writing as well as speaking English. A language proficiency test comprising the four skills-listening, speaking, reading and writing was used for the collection of data. In all, the performance of the innovative system was found to be higher in skills like speaking, reading and writing.

Nagarjan (1968) compared Bilingual method and other methods in teaching English on class VI of Hindi medium students of Hyderabad. Other variables were kept constant except the use of mother tongue. The major findings of the study were: i) bilingual method is simple from the point of view of both learners as well as teacher and it enable the students to speak fluently and accurately.

Pradhan (2001) compared direct method and Bilingual method of teaching English in the class. The objectives of the study were: i) to analyze inadequacies of different methods of teaching that are in vogue.ii) to develop four language skills. The findings were: i) The ANOVA revealed that treatment produced significant effect, ii) The Bilingual method ensured accuracy and fluency in spoken words.

Patil (2006) conducted a study entitled "A Comparative study of achievement in English language of class VI students studying through Traditional approach and Structural approach".

2.2 Studies Abroad

Studies related to Constructivist Approach.

Clare Stinger and Bernadette Garfinkel (2003). How the Constructivist Approach to learn can be used to attain academic standards. The findings of this project showed all the students have responded well to the Constructive Approach to learning. The students were able to work through their problems together. An important one being the openness to conversation in the classroom.

Sherri (1995) in his study examined the effects of a Constructivist Learning environment on student cognition of mechanics and attitude towards science compared to students enrolled in a traditional lecturer course and found that there was no significant differences in two groups, but qualitatively students said that they enjoyed the Constructivist strategies, instructor interaction, hands on activities and applications to everyday life.

Marie (2002) revealed that the study provides a strong support for a positive relationship between Constructivist Learning environment and student attitudes, but little support for a direct relationship to student achievements in algebra and biology. The findings showed that neither overall Constructivist- Learning environment nor standards-based teaching practices predicted achievement in any of the content areas. Overall constructivist learning environment and standards-based teaching practices were significant positive predictors of student intrinsic value and learning strategies in all three content areas, after controlling for student and classroom demographic variables.

Studies related to teaching approaches in English

Paul Stone and Andrew Kidd's article Language teaching research, April 2004 reports a survey of 300 intermediate level adult learners views about the instruction they receive and of 15 of their teachers at the national university of Vietnam in Ho Chi Minh City. Its main focus is on how learners can contribute to ELT methodology. The article reviews the literature on learner's culture and perception in language education and on the contributions that learners have made and could make the decisions about classroom methodology. It also reports the conduct and the results of the survey and uses this to discuss implications for L2 classrooms in Vietnam and elsewhere, and to suggest pedagogic interventions that could facilitate learner contributions and cater for learner's needs and wants. The survey indicates that the teachers (as reported in other similar studies) were largely unaware of what their students felt and thought about the methodology of their courses, and that the learners would welcome changes to the culture of their classrooms.

From the above review of related literature, it was found that in many areas of teaching, studies have been conducted. But those were in behavioural approach. A few researches have been undertaken on constructivist approach. Therefore, need to shift from the behavioral approach to constructivist approach of teaching. Critical pedagogy and the constructivist approach go hand in hand. Therefore, a study is needed in the area of constructive approach to find its effectiveness in terms of the variables related to cognitive and affective domain. In these terms of the variables related to cognitive and affective domain. In this study, an attempt will be made to investigate the impact of Constructivist Approach on achievement of class VI students in English.

Duren Cherrington (1992) studied the relative effect of Cooperative basis independent practices following the instructional period of introducing mathematical problem solving strategies. The result of the test indicated that the students who worked cooperatively were able to remember and apply the problem solving strategies better than the students for the independent practices classes. Result also shows that the students were more willingly to take a problem linger in the cooperative groups from teacher observation and notes, students in the cooperative group classes were more open to alternative strategies and received much more corrective feedback from peers.

Studies related to learning outcomes

Natalia A.Gunina (2015) Action research into teaching English in Russia's professional context. The key issue relevant to designing the ESP course for IT undergraduates on the basis of research

conducted at Tambov state technical university. ESP course design should start from analyzing learner's particular needs and expectations. Based on learner's need and their future language use, the learning outcomes can be formulated. This process involves consideration of skills required for future workplace communication. Evaluation of the course is an essential part of its design as it helps to understand the effectiveness of the employed methods of teaching, the appropriateness of the materials selected for the course and the necessity of changes of the structure, content and methodology of instruction.

Fred Genesee, Lindolm-Leary, Bill Saunders, Donna Christian (2006) Educating English language learners: A Synthesis of Research Evidence. This book provides an extensive review of scientific research on the Learning Outcomes of students with limited or no proficiency in English in US Schools. Research on student in Kindergarten through grade 12 is reviewed. The primary chapter of the book focus on these student's acquisition of oral language skills in English, their development of literacy (reading and writing skills) in English, instructional issues in teaching literacy and achievement in academic domains (i.e, mathematics, science and reading). The review and analysis of the research are relatively technical with a focus on research quality, design characteristics and statistical analysis.

Su Li (2011) Vocabulary learning beliefs, strategies and Language Learning Outcomes: A Study of Chinese learners of English in higher vocational education. Vocabulary is essential for any language. Yet, the outcomes of second language vocabulary learning are far from satisfactory for most learners. This is especially true with learners of English in mainland china. In this input-poor context, vocabulary learning strategies is known to teachers and students, who also instinctively know the use of vocabulary learning strategies influenced by vocabulary learning beliefs including the under researched motivational beliefs.

With a highly homogeneous sample whose size is considerable, this book reports the first comprehensive study in mainland china on vocabulary learning strategies and beliefs that address motivational vocabulary learning beliefs. The goal of research into beliefs and strategies is to facilitate teaching and learning. Though the book focuses on the Chinese learners of English, much of what is found should be relevant to teaching and learning in other parts of the world.

Ruby Takanishi & Suzanne Le Menestrel (2017). Promising and effective practices for educating English learners in Grade Pre k to 5. Research on classroom practices does not account for the potential influence of developmental factors such as age or grade of the students and associative cognitive and social change that may influence their learning. Thus the conclusion about effective practices are based on synthesis of research involving students in particular grades span through middle school (k-8) or (k-12), on the assumption that evidence based practices apply to students in all grades and that the changing cognitive, social, and emotional development of students during those grades does not condition or interact with outcomes.

Promise N. Okpala (2006) Promoting the educational success of children & youth learning English: promising future. Educating dual language (DLLs) & English learners (ELs) effectively is a national challenge with consequences both for individuals and for American society. Despite their linguistic, cognitive and social potential, many ELs who account for more than 9% of enrollment grades k-12 in US schools are struggling to meet the requirements for academic success, and their prospects for success in post secondary education and in the workforce are jeopardized as a result.

Promoting future examines how evidence based on research relevant to the development of DLLs/ELs from birth to age 21 can inform education and health policies and related practices that

can result in better educational outcomes. This report makes recommendations for policy, practice and research and data collection focused on addressing the challenges in caring for and educating DLLs/ELs from birth to grade 12.

2.3 Overview

By studying the above researches it gets clear that few studies have been conducted in the field of constructivist approach in India and on Learning Outcomes in Abroad. There is a need to shift from behavioral approach to Constructivist approach of teaching in order to attain better Learning outcomes. Constructivist approach of teaching and obtaining better Learning Outcomes go hand in hand. Therefore, a study is needed to find the impact of constructivist approach on the learning outcomes of English at the Upper Primary Level. Whatever research has been done is not directly related with the present study. Hence, above mentioned researches is the basis for the present study.

Chapter— III Design and methodology of the study

Chapter - III

Design and methodology of the study

3.0 Introduction

Chapters 1 and 2 served as theoretical background to the research and contained a survey of the literature consulted for the research under review. In Chapter 1 the detailed conceptual framework has been developed regarding the importance of constructivist approach in teaching various aspects of English. It also served as background information to substantiate the focus on the impact of constructivism by referring to the views of eminent scholars. In Chapter 2 the literature study provided more insight into how the learning process and a process of change according to the constructivist view can bring about a new understanding and deeper thinking on who the learning outcomes could be achieved.

3.1 The Research Approach

Research designis defined as a blueprint or detailed plan for how the research study is to be conducted and others expand the definitions by adding that the plan is to collect data and to investigate the research hypothesis (Thyer, 1993: 94; Huysamen, 1993: 10). Cohen, Manion and Morrison (2002: 73) argue compellingly that the research design is governed by the notion of fitness for purpose; therefore there cannot be an equal blueprint design for all research. What can be identified is a set of issues that the researcher needs to address in order for the research to be practicable, feasible and able to lead to enhancing the practice. Clarity regarding the critical elements of a research design are vital to ensure that the study is grounded, justified and valid. The present study is a mixed method research. In the present study pre-test post-test control group design is utilized. In order to provide depth and greater understanding, certain qualitative aspects have been added to the study by including a focus group discussion, class room observation schedule and an interview schedule for the teacher. This appears to be valuable in the investigation to find the participants' ideas, interpretation of concepts, meaning given to approaches, feelings, knowledge and practical application of instructional design and assessment of the learning outcomes. This method was chosen as it will be used to investigate in what manner the constructivist approach impacts on instructional design and learning outcomes.

3.2 Sample

The target population consists of all the students studying at upper primary level. For the present study students studying in two sections each of Class VI and VIII of Demonstration Multipurpose School, Bhopal were taken as the sample. Each section has 25 students each. Hence the total sample consisted of 100 students. One section from each class i.e. 25 students, formed the experimental group on whom the intervention was given and the other 25 students formed the control group who were taught through the traditional method.

3.3 Tools Employed in the Study

An in-house planning meeting of two days was organised at Regional Institute of Education, Bhopal to lay a plan for the research study. Thereafter a three days in house workshop was organized at Regional Institute of Education, Bhopal to develop the tools for the study. The workshop was attended by the investigators, junior project fellow and two teachers of DMS, Bhopal. After due deliberations five tools were prepared for the collection of the data for the research work. For collecting the data of the present study the following five tools were developed and used—

- 1) Pre-test on grammar, vocabulary, short composition and reading composition.
- 2) Post-test on grammar, vocabulary, short composition and reading composition.
- 3) Questionnaire for the Teachers
- 4) Classroom Observation Schedule
- 5) Format for Focus Group Discussion with Students

Each tool used is discussed in detail in the following lines

3.3.1 Pre-test on grammar, vocabulary, short composition and reading composition

In order to gauge the students of the control and the experimental group on the basis of their understanding of grammar, vocabulary, short composition and reading composition a pre-test was prepared. This was also important to find if both the groups are homogenous before the intervention. The pre-test consisted of four questions catering to the aspects in question i.e. grammar, vocabulary, short composition and reading composition. Each section was of 10 marks each. Separate pre-tests were prepared for Classes VI and VIII, but the items of the pre-test were same for both the control and the experimental group. In the initial part in both the classes the students had to fill in their name, class and the date on which they are taking the pre-test. The questions included in the pre-test for Class VI were as follows. The first question was to test the reading comprehension of the students. Here a passage on hippopotamus was given and the students were asked to answer five questions from the passage that they had just read. The next question was to test the vocabulary of the students. The students were given five words and were asked to write the meaning and use these words to make sentences of their own. The next question was to test the grammar of the students. In order to do so, the students were given ten sentences where the words were jumbled. They were supposed rearrange the words and phrases to form meaningful sentences. The last question was to know the ability of the students to solve questions on short composition. Here they were given a short story was given in the form of phrasal cues. The students were asked to complete story based on the outlines. This story was to be completed in 100 to 120 words. All the questions were to be done in the sheet provided and the students were to complete the pre-test within one hour.

The pre-test prepared for Class VIII too included four questions with various sub parts. The first question was to read the passage carefully and answer the following questions that follow. A paragraph on save tigers was given and question based on the passage was given below which the students had to answer based on their reading of the passage. The next question was to test the vocabulary of the students. The students were given five words and were asked to write the meaning and use these words to make sentences of their own. The next question was to test the grammar of the students. In order to do so, the students were given ten sentences where the words were jumbled. They were supposed rearrange the words and phrases to form meaningful

sentences. The last question was to know the ability of the students to solve questions on short composition. The last question was to complete a story with a suitable title in about 120 to 150words. Below the question an incomplete story was given with only the beginning. The students were supposed to complete the story on their own using their imagination. The pre-test of both the classes is attached in the appendix.

3.3.2 Post-test on grammar, vocabulary, short composition and reading composition

With the aim of finding the impact of the intervention and the difference in the performance of the control and the experimental group after the treatment a post test was prepared and administered on both the groups. The post-test consisted of four questions catering to the aspects being tested i.e. grammar, vocabulary, short composition and reading composition. Each section was of 10 marks each. Separate pre-tests were prepared for Classes VI and VIII, but the items of the pre-test were same for both the control and the experimental group. In the initial part in both the classes the students had to fill in their name, class and the date on which they are taking the post-test. The questions included in the post-test for Class VI were as follows. The first question was to test the reading comprehension of the students. Here a passage on Sarojini Naidu was given and the students were asked to answer five questions from the passage that they had just read. The next question was to test the vocabulary of the students. The students were given five words and were asked to write the meaning and use these words to make sentences of their own. The next question was to test the grammar of the students. In order to do so, the students were given ten sentences where the words were jumbled. They were supposed rearrange the words and phrases to form meaningful sentences. The last question was to know the ability of the students to solve questions on short composition. Here they were asked to write a story on the topic 'thirsty crow'. The students were provided support in the form of a picture about the story and phrasal cues. The students were asked to complete story based on the guidelines. This story was to be completed in 100 to 120 words. All the questions were to be done in the sheet provided and the students were to complete the post-test within one hour.

The post-test prepared for Class VIII too included four questions with various sub parts. The first question was to read the passage carefully and answer the following questions that follow. A paragraph on Madam Curie and her achievements was given and question based on the passage was given below which the students had to answer based on their reading of the passage. The next question was to test the vocabulary of the students. The students were given five words and were asked to write the meaning and use these words to make sentences of their own. The next question was to test the grammar of the students. In order to do so, the students were given ten sentences where the words were jumbled. They were supposed rearrange the words and phrases to form meaningful sentences. The last question was to know the ability of the students to solve questions on short composition. The last question was to complete a story in about 120 to 150words. Below the question a story was given with along with phrasal cues. The students were supposed to complete the story on their own using the phrasal cues. The post-test of both the classes is

attached in the appendix.

3.3.3 Questionnaire for the Teachers

To collect the opinion of the teachers regarding the various activities conducted by them a questionnaire for teachers was prepared by the investigators. In the initial part information regarding the name of the school, name of the teacher, the classes and subject taught by them was collected. In the second part the first question was regarding the textbook utilized by them for teaching English. The teachers were supposed to name the textbook. The next few questions were included to find out information regarding the various activities conducted by the teacher to give the concepts of grammar, improve vocabulary, teach short composition writing and enhance reading comprehension. The last few questions included question about the usefulness of constructivist approach in achieving the learning outcomes and the various learning outcomes achieved. The information was filled in by the junior project fellow. A format of the questionnaire for the Teachers is attached in the appendix.

3.3.4 Classroom Observation Schedule

Since in a constructivist classroom much of the learning takes place during the process of the classroom interaction hence Classroom Observation Schedule was prepared in order to have hands on information about the communication between teacher and students and among the students. This Classroom Observation Schedule was developed by the investigators. The observation was scheduled for 10 days each in the classes of control and experimental groups. The same classroom observation schedule was used for both the control and experimental groups. The observation schedule was prepared in such a way that the junior project fellow had to tick the instance of an event if it is conducted even once in a period. The instances that were included were learning through lectures, teacher more active that students, use of journals for writing down learning experiences, opportunities of cooperative work, opportunities to make presentations and speeches, encourage peer learning, work is added to portfolios, use of different learning activities (role-play, drama, simulation etc.)., opportunities to do individual projects, opportunities to do group project, opportunities for discussion, assignments were given to find facts not given in the textbook, encourage to learn the new topics through self-discovery, opportunities to develop concept maps, opportunities to raise questions based on reading, provide learning activities for developing creative thinking and provide suggestions, use of various equipments such as dictionaries, LCD projector, computer, audio, video, pictures etc., opportunities to evaluate themselves, opportunities to evaluate peers, opportunities to reflect on their learning, regular feedback is given to the students and the teacher acts as a facilitator and guide. For scoring, the total number of days on which each activity is conducted even once was included from both the control group and the experimental group. The number of days were then converted to that much percentages. The format of the Classroom Observation Schedule is attached in the appendix.

3.3.5 Format for Focus Group Discussion with Students

A format for Focus Group Discussion (FGD) with students was prepared by the investigators to find the opinion and the activities conducted in the classroom for teaching and improving the grammar, vocabulary, short composition and reading comprehension. In the initial part is included the details of the date on which the FGD was conducted is sought, the name of the school and the class is asked. Regarding he questions included in the FGD, the first question is general in nature where it seeks to opinion of the students about the need to learn English language at school level, the next question tries to find the opinion of the students regarding the problems faced by the students in an English Language Classroom. The next few questions seek to find if activities such as discussion or debates, role-play or drama or skit, use of multimedia aids, collaborative or peer learning opportunities, projects, games or puzzles etc. are conducted in the class and how these different activities or aids help them in improving grammar, vocabulary, short composition and reading comprehension. The focus group discussion was held with 10 students from each section of the experimental and control group. The students were selected in consultation with the teachers. The format of the Focus Group Discussion with Students is attached in the appendix.

3.4 Data Collection Procedures

As it is PAC project a Junior Project Fellow was employed according to the need of the study. After selection of the school i.e. Demonstration Multipurpose School, Bhopal, the investigators along with the project fellow visited the school and personally met the Headmaster to seek permission and cooperation for conducting the study. After he agreed to extend his cooperation and provide all facilities required for implementation of the experiment and collection of data, he appointed an English teacher who would conduct the experiment in both the classes. The project fellow and the designated teacher conducted several meeting to clarify regarding the objective of the project and the date and time for the purpose was fixed in the school. Then the project fellow visited the school as per the schedule and collected the data. The data were collected in three phases in the school as discussed in the following paragraphs.

Phase I: Conduct of the Pre-Test

During the in-house meetings with the designated teacher a pre-test was prepared for the students of Class VI and VIII specifically to test their grammar, vocabulary, short composition writing and reading comprehension. In the first phase of the data collection, the students were administered the Pre-test on grammar, vocabulary, short composition and reading composition. The conduct of the test took one hour. The pre-test was administered in both the sections of both the classes simultaneously by the respective English subject teachers.

Phase II: Intervention and Classroom Observation

After the conduct of the pre-test, a ten day intervention was prepared by the junior project fellow in consultation with the designated teacher. It was decided that two days intervention each will be prepared for improving vocabulary and short composition writing and three days intervention each will be prepared for improving grammar and for reading comprehension. Accordingly the lesson plans were prepared and the same were implemented by the teacher for ten days for one

period each (the period they usually took in the designated class). The project fellow observed the transaction and filled in the Classroom Observation Schedule according to the procedure for filling in the same. In the other section the same topics were taught with traditional method and the same were also observed using the Classroom Observation Schedule. For this the junior project fellow sat in the classrooms while the teacher was taking classes.

Phase III: Conduct of the Post-test

After the intervention was carried out for ten days, a post test was conducted on both the control and experimental group. For this purpose Post-test on grammar, vocabulary, short composition and reading composition prepared by the investigators was administered. The post test was based on the content that was covered during the intervention. The post-test was conducted for both the VI and the VIII classes. The conduct of the test took one hour. The post-test was administered in both the sections of both the classes simultaneously by the respective English subject teachers.

Phase IV: Collection of Data from the Teachers

In the fourth phase Questionnaire for the Teachers was filled by personally meeting the concerned teachers and noting down their opinion about the various activities conducted in the class for improving grammar, vocabulary, short composition writing and reading comprehension of the students. Their opinion was also sought on how the various pedagogies were helpful in achieving the desired learning outcomes.

Phase V: Conduct of Focus Group Discussion

For the fifth phase a Focus Group Discussion (FGD) was held with the students. For the purpose a group of ten students were randomly selected from the experimental group of both the classes. FGD with each class was conducted separately. On the desired day, a discussion was conducted regarding the various activities conducted in the class for improving agrammar, vocabulary, short composition writing and reading comprehension and relevant questions from the format for Focus Group Discussion with students were asked. On the basis of the discussion the junior project fellow noted down the responses.

3.5 Scoring, Tabulation and Analysis of the Data

On the completion of the data collection, the data sheets were filed class wise and then student wise. The scores were tabulated on the basis of the answers received. The pre-test and post-test sheets were evaluated and the scores obtained were tabulated for further analysis. For the classroom observation schedule the frequency were tabulated. As from the questionnaire with the teacher and focus group discussion descriptive answers were received, coding for similar answers was done. The scores arrived were tabulated in Microsoft Excelfor further analysis and calculations. The data was analysed using both quantitative and qualitative techniques with thick description.

3.6 Statistical Techniques/Procedures/Methods

- arithmetic mean and standard deviation was computed to know the nature of distribution.
- percentage analysis was done qualitative data.
- t-test was used to find the effect of intervention on the experimental group.

Chapter- 4 Analysis and interpretation of results

Chapter 4 Analysis and interpretation of results

4.0 Introduction

The first chapter deals with the introduction, background, need and justification, objectives and hypothesis of the study. Reviews of related literature are present in the second chapter. In the third chapter, the methodology, sample, tools, procedure of data collection and the statistical techniques to be employed for the analysis of the data are presented. The analysis of results and its interpretations are presented under different headings in this chapter.

4.1 Analysis of data, interpretation of results and discussion

The analysis of data, its interpretation and the discussions based on the results are presented here. In order to answer the research questions the investigator has utilized percentage analysis of the collected data. In the case of the hypothesis, the researcher has adopted both 0.05 and 0.01 level of significance to test significance of the obtained results. The researcher analyzed the data in the computer using Microsoft Excel 2007 and SPSS 20 software packages. In the lines that follow the analysis and interpretation of the collected data is presented objective-wise. As two different classes i.e. Class VI and Class VIII has been taken for the study, the analysis and interpretation is done in two sections.

4.2 Impact of Constructivism on the Learning Outcomes on Class VI Students

This section relates to analysis and interpretation of data pertaining to objective number 1 of the study that reads'to study the impact of constructivism on the learning outcomes in—grammar in context; vocabulary in context; short composition and reading comprehension' and to test the hypothesis namely i) constructivist pedagogy has a positive influence on learning outcomes in English in the area of grammar; ii) constructivist pedagogy has a positive influence on learning outcomes in English in the area of vocabulary; iii) constructivist pedagogy has a positive influence on learning outcomes in English in the area of short composition; and iv) constructivist pedagogy has a positive influence on learning outcomes in English in the area of reading comprehension. The data for the above was collected using the pre-test and post-test on grammar, vocabulary, short composition and reading composition. The impact of constructivism on different aspects among Class VI students is presented in the lines that follow.

4.2.1 Impact of Constructivism on the Learning Outcomes in Grammar on Class VI students

With the aim of testing the effectiveness of constructivist pedagogy on the learning outcomes in grammar of Class VI students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the grammar section were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in grammar of Class VI students in control group was compared with the mean score in grammar of Class VI students in the experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of constructivist

pedagogy, the subjects were administered the post-test. In the post test too the mean score in grammar of Class VI students in the control group were compared with the mean score in grammar of Class VI students in the experimental group. This was done by testing significance of difference between of post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.1.

Table 4.1 Mean scores, standard deviation and t values of the pre-test and post-test of groups for grammar

Variable	Group	N	Mean	SD	Df	t value
Pre-test Score	Control	25	5.32	1.520		.094"
	Experimental	25	5.28	1.487	48	
Post-test Score	Control	25	5.16	1.344	70	5.314**
	Experimental	25	7.24	1.422		

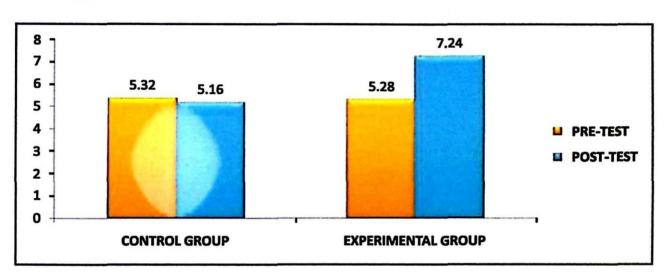
#not significant at 0.05 level

Table 4.1 shows the value of 't' test applied to the pre-test scores obtained by the Class VI students of the Control (N=25) and Experimental (N=25) groups for grammar. Since the calculated t value (.094) is less than the table value (2.01) at 0.05 level with df as 48, the difference between the mean score of control group (5.32) and that of the experimental group (5.28) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having equal competence in grammar before the intervention was given. This clearly confirms that the Class VI students of the control and experimental groups are of equal ability with reference to their understanding of grammar.

Further table 4.1 also show the value of 't' test applied to the post-test scores obtained by the Class VI students of the control and experimental groups for grammar. In this case since the calculated value of t (5.314) was greater than table value (2.68) at 0.01 level with df as 48, the difference between the mean score of control group (5.16) and that of the experimental group (7.24) on post-test is statistically significant. Since the value is significant hence the hypothesis

^{**} significant at 0.01 level

namely "constructivist pedagogy has a positive influence on the learning outcomes in English in the area of grammar" is accepted in this case. It implies that Experimental Group of Class VI students performed better in the post-test compared to the Control Group of Class VI students. The finding indicates that the utilization of constructivist approach leads to gain in scores of grammar.



approach leads to gain in scores of grammar.

Figure 4.1 showing the mean pre-test and post-test scores of grammar obtained by the control and experimental group

On analyzing figure 4.1 it is found that the mean pre-test scores of control group is 5.32 and that of the experimental group is 5.16, while the post-test scores of control group is 5.28 and that of the experimental group is 7.24. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in grammar of the experimental group has shown improvement. Further from table 4.1 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this is can be inferred that the improvement is due to the intervention provided i.e. the used of constructivist pedagogy in teaching grammar.

4.2.1.2 Impact of Constructivism on the Learning Outcomes in Vocabulary on Class VI students

With the aim of testing the effectiveness of constructivist pedagogy on the learning outcomes in vocabulary of Class VI students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the vocabulary section were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in vocabulary of Class VI students in control group was compared with the mean score in vocabulary of Class VI students in the

experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of constructivist pedagogy, the subjects were administered the post-test. In the post test too the mean score in vocabulary of Class VI students in the control group were compared with the mean score in vocabulary of Class VI students in the experimental group. This was done by testing significance of difference between of post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.2.

Table 4.2 Mean scores, standard deviation and t values of the pre-test and post-test of groups for vocabulary

Variable	Group	N	Mean	SD	Df	t value
Pre-test Score	Control	25	3.64	1.705		.084"
	Experimental	25	3.60	1.658	40	
Post-test Score	Control	25	3.48	1.661	48	4.563**
	Experimental	25	5.40	1.291		

not significant at 0.05 level

Table 4.2 shows the value of 't' test applied to the pre-test scores obtained by the Class VI students of the Control (N=25) and Experimental (N=25) groups for vocabulary. Since the calculated t value (.084) is less than the table value (2.01) at 0.05 level with df as 48, the difference between the mean score of control group (3.64) and that of the experimental group (3.60) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having equal competence in vocabulary before the intervention was given. This clearly confirms that the Class VI students of the control and experimental groups are of equal ability with reference to their understanding of vocabulary.

Further table 4.2 also show the value of 't' test applied to the post-test scores obtained by the Class VI students of the control and experimental groups for vocabulary. In this case since the calculated value of t (4.563) was greater than table value (2.68) at 0.01 level with df as 48, the difference between the mean score of control group (3.48) and that of the experimental group (5.40) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "constructivist pedagogy has a positive influence on the learning outcomes in English in the area of vocabulary" is accepted in this case. It implies that Experimental Group of Class VI students performed better in the post-test compared to the Control Group of Class VI students. The finding indicates that the utilization of constructivist approach leads to gain in scores of vocabulary.

^{**} significant at 0.01 level

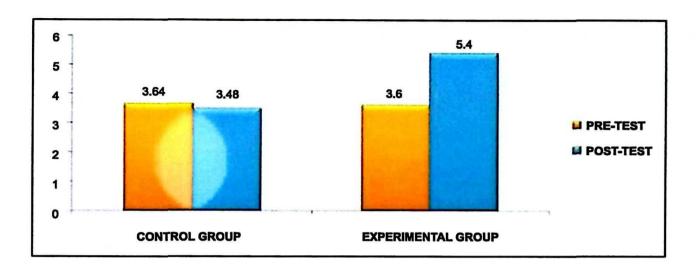


Figure 4.2 showing the mean pre-test and post-test scores of vocabulary obtained by the control and experimental group

On analyzing figure 4.2 it is found that the mean pre-test scores of control group is 3.64 and that of the experimental group is 3.48, while the post-test scores of control group is 3.6 and that of the experimental group is 5.4. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in vocabulary of the experimental group has shown improvement. Further from table 4.1 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this is can be inferred that the improvement is due to the intervention provided i.e. the used of constructivist pedagogy in vocabulary.

4.2.1.3 Impact of Constructivism on the Learning Outcomes in Short composition on Class VI students

With the aim of testing the effectiveness of constructivist pedagogy on the learning outcomes in short composition of Class VI students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the short composition section were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in short composition of Class VI students in control group was compared with the mean score in short composition of Class VI students in the experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of constructivist pedagogy, the subjects were administered the post-test. In the post test too the mean score in short composition of Class VI students in the control group were compared with the mean score in short composition of Class VI students in the experimental group. This was done by testing significance of difference between of post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.3.

Table 4.3 Mean scores, standard deviation and t values of the pre-test and post-test of groups for short composition

Variable	Group	N	Mean	SD	df	t value
Pre-test Score	Control	25	5.52	1.295		0.112*
	Experimental	25	5.48	1.229	48	
Post-test Score	Control	25	5.36	1.221		5.876**
	Experimental	25	7.36	1.186		

not significant at 0.05 level

** significant at 0.01 level

Table 4.3 shows the value of 't' test applied to the pre-test scores obtained by the Class VI students of the Control (N=25) and Experimental (N=25) groups for short composition. Since the calculated t value (0.112) is less than the table value (2.01) at 0.05 level with df as 48, the difference between the mean score of control group (5.52) and that of the experimental group (5.48) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having equal competence in short composition before the intervention was given. This clearly confirms that the Class VI students of the control and experimental groups are of equal ability with reference to their understanding of short composition.

Further table 4.1 also show the value of 't' test applied to the post-test scores obtained by the Class VI students of the control and experimental groups for short composition. In this case since the calculated value of t (5.876) was greater than table value (2.68) at 0.01 level with df as 48, the difference between the mean score of control group (5.36) and that of the experimental group (7.36) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "constructivist pedagogy has a positive influence on the learning outcomes in English in the area of short composition" is accepted in this case. It implies that Experimental Group of Class VI students performed better in the post-test compared to the Control Group of Class VI students. The finding indicates that the utilization of constructivist approach leads to gain in scores of short composition.

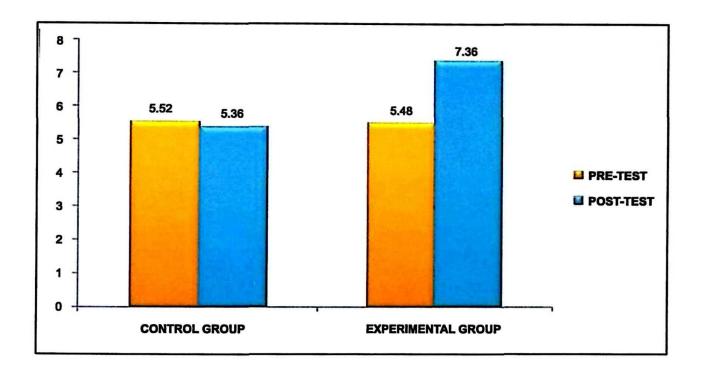


Figure 4.3 showing the mean pre-test and post-test scores of short composition obtained by the control and experimental group

On analyzing figure 4.3 it is found that the mean pre-test scores of control group is 5.52 and that of the experimental group is 5.48, while the post-test scores of control group is 5.36 and that of the experimental group is 7.36. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in short composition of the experimental group has shown improvement. Further from table 4.1 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this is can be inferred that the improvement is due to the intervention provided i.e. the used of constructivist pedagogy in short composition.

4.2.1.4 Impact of Constructivism on the Learning Outcomes in Reading Comprehension on Class VI students

With the aim of testing the effectiveness of constructivist pedagogy on the learning outcomes in reading comprehension of Class VI students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the reading comprehension section were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in reading comprehension of Class VI students in control group was compared with the mean score in reading comprehension of Class VI students in the experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of constructivist pedagogy, the subjects were administered the post-test. In the post test too the mean score in reading comprehension of Class VI students in the control group were compared with the mean score in reading comprehension of Class VI students

in the experimental group. This was done by testing significance of difference between of posttest scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.4.

Table 4.4 Mean scores, standard deviation and t values of the pre-test and post-test of groups for reading comprehension

Variable	Group	N	Mean	SD	Df	t value
Pre-test Score	Control	25	3.76	1.332		0.579"
	Experimental	25	3.96	1.098	40	
Post-test Score	Control	25	3.8	1.225	48	4.297**
	Experimental	25	5.8	1.979		

not significant at 0.05 level

** significant at 0.01 level

Table 4.4 shows the value of 't' test applied to the pre-test scores obtained by the Class VI students of the Control (N=25) and Experimental (N=25) groups for reading comprehension. Since the calculated t value (0.579) is less than the table value (2.01) at 0.05 level with df as 48, the difference between the mean score of control group (3.76) and that of the experimental group (3.96) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having equal competence in reading comprehension before the intervention was given. This clearly confirms that the Class VI students of the control and experimental groups are of equal ability with reference to their understanding of reading comprehension.

Further table 4.4 also show the value of 't' test applied to the post-test scores obtained by the Class VI students of the control and experimental groups for reading comprehension. In this case since the calculated value of t (4.297) was greater than table value (2.68) at 0.01 level with df as 48, the difference between the mean score of control group (3.8) and that of the experimental group (5.8) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "constructivist pedagogy has a positive influence on the learning outcomes in English in the area of reading comprehension" is accepted in this case. It implies that Experimental Group of Class VI students. The finding indicates that the utilization of constructivist approach leads to gain in scores of reading comprehension.

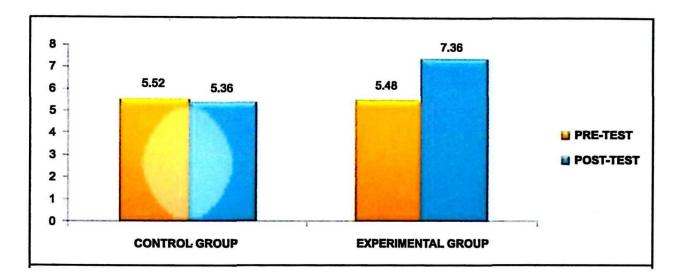


Figure 4.4 showing the mean pre-test and post-test scores of reading comprehension obtained by the control and experimental group

On analyzing figure 4.4 it is found that the mean pre-test scores of control group is 3.96 and that of the experimental group is 4.297, while the post-test scores of control group is 3.8 and that of the experimental group is 5.8. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in reading comprehension of the experimental group has shown improvement. Further from table 4.4 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this is can be inferred that the improvement is due to the intervention provided i.e. the used of constructivist pedagogy in reading comprehension.

4.2.2 Impact of Constructivism on the Learning Outcomes on Class VIII Students

The data for the above was collected using the pre-test and post-test on grammar, grammar, short composition and reading composition for Class VIII. The impact of constructivism on different aspects among Class VIII students is presented in the lines that follow.

4.2.2.1 Impact of Constructivism on the Learning Outcomes in Grammar on Class VIII students

With the aim of testing the effectiveness of constructivist pedagogy on the learning outcomes in grammar of Class VIII students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the grammar section were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in grammar of Class VIII students in control group was compared with the mean score in grammar of Class VIII students in the experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of constructivist pedagogy, the subjects were administered the post-test. In the post test too the mean score in grammar of Class VIII students in the control group were compared with the mean score in

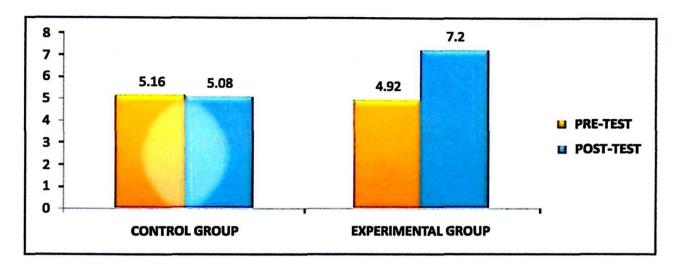


Figure 4.1 showing the mean pre-test and post-test scores of grammar obtained by the control and experimental group

On analyzing figure 4.2 it is found that the mean pre-test scores of control group is 5.16 and that of the experimental group is 4.92, while the post-test scores of control group is 5.08 and that of the experimental group is 7.2. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in grammar of the experimental group has shown improvement. Further from table 4.1 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this is can be inferred that the improvement is due to the intervention provided i.e. the used of constructivist pedagogy in grammar.

4.2.2.2 Impact of Constructivism on the Learning Outcomes in Vocabulary on Class VIII students

With the aim of testing the effectiveness of constructivist pedagogy on the learning outcomes in vocabulary of Class VIII students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the vocabulary section were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in vocabulary of Class VIII students in control group was compared with the mean score in vocabulary of Class VIII students in the experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of constructivist pedagogy, the subjects were administered the post-test. In the post test too the mean score in vocabulary of Class VIII students in the control group were compared with the mean score in vocabulary of Class VIII students in the experimental group. This was done by testing significance of difference between of post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.1.

grammar of Class VIII students in the experimental group. This was done by testing significance of difference between of post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.1.

Table 4.1 Mean scores, standard deviation and t values of the pre-test and post-test of groups for grammar

Variable	Group	N	Mean	SD	df	tvalue
Pre-test Score	Control	25	5.16	1.463		.590*
	Experimental	25	4.92	1.412	48	
Post-test Score	Control	25	5.08	1.344	70	5.250**
	Experimental	25	7.20	1.422		

#not significant at 0.05 level

Table 4.1 shows the value of 't' test applied to the pre-test scores obtained by the Class VIII students of the Control (N=25) and Experimental (N=25) groups for grammar. Since the calculated t value (0.59) is less than the table value (2.01) at 0.05 level with df as 48, the difference between the mean score of control group (5.16) and that of the experimental group (4.92) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having equal competence in grammar before the intervention was given. This clearly confirms that the Class VIII students of the control and experimental groups are of equal ability with reference to their understanding of grammar.

Further table 4.1 also show the value of 't' test applied to the post-test scores obtained by the Class VIII students of the control and experimental groups for grammar. In this case since the calculated value of t (5.25) was greater than table value (2.68) at 0.01 level with df as 48, the difference between the mean score of control group (5.08) and that of the experimental group (7.2) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "constructivist pedagogy has a positive influence on the learning outcomes in English in the area of grammar" is accepted in this case. It implies that Experimental Group of Class VIII students performed better in the post-test compared to the Control Group of Class VIII students. The finding indicates that the utilization of constructivist approach leads to gain in scores of grammar.

^{**} significant at 0.01 level

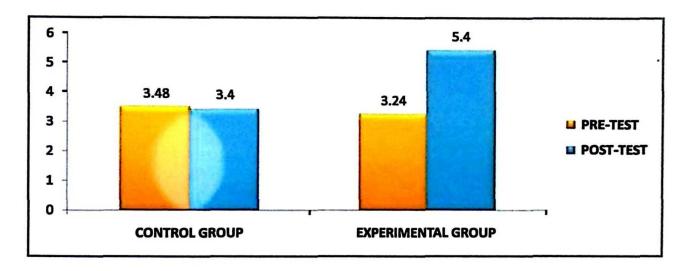


Figure 4.1 showing the mean pre-test and post-test scores of vocabulary obtained by the control and experimental group

On analyzing figure 4.2 it is found that the mean pre-test scores of control group is 3.48 and that of the experimental group is 3.24, while the post-test scores of control group is 3.4 and that of the experimental group is 5.4. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in vocabulary of the experimental group has shown improvement. Further from table 4.1 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this is can be inferred that the improvement is due to the intervention provided i.e. the used of constructivist pedagogy in vocabulary.

4.2.2.3 Impact of Constructivism on the Learning Outcomes in Short composition on Class VIII students

With the aim of testing the effectiveness of constructivist pedagogy on the learning outcomes in short composition of Class VIII students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the short composition section were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in short composition of Class VIII students in control group was compared with the mean score in short composition of Class VIII students in the experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of constructivist pedagogy, the subjects were administered the post-test. In the post test too the mean score in short composition of Class VIII students in the control group were compared with the mean score in short composition of Class VIII students in the experimental group. This was done by testing significance of difference between of post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.1.

Table 4.1 Mean scores, standard deviation and t values of the pre-test and post-test of groups for vocabulary

Variable	Group	N	Mean	SD	Df	t value
Pre-test Score	Control	25	5.36	1.221		0.655#
	Experimental	25	5.12	1786	48	
Post-test Score	Control	25	5.28	1.137	40	6.429**
	Experimental	25	7.36	1.150		

not significant at 0.05 level

** significant at 0.01 level

Table 4.1 shows the value of 't' test applied to the pre-test scores obtained by the Class VIII students of the Control (N=25) and Experimental (N=25) groups for vocabulary. Since the calculated t value (0.755) is less than the table value (2.01) at 0.05 level with df as 48, the difference between the mean score of control group (3.48) and that of the experimental group (3.24) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having equal competence in vocabulary before the intervention was given. This clearly confirms that the Class VIII students of the control and experimental groups are of equal ability with reference to their understanding of vocabulary.

Further table 4.1 also show the value of 't' test applied to the post-test scores obtained by the Class VIII students of the control and experimental groups for vocabulary. In this case since the calculated value of t (4.899) was greater than table value (2.68) at 0.01 level with df as 48, the difference between the mean score of control group (3.4) and that of the experimental group (5.4) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "constructivist pedagogy has a positive influence on the learning outcomes in English in the area of vocabulary" is accepted in this case. It implies that Experimental Group of Class VIII students performed better in the post-test compared to the Control Group of Class VIII students. The finding indicates that the utilization of constructivist approach leads to gain in scores of vocabulary.

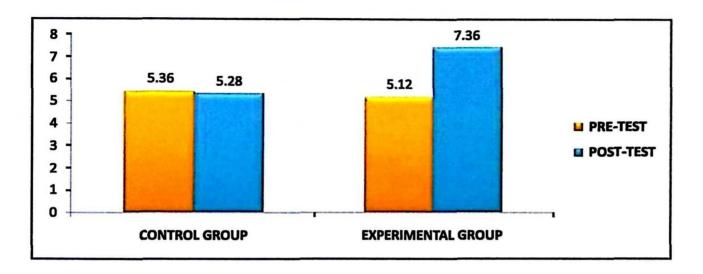


Figure 4.1 showing the mean pre-test and post-test scores of short composition obtained by the control and experimental group

On analyzing figure 4.2 it is found that the mean pre-test scores of control group is 5.36 and that of the experimental group is 5.12, while the post-test scores of control group is 6.429 and that of the experimental group is 5.28. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in short composition of the experimental group has shown improvement. Further from table 4.1 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this is can be inferred that the improvement is due to the intervention provided i.e. the used of constructivist pedagogy in short composition.

4.2.2.4 Impact of Constructivism on the Learning Outcomes in Reading Comprehension on Class VIII students

With the aim of testing the effectiveness of constructivist pedagogy on the learning outcomes in reading comprehension of Class VIII students, the pre-test and post-test scores obtained by control and experimental group were compared. For this the mean pre-test scores and mean post-test scores obtained in the reading comprehension section were computed before and after the experiment and subjected to analysis. Before starting the experiment, the mean score in reading comprehension of Class VIII students in control group was compared with the mean score in reading comprehension of Class VIII students in the experimental group. This was done by testing significance of difference between of pre-test scores of control and experimental groups. Later, to find out the effectiveness of constructivist pedagogy, the subjects were administered the post-test. In the post test too the mean score in reading comprehension of Class VIII students in the control group were compared with the mean score in reading comprehension of Class VIII students in the experimental group. This was done by testing significance of difference between of post-test scores of control and experimental groups. Data and result of both the post test and pre test are presented in table.4.1.

Table 4.1 Mean scores, standard deviation and t values of the pre-test and post-test of groups for short composition

Variable	Group	N	Mean	SD	df	tvalue
Pre-test Score	Control	25	5.36	1.221		0.655*
	Experimental	25	5.12	1.786	48	
Post-test Score	Control	25	5.28	1.137	76	6.429**
	Experimental	25	7.36	1.150		

#not significant at 0.05 level

Table 4.1 shows the value of 't' test applied to the pre-test scores obtained by the Class VIII students of the Control (N=25) and Experimental (N=25) groups for short composition. Since the calculated t value (0.655) is less than the table value (2.01) at 0.05 level with df as 48, the difference between the mean score of control group (5.36) and that of the experimental group (5.12) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having equal competence in short composition before the intervention was given. This clearly confirms that the Class VIII students of the control and experimental groups are of equal ability with reference to their understanding of short composition.

Further table 4.1 also show the value of 't' test applied to the post-test scores obtained by the Class VIII students of the control and experimental groups for short composition. In this case since the calculated value of t (6.429) was greater than table value (2.68) at 0.01 level with df as 48, the difference between the mean score of control group (5.28) and that of the experimental group (7.36) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "constructivist pedagogy has a positive influence on the learning outcomes in English in the area of short composition" is accepted in this case. It implies that Experimental Group of Class VIII students performed better in the post-test compared to the Control Group of Class VIII students. The finding indicates that the utilization of constructivist approach leads to gain in scores of short composition.

^{**} significant at 0.01 level

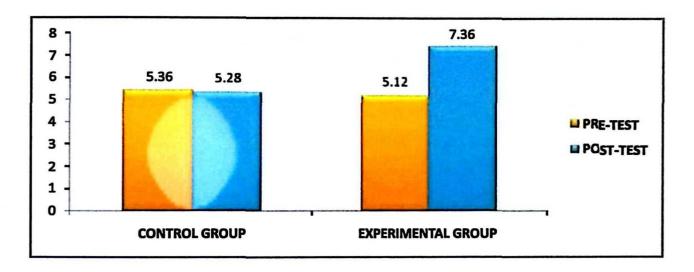


Figure 4.1 showing the mean pre-test and post-test scores of reading comprehension obtained by the control and experimental group

On analyzing figure 4.2 it is found that the mean pre-test scores of control group is 3.76 and that of the experimental group is 3.92, while the post-test scores of control group is 3.302 and that of the experimental group is 3.84. Since the mean scores of post-test of the experimental group is higher than the mean post-test scores of the control group, it can be said that the performance in reading comprehension of the experimental group has shown improvement. Further from table 4.1 it can be seen that when the mean post test scores of the control and the experimental group are compared the t value calculated is significant. From this is can be inferred that the improvement is due to the intervention provided i.e. the used of constructivist pedagogy in reading comprehension.

4.2.3 Pedagogical Processes and Opportunities Provided to the Studentsby the Teacher

This section relates to analysis and interpretation of data pertaining to objective number 2 of the study that reads'to study the pedagogical process which involve opportunities provided to the learners by the teacher.' For the same the research question prepared is 'what are the pedagogical process which involve opportunities provided to the learners by the teacher?' The data for the same was collected by utilizing the Classroom Observation Schedule, the Questionnaire for the teachers and the Focus Group Discussion with the Students.

Since it is mixed methods research where qualitative data was also collected, the items of the tools cater to different objectives. For the present objective all the items of the the Classroom Observation Schedule are used. Along with this, questions 2, 3, 4 and 5 of the Questionnaire for the Teachers too try to fulfill this objective. Lastlyexcerpts from question number 3, 4, 5, 6, 7 and 8 from the Focus Group Discussion with the Students too are used to answer the related research question. The data obtained from the Classroom Observation Schedule were in number of days. These were subjected to percentage analysis and interpretation. The data obtained from the Questionnaire for the Teachers were descriptive and they are analysed question-wise. The data gathered from the Focus Group Discussion with 10 students (5 students each from Class VI and

Table 4.1 Mean scores, standard deviation and t values of the pre-test and post-test of groups for reading comprehension

Variable	Group	N	Mean	SD	df	t value
Pre-test Score	Control	25	3.76	1.422	48	0.427*
	Experimental	25	3.92	1.222		
Post-test Score	Control	25	3.84	1.068		3.302**
	Experimental	25	5.36	2.039s		

not significant at 0.05 level

** significant at 0.01 level

Table 4.1 shows the value of 't' test applied to the pre-test scores obtained by the Class VIII students of the Control (N=25) and Experimental (N=25) groups for reading comprehension. Since the calculated t value (0.427) is less than the table value (2.01) at 0.05 level with df as 48, the difference between the mean score of control group (3.76) and that of the experimental group (3.92) on pre-test is not statistically significant. Thus it can be inferred that both the groups were found to be having equal competence in reading comprehension before the intervention was given. This clearly confirms that the Class VIII students of the control and experimental groups are of equal ability with reference to their understanding of reading comprehension.

Further table 4.1 also show the value of 't' test applied to the post-test scores obtained by the Class VIII students of the control and experimental groups for reading comprehension. In this case since the calculated value of t (3.302) was greater than table value (2.68) at 0.01 level with df as 48, the difference between the mean score of control group (3.84) and that of the experimental group (5.36) on post-test is statistically significant. Since the value is significant hence the hypothesis namely "constructivist pedagogy has a positive influence on the learning outcomes in English in the area of reading comprehension" is accepted in this case. It implies that Experimental Group of Class VIII students performed better in the post-test compared to the Control Group of Class VIII students. The finding indicates that the utilization of constructivist approach leads to gain in scores of reading comprehension.

VIII) from each of the control and the experimental group was too in the form of descriptions but they were codified according to the repetition in the answers and percentage analysis of the same was done. In the lines that follow first the analysis of data obtained from the classroom observation is presented. Figure 4.5 presents the data regarding the frequency of the use of various activities conducted by the respective teachers with the control and the experimental groups.

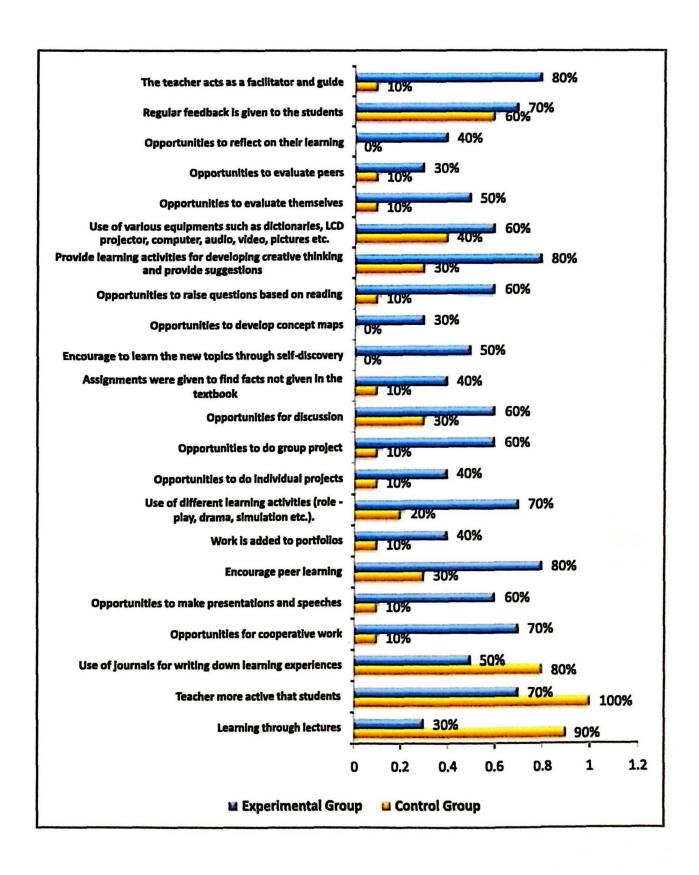


Figure 4.5 showing activities conducted by the teachers with control and experimental group

From figure 4.5 it can be seen that in the control group, of the total times, in 10% of the available time the teacher acts as a facilitator and guide, while this aspect was 80% in the case of experimental group. Further, in the control group, of the total times, in 60% of the available time regular feedback is given to the students, while this aspect was 70% in the case of experimental group. Regarding the next component, in the control group no opportunity to reflect on their learning was given, while this aspect was 40% in the case of experimental group. It was seen that, in the control group, of the total times, in 10% of the available time opportunities to evaluate peers was given, while this aspect was 30% in the case of experimental group. In addition, in the control group, of the total times, in 10% of the available time opportunities to evaluate themselves was given, while this aspect was 50% in the case of experimental group. In another component of the aspect, in the control group, of the total times, in 40% of the available time use of various equipments such as dictionaries, LCD projector, computer, audio, video, pictures etc. was done, while this aspect was 60% in the case of experimental group. Subsequently, in the control group, of the total times, in 30% of the available time teachers provide learning activities for developing creative thinking and provide suggestions, while this aspect was 80% in the case of experimental group. Next, in the control group, of the total times, in 10% of the available time opportunities to raise questions based on reading was given, while this aspect was 60% in the case of experimental group. Further, in the control group, of the total times, no opportunity to develop concept maps was given, while this aspect was 30% in the case of experimental group. It was also seen that, in the control group, of the total times, in no time was given to encourage learning of the new topics through self-discovery, while this aspect was 50% in the case of experimental group. In addition, in the control group, of the total times, in 10% of the available time assignments were given to find facts not given in the textbook, while this aspect was 40% in the case of experimental group. Next, in the control group, of the total times, in 30% of the available time opportunities for discussion was given, while this aspect was 60% in the case of experimental group. Regarding the next component, in the control group, of the total times, in 10% of the available time opportunities to do group project was given, while this aspect was 60% in the case of experimental group. It was seen that, in the control group, of the total times, in 10% of the available time opportunities to do individual projects was given, while this aspect was 40% in the case of experimental group. In addition, in the control group, of the total times, in 20% of the available time use of different learning activities (role -play, drama, simulation etc.) was done, while this aspect was 70% in the case of experimental group. In another component of the aspect, in the control group, of the total times, in 10% of the available time work is added to portfolios, while this aspect was 40% in the case of experimental group. Subsequently, in the control group, of the total times, in 30% of the available time was given to encourage peer learning, while this aspect was 80% in the case of experimental group. Next, in the control group, of the total times, in 10% of the available time opportunities to make presentations and speeches was given, while this

aspect was 60% in the case of experimental group. Further, in the control group, of the total times, in 10% of the available time opportunities for cooperative work was given, while this aspect was 70% in the case of experimental group. It was also seen that, in the control group, of the total times, in 80% of the available time use of journals for writing down learning experiences, while this aspect was 50% in the case of experimental group. In addition, in the control group, of the total times, in 100% of the available time teacher was more active that students, while this aspect was 60% in the case of experimental group. Lastly, in the control group, of the total times, in 90% of the available time learning took place through lectures, while this aspect was 30% in the case of experimental group.

Interpretation

From above it can be inferred that in the control group more emphasis was given on writing and learning, preparing journals by copying down the work done on the blackboard. It was also seen that almost always lecture method was used for teaching. It was observed that there was mostly only one way communication where the teacher does all the taking and the students were reduced to passive listeners. While when the experimental group of children were observed it was seen that the teacher made use of various equipments such as dictionaries, LCD projector, computer, audio, video, pictures etc and gave opportunities to role -play, drama, simulation etc. They were also given opportunities to develop concept maps, reflect on their learning, evaluate peers and themselves, developing creative thinking and raise questions, learn the new topics through selfdiscovery and discuss, do group project and individual projects, peer learning and cooperative work. Here the teacher acted as a facilitator and guide and gave regular feedback. All the approaches adopted by the teacher in the experimental group were constructive pedagogical approaches while the approaches adopted by the teacher of the control group were traditional pedagogical approaches. The use of constructive pedagogical approaches may be the reason for the better performance of the students in the post-test for grammar, vocabulary, short composition and reading comprehension.

Activities Conducted for giving the Concepts of Grammar

Given in the lines that follow are the answers given by the teachers of the control and experimental group regarding the activities conducted by them to given the concepts of grammar. The teacher of the control group said that she used the rule method to give the concepts of grammar, where the rules were told to the students regarding the use of grammar and then exercises based on them were solved. The teacher of the experimental group told that he opportunities to reflect on their learning, raise questions, develop concept maps, self-discovery, do group and individual projects, discuss, make presentations and speechesto evaluate peers and themselves. He used various equipments such as dictionaries, LCD projector, computer, audio, video, pictures etc. He also provided learning activities for developing creative thinking and solve assignments based on them. These were later added to the portfolio. He also used different learning activities such as role -play, drama, simulation etc. He found that by encouraging peer learning and cooperative work he got better results. He made sure to act as a guide and provide

regular feedback.

Activities Conducted in the Class to Improve Vocabulary

To improve vocabulary the teacher of the control group tell the meaning of the difficult words, asks them to find the meaning in the dictionary and make them write the meanings directly in the notebook. The teacher teaching the experimental group gives opportunities to gauge the meaning in context, discuss, use dictionary, reflect, question, self-discover, do individual and group work and encourages peer learning.

Activities Conducted Teach Short Composition Writing

In order to teach short composition writing, the teacher with the control group gives aa few already prepared short composition to the students and asks them to memorize and write them down a number of times to practice. She also tells which words can be substituted in case a similar short composition is asked. The teacher in the experimental class, given opportunities to reflect, discuss, evaluate the work of self and that of the peer, used audio and video, encourages use dictionaries, preparation of concept maps, make presentations. The teacher also emphsised on peer and collaborative leaning. According to him, all through the process the teacher should act as a facilitator and provide regular feedback.

Activities Conducted to Enhance Reading Comprehension

To enhance the reading comprehension of the students the teacher in the control class conducted few exercises in reading comprehension, where the given passage was read by the teacher and the answers were told to the students. For some passages the students were asked to find the answers from the passage, in case the answers were not found the teacher told the answers to the students. While in the experimental class the teacher gives opportunity to the students to reflect, discuss, evaluate self and peers, use multimedia, prepare concept maps, do individual and group projects, make presentations and speeches and add work to portfolio. They provide regular feedback and guidance.

Regarding the use of various constructive pedagogies, the data was collected only from the students of the experimental group. The same is given in the lines that follow.

Use of Group Discussion/Debates as a Pedagogical Approach

On analyzing the answers given by the students in the Focus Group Discussion (FGD) regarding the use of group discussion/debates as a pedagogical approach, all the students agreed that discussion/debate was held in the classroom. The students told that it was useful pedagogical approach as it encourages participation by all, development of democratic and reflective thinking, provides training in self expression and learning becomes interesting. It removes the inhibition and in removing the doubts in grammar and reading comprehension. With regular interaction vocabulary is also developed. It helps in developing oral communication and expression.

Use of role-play/drama/skit as a Pedagogical Approach

On analyzing the discussion during the FGD on use of role-play/drama/ skit all the students of the constructivist group said that role-play/drama/ skit were conducted regularly in the classroom.

Regarding its effectiveness in learning the students said that it was useful as provided them with the ability to visualize and model a concept or event. They also expressed that it allowed them to discover knowledge through exploration and encouraged engagement and motivation-processes. Role play or drama or skits are wonderful tools to develop vocabulary and short composition. It helps us to develop the skill of making the aspects interesting without taking much time. The reading comprehension is improved as it teaches us to visualize the incidents of facts.

Use of multimedia as a Pedagogical Approach

Regarding the use of multimedia the students of the constructivist group during the FGD affirmed that multimedia aids such as computers, audio, video, mobiles, LCD projectors were often used for teaching various concepts. The students said that the use of multimedia helped them in understanding the concept deeply, visualize the facts better, encouraged exploration and gave access to a wide variety of additional information and made them more engaged. All the students unanimously felt that if was more economical in terms of time and efforts. Using multimedia is very useful as it gives instant feedback and reinforcement regarding aspects of grammar and vocabulary. The exposure to audio and video provides opportunities to expand the use of appropriate words, phrases and sentences. A variety of examples can be seen, which help is making short composition.

Use of collaborative and peer learning as a Pedagogical Approach

Collaborative and peer learning was used almost every day in the classroom, this fact was expressed by the students of the constructivist group. They further said that it was a very useful method of learning as it helps in better retention, oral communication, self-management, and leadership skills. They also agreed that it helps in having diverse perspectives as many times they may have not thought about the possibility of something happening in the context before the peer told them about it. It also prepares for real life social interaction. It helps to understand the abilities in a person. Collaborative and peer learning are useful as it gives a chance for verbal communication and hence develop grammar and vocabulary. When more minds are working together, there are more interpretation and hence the concepts of short composition and reading comprehension become more strong. It also helps to remove doubts and ask questions freely as the inhibition that is felt during interaction with the teacher is not present while interacting with friends.

Use of projects as a Pedagogical Approach

All the students of the constructivist group affirmed that projects were regularly given to them during the teaching learning process. They expressed that it gives them the opportunity for learning by doing. It develops in them the skill of decision making, problem solving, understanding the abstract concepts, thinking out of the box especially in case of failures. Projects help in learning through trial and error. They encourage exploration and finding out what is right and helps develop vocabulary. The concepts of grammar are strengthened as while working together with a group the group members try to find what is best to succeed while competing with the other groups. Reading comprehension is also improves as in projects a lot of

discussion is done and this leads to understanding the passage better with diverse perspectives.

Use ofgames and puzzles as a Pedagogical Approach

The students of the constructive group said that games and puzzles were used often in the classroom to give various concepts of English. All the students said that they loved learning through games and puzzles as they are very engaging, motivating and challenging. It helps them to learn without much effort. They also expressed that learning through games and puzzles was not at all tiring and made the class more lively and interesting. It helps them in understanding many difficult .concepts. As games and puzzles are challenging and lead to a sense of competition, it directs to work towards perfection in all the concepts be it grammar, vocabulary, short composition or reading comprehension.

4.2.4 Effectiveness of Pedagogical Processes on Learning Outcomes

The third objective of the study was 'to study how pedagogical processes affect learning outcomes.' The research question prepared for the same is 'How effective was constructive pedagogical processes in achieving the desired learning outcomes?' The data for the same was collected using the Questionnaire for Teachers. The analysis and interpretation for the same is presented in the lines that follow.

To satisfy the third objective the question included was Are constructivist/traditional pedagogical processes effective in achieving the desired learning outcomes? If yes how? The answer to the above question was collected both from the teacher teaching the control group and the experimental group. According to the teacher of the control group, the traditional pedagogy is useful as it facilitates direct flow of information from the teacher to the student. It has been in use since the ancient times and has produced a number of successful scholars. Moreover as all the strategies are pre-decided there is no uncertainty during the transaction process. The effectiveness of the process can be evaluated easily using a test. While according to the teacher who was using the constructivist approach, a single approach to teaching makes the class boring and monotonous. Here the students are more engaged as a variety of activities are used to provide the concepts. The students get the opportunity to interact with each other which ensures peer and collaborative learning. The students are given opportunity to express themselves freely and naturally. They are motivated for problem solving and decision taking.

Another question that was included was 'What are the learning outcomes achieved after utilizing constructivist pedagogical processes?' The answer to this question was sought only from the teacher teaching the experimental group. As answer to this question the teacher expressed that when constructivist pedagogical processes are used the student is able to provide effective oral response to directions and questions and thus communicate meaningfully. Provide synonyms and antonyms to words. The student is able to main idea, characters, sequence of ideas and events and related with personal experience. They are able to deduce word meanings from clues in context while reading a variety of texts. The are able to write words, phrases, simple sentences, paragraphs and composition as desired by the teacher. They feel motivated to write a coherent and meaningful paragraph through the process of drafting, revising, editing and finalizing. Further

they are also able to use meaningful sentences to describe and narrate factual and imaginary situations in speech and writing. With the various activities the students often refer to dictionary to check meanings and spellings, they also are encouraged to visit and collect information from websites. The students understand grammatical forms in context through reading and make grammatically correct sentences of a variety of situations using noun, pronouns and other parts of speech. The students are encouraged for additional reading.

4.3 Books utilized in Class VI and VIII

The sample of the present study was selected from Demonstration Multipurpose School, Bhopal. The sample consisted of Class VI and VIII students. The book used in Class VI is 'Honeysuckle.' It is published by NCERT in 2006 and has 10 chapters and 8 poems. The whole book is covered in 138 pages. For Class VIII the book used is 'Honeydew.' This book is also published by NCERT in 2008. It has 10 chapters and 8 poems. It has 140 pages.

4.4 Reason for learning English at School Level

This question was included in the FGD to gauge the opinion of the students regarding the reason for learning English at school level. The students gave a number of answers. The gist of the same came out to be the following. All the students felt that learning English was very necessary at school level. The students expressed that it is the major link between the people speaking different languages especially in south and north-east India. They also said that it is needed for professional betterment. The students also strongly felt that it is very necessary in the case of higher education. The students also opined that English is the language of the whole world. It is the linking language between countries and also that matter in science and technology is available only in English.

4.5 Problems faced in an English Language Classroom

Regarding answer to thequestion on the problems faced by the students in English language classroom gave the following answers. The student stated that English is not the mother tongue hence there is less understanding. English is difficult because there is difference in pronunciation and spellings and also that they are not aware of meaning and context of many words and phrases. The fear of being ridiculed for wrong answers by the dominating students is another issue that make learning English difficult. The students strongly felt that as there is lack of understanding students are bored, inattentive, or unmotivated and also that students don't get much support from home hence come unprepared.

4.6 Conclusion

In this chapter the analysis, interpretation and discussions were reported objective wise. The analysis and interpretation were aided with graphs, tables and statistical procedures. In the next chapter the summary and recommendations are logically presented.

Chapter 5 Summary

Chapter 5 Summary

5.0 Introduction

There are several approaches which are used to develop language skills. Constructivism is a major paradigm shift in the field of learning. Constructivist approach is a learner centered approach which emphasizes on collaborative learning. Language learning is facilitated through social interaction. Therefore, constructivism is an approach which promotes language learning. Demonstration Multipurpose school is an experimental school where all new theories are tried and implemented. Learning outcome document has been published by NCERT, New Delhi in 2017. This document establishes a linkage between pedagogical processes and learning outcomes. This study on constructivism and its impact on learning outcomes in English at Upper Primary level in DM School is conducted in which constructivist strategies are adopted in English classroom and learning outcomes are attained.

5.1 Statement of the problem

Impact of constructivism on learning outcomes in English at upper primary level in DMS, Bhopal.

5.2 Objectives

- 1 To study impact of constructivism on the learning outcomes in
 - Reading comprehension.
 - Vocabulary in context.
 - Grammar in context.
 - Short composition
- 2 To study the pedagogical process which involves opportunities provided to learners by teachers.
- 3 To study how pedagogical processes affect learning outcomes.

5.3 Research questions

- 1 To what extent does constructivist pedagogy influence learning outcomes in English regarding grammar, vocabulary, short composition, reading comprehension?
- 2 Do the teachers provide opportunities to learners of English through constructivist pedagogical processes?
- 3 How effective are the constructivist pedagogical processes in achieving the desired learning outcomes?

5.4 Hypotheses

- 1 Constructivist pedagogy has a positive influence on learning outcomes in English in the area of grammar.
- 2 Constructivist pedagogy has a positive influence on learning outcomes in English in the area of vocabulary.
- 3 Constructivist pedagogy has a positive influence on learning outcomes in English in the area of

Short composition.

4 Constructivist pedagogy has a positive influence on learning outcomes in English in the area of reading comprehension.

5.5 Sample

The target population consists of all the students studying at upper primary level. For the present study students studying in two sections each of Class VI and VIII of Demonstration Multipurpose School, Bhopal were taken as the sample. Each section has 25 students each. Hence the total sample consisted of 100 students. One section from each class i.e. 25 students, formed the experimental group on whom the intervention was given and the other 25 students formed the control group who were taught through the traditional method.

5.6 Tools Employed in the Study

An in-house planning meeting of two days was organised at Regional Institute of Education, Bhopal to lay a plan for the research study. Thereafter a three days in house workshop was organized at Regional Institute of Education, Bhopal to develop the tools for the study. The workshop was attended by the investigators, junior project fellow and two teachers of DMS Bhopal. After due deliberations five tools were prepared for the collection of the data for the research work. For collecting the data of the present study the following five tools were developed and used—

- 1) Pre-test on grammar, vocabulary, short composition and reading composition.
- 2) Post-test on grammar, vocabulary, short composition and reading composition.
- 3) Questionnaire for the Teachers
- 4) Classroom Observation Schedule
- 5) Format for Focus Group Discussion with Students

Each tool used is discussed in detail in the following lines

5.7 Methodology

Research designis defined as a blueprint or detailed plan for how the research study is to be conducted and others expand the definitions by adding that the plan is to collect data and to investigate the research hypothesis (Thyer, 1993: 94; Huysamen, 1993: 10). Cohen, Manion and Morrison (2002: 73) argue compellingly that the research design is governed by the notion of fitness for purpose; therefore there cannot be an equal blueprint design for all research. What can be identified is a set of issues that the researcher needs to address in order for the research to be practicable, feasible and able to lead to enhancing the practice. Clarity regarding the critical elements of a research design are vital to ensure that the study is grounded, justified and valid. The present study is a mixed method research. In the

present study pre-test post-test control group design is utilized. In order to provide depth and greater understanding, certain qualitative aspects have been added to the study by including a focus group discussion, class room observation schedule and an interview schedule for the teacher. This appears to be valuable in the investigation to find the participants' ideas, interpretation of concepts, meaning given to approaches, feelings, knowledge and practical application of instructional design and assessment of the learning outcomes. This method was chosen as it will be used to investigate in what manner the constructivist approach impacts on instructional design and learning outcomes.

5.8 Findings

- 1. The Experimental Group of Class VI students performed better in the post-test compared to the Control Group of Class VI students in grammar.
- 2. The Experimental Group of Class VI students performed better in the post-test compared to the Control Group of Class VI students in vocabulary.
- 3. The Experimental Group of Class VI students performed better in the post-test compared to the Control Group of Class VI students in short composition.
- 4. The Experimental Group of Class VI students performed better in the post-test compared to the Control Group of Class VI students in reading comprehension.
- 5. The Experimental Group of Class VIII students performed better in the post-test compared to the Control Group of Class VIII students in grammar.
- 6. The Experimental Group of Class VIII students performed better in the post-test compared to the Control Group of Class VIII students in vocabulary.
- 7. The Experimental Group of Class VIII students performed better in the post-test compared to the Control Group of Class VIII students in short composition.
- 8. The Experimental Group of Class VIII students performed better in the post-test compared to the Control Group of Class VIII students in reading comprehension.
- 9. The teachers acted more as a facilitator and guide in the experimental group.
- 10. In the experimental group regular feedback was given often.
- 11. Opportunities to reflect were given in the experimental group while no such opportunity was given in the control group.
- 12. The students of the experimental group were given more opportunities to evaluate self and peers as compared to the students of the control group.
- 13. Equipments such as dictionaries, LCD projector, computer, audio, video, pictures etc. were used more with the experimental group.
- 14. More opportunities for doing learning activities for developing creative thinking and provide suggestions were given to the experimental group.
- 15. Students of the experimental group were given opportunities to raise questions based on reading. These opportunities were very few in case of the control group.
- 16. The students of the experimental group were given opportunities to develop concept maps

- while no such practice was followed with the students of the control.
- 17. The students of the experimental group were encouraged to learn the new topics through self-discovery while no such encouragement was given to the students of the control group.
- 18. Assignments were given to find facts not given in the textbook to the students of the experimental group while this practice was rarely followed with the students of the control group.
- 19. The students of the experimental group were given many opportunities to conduct discussion on relevant topics, while this opportunity was rarely utilized in the control group.
- 20. The students of the experimental group were given many opportunities to do group work on relevant topics, while this opportunity was rarely given in the control group.
- 21. The students of the experimental group were given many opportunities to work on projects individually, while this opportunity was rarely seen in the control group.
- 22. The teacher of the experimental group used different learning activities (role -play, drama, simulation etc.). quite often.
- 23. In the experimental group peer learning was encourage almost all the times, while peer learning was seldom used with the control group.
- 24. The students of the experimental group were given opportunities to make presentations and speeches many times but these opportunities were not given much to the students of the control group.
- 25. The students of the experimental group were given opportunities for cooperative learning a number of times but this opportunity was rare for the students of control group.
- 26. In the control group more emphasis was given on preparation of journals.
- 27. In the control group it was found that the teachers was always more active that the students.
- 28. The students of the control group were mostly learning through lectures but this practice was less in the experimental class.
- 29. The teacher of the control group said that she used the rule method to give the concepts of grammar, where the rules were told to the students regarding the use of grammar and then exercises based on them were solved. The teacher of the experimental group told that he opportunities to reflect on their learning, raise questions, develop concept maps, self-discovery, do group and individual projects, discuss, make presentations and speeches to evaluate peers and themselves. He used various equipments such as dictionaries, LCD projector, computer, audio, video, pictures etc. He also provided learning activities for developing creative thinking and solve assignments based on them. These were later added to the portfolio. He also used different learning activities such as role -play, drama, simulation etc. He found that by encouraging peer learning and cooperative work he got better results. He made sure to act as a guide and provide regular feedback.
- 30. To improve vocabulary the teacher of the control group tell the meaning of the difficult words, asks them to find the meaning in the dictionary and make them write the meanings

- directly in the notebook. The teacher teaching the experimental group gives opportunities to gauge the meaning in context, discuss, use dictionary, reflect, question, self-discover, do individual and group work and encourages peer learning.
- 31. In order to teach short composition writing, the teacher with the control group gives aa few already prepared short composition to the students and asks them to memorize and write them down a number of times to practice. She also tells which words can be substituted in case a similar short composition is asked. The teacher in the experimental class, given opportunities to reflect, discuss, evaluate the work of self and that of the peer, used audio and video, encourages use dictionaries, preparation of concept maps, make presentations. The teacher also emphsised on peer and collaborative leaning. According to him, all through the process the teacher should act as a facilitator and provide regular feedback.
- 32. To enhance the reading comprehension of the students the teacher in the control class conducted few exercises in reading comprehension, where the given passage was read by the teacher and the answers were told to the students. For some passages the students were asked to find the answers from the passage, in case the answers were not found the teacher told the answers to the students. While in the experimental class the teacher gives opportunity to the students to reflect, discuss, evaluate self and peers, use multimedia, prepare concept maps, do individual and group projects, make presentations and speeches and add work to portfolio. They provide regular feedback and guidance.
- 33. Discussion and debates are good methods as it removes the inhibition and in removing the doubts in grammar and reading comprehension. With regular interaction vocabulary is also developed. It helps in developing oral communication and expression.
- 34. Role-play, drama and skit and useful methods as it helps us to develop the skill of making the aspects interesting without taking much time. The reading comprehension is improved as it teaches us to visualize the incidents of facts.
- 35. The use of multimedia gives instant feedback and reinforcement regarding aspects of grammar and vocabulary. The exposure to audio and video provides opportunities to expand the use of appropriate words, phrases and sentences. A variety of examples can be seen, which help is making short composition.
- 36. Collaborative and peer learning are useful as it gives a chance for verbal communication and hence develop grammar and vocabulary. When more minds are working together, there are more interpretation and hence the concepts of short composition and reading comprehension become more strong. It also helps to remove doubts and ask questions freely as the inhibition that is felt during interaction with the teacher is not present while interacting with friends.
- 37. Projects help in learning through trial and error. They encourage exploration and finding out what is right and helps develop vocabulary. The concepts of grammar are strengthened as while working together with a group the group members try to find what is best to succeed while competing with the other groups. Reading comprehension is also improves

- as in projects a lot of discussion is done and this leads to understanding the passage better with diverse perspectives.
- 38. As games and puzzles are challenging and lead to a sense of competition, it directs to work towards perfection in all the concepts be it grammar, vocabulary, short composition or reading comprehension.
- 39. Traditional pedagogy is useful as it facilitates direct flow of information from the teacher to the student.
- 40. A single approach to teaching makes the class boring and monotonous. Here the students are more engaged as a variety of activities are used to provide the concepts. The students get the opportunity to interact with each other which ensures peer and collaborative learning. The students are given opportunity to express themselves freely and naturally. They are motivated for problem solving and decision taking.
- 41. When constructivist pedagogical processes are used the student is able to provide effective oral response to directions and questions and thus communicate meaningfully. Provide synonyms and antonyms to words. The student is able to main idea, characters, sequence of ideas and events and related with personal experience. They are able to deduce word meanings from clues in context while reading a variety of texts. The are able to write words, phrases, simple sentences, paragraphs and composition as desired by the teacher. They feel motivated to write a coherent and meaningful paragraph through the process of drafting, revising, editing and finalizing. Further they are also able to use meaningful sentences to describe and narrate factual and imaginary situations in speech and writing. With the various activities the students often refer to dictionary to check meanings and spellings, they also are encouraged to visit and collect information from websites. The students understand grammatical forms in context through reading and make grammatically correct sentences of a variety of situations using noun, pronouns and other parts of speech. The students are encouraged for additional reading.
- 42. All the students felt that learning English was very necessary at school level. Regarding the need to learn English at school level the students expressed that it is the major link between the people speaking different languages especially in south and north-east India. They also said that it is needed for professional betterment. The students also strongly felt that it is very necessary in the case of higher education. The students also opined that English is the language of the whole world. It is the linking language between countries and also that matter in science and technology is available only in English.
- 43. The problem faced in an English classroom include, the fact that that English is not the mother tongue hence there is less understanding. English is difficult because there is difference in pronunciation and spellings and also that they are not aware of meaning and context of many words and phrases. The fear of being ridiculed for wrong answers by the dominating students is another issue that make learning English difficult. The students strongly felt that as there is lack of understanding students are bored, inattentive, or

unmotivated and also that students don't get much support from home hence come unprepared.

5.9 Conclusion

The present research study clearly indicates that there is an Impact of Constructivism on Learning Outcomes in English at Upper Primary Level in context of Grammar, Vocabulary, Short composition, Reading comprehension. The constructivist pedagogical processes which are mentioned in the Learning Outcomes document 2017 in connection with learning outcomes in English at Upper Primary Level have been proved to be beneficial to attain better learning outcomes in DMS, Bhopal. Experimental groups of class VI and class VIII showed better results in comparison to control groups of class VI and class VIII after the treatment was given. Experimental group of class VI and VIII performed better in Grammar, Vocabulary, Short composition and reading comprehension in the post test which indicates that constructivist pedagogical processes are having positive impact on the learning outcomes in English at Upper Primary Level.

5.10 Recommendations

The findings of the research study clearly indicates that there is an Impact of Constructivism on learning Outcomes in English at Upper Primary Level in DMS, Bhopal.

Some recommendations are being mentioned which will enable us to adopt constructivism as a pedagogical processes to attain better learning outcomes in English.

- To improve vocabulary teacher should give opportunity to gauge the meanings in context, discuss, use dictionary, reflect, question, self discover, do individual and group work and encourage peer learning.
- For attaining better results in grammar students should be given opportunities to reflect on their learning, raise questions, develop concept maps, self discovery, do group and individual projects, discuss, make presentations and speeches to evaluate peers and themselves. Students should use various equipment such as dictionaries, LCD projector, computer, audio, video, pictures etc. Students should be provided with the learning activities such as role play, drama, simulation etc. they should be encouraged for peer learning and cooperative work to get better result. Teacher should act as a guide and provide regular feedback.
- To improve short composition in class the teacher should give students the opportunities to reflect, discuss, evaluate the work of self and that of the peer, use audio and video, encourage use of dictionaries, preparation of concept maps, make presentations. The teacher should also emphasize on peer and collaborativelearning, teacher should act as a facilitator throughout the process and should give regular feedback.
- For reading comprehension, teacher should give opportunity to students to reflect, discuss, evaluate self and peer, use multimedia, prepare concept maps, do individual and group projects, make presentations and speeches and add work to portfolio.
- Students should be given opportunity to interact with each other which ensures peer and

- collaborative learning. Students should be given opportunity to express themselves freely and naturally. They should be motivated for problem solving and decision making.
- Games and puzzles are challenging and lead to a sense of competition, they should be used as they direct to work towards perfection in all the concepts of grammar, vocabulary, short composition, and reading comprehension.
- Teacher should conduct discussion and debate to remove doubts in grammar and reading comprehension.
- Teacher should teach students to visualize the incidents of facts in reading comprehension as Role play, drama, and skits are useful method to develop interest in students.
- Multimedia or exposure to audio video provide opportunity to explain the use of appropriate words, phrases and sentence, various examples can be shown to prepare a short composition.
- When more minds are working together, there are more interpretation and hence concept of short composition and reading comprehension become strong. Therefore, collaborative and peer learning should be incorporated in the classroom.
- Project help in learning through trail and error. Hence, it is beneficial to strengthen the vocabulary and grammar of students.

5.11 Suggestions for further studies

- 1. Research studies can be conducted on Constructivist approach in the area of prose and poetry also.
- 2. Comparative studies on the rural environment can be consolidated with urban one for a wider scope.
- 3. Different grade levels can be selected for study.
- 4. Studies can be undertaken with the large sample size also.
- 5. This study is conducted in only one school i.e, DM School, similar studies can be conducted in other schools also.
- 6. Comparative study can also be conducted among various schools.

Bibliography

Bibliography

Bibliography

Agnihotri, R.K. and Khanna, A.L. (1917), Social-Psychological Perspective. On Second Language Learning: A Critique. In Singh, R. (ed), Grammar, Language And Society. New Delhi: Sage Publications.

Aiken, W. (1942). The story of the eight -year study: With conclusions and recommendations. Network: Harper & brothers.

Ausubel, D. (1978). In defence of advance organizers; A reply to the critics. Review of educational research, 48,251-259.

Barbara, Jaworski; Constructivism and teaching-the socio-cultural context.

Baumrind, D. (1971). Current patterns of parental authority. Developmental psychology monograph, 4(1), 1-103.

Best, J.W. (1986). Research in Education, New Delhi, Prentice Hall of India Pvt. Ltd.

Bloom, B.S. et al (1956). Taxonomy of educational objectives. Mc Kay, New York.

Brooks, J.G and Brooks, M.G. (1993). In search of understanding: The case for constructivist classroom, Association for supervision and curriculum development, Alexandria, VA.

Brown, J.S., Collins, A, &Duguid, P. (1989). Situated cognition and the culture of learning. Educational research, 18(1, 32-41).

Bruner, J.S. (1964), The course of cognitive growth. American psychologist, 19, 1-15.

Chomsky, N.C. (1986). Knowledge of language. New York; Prageg Classrooms.

Alexandria, VA: Association for supervision & curriculum development, 1993.

Confery.J. (1990) what constructivist implies for teaching.

Dewey, J. Democracy & education. New York: free press 1966.

Driver, R., Asoko, H., Leach, J., Mortimer, and Scott, P. (1994). Constructing scientific knowledge in the classroom. Educational research, 23(7), 5-12.

Ellis.R. (2003). Task-based language learning and teaching. Oxford: oxford university press.

Fosnot, C.T. (1996). Constructivism; Theory, perspective and practice. New York: Teacher's college, Columbia University.

Foxx et al (2001). Evaluation of constructivist pedagogy: Influence on critical thinking skills, science fair participation and level of performance. Dissertation Abstracts International.62 (2).

Garret, H.E. (1967). Statistics in psychology and education; Bombay Vakils.

Kerlinger, F.N. (1983). Foundations of behavioral research, New Delhi: Surject publications.

Kaul, Lokesh (1984) Methodology of educational research, New Delhi, Vikas Publications.

Krashan, S.D.(1992). Principles And Practice in Second Language Acquisition. Oxford: Pengamon Press.

National Curriculum Framework-2005 (NCF-2005). National council of educational research and training, New Delhi.

National curriculum framework-2005 (NCF-2005). National focus groups- position paper on teaching of English. National council of educational research and training, New Delhi.

Ojha, N.C. (2004). Teaching of economics: concept attainment model, Gagan Deep Publications, Delhi.

Padmanabhan, Vasundhara. Constructivism and Reflective Teaching in Teacher Education.

Edutracks 14-16 Dec 2007.

Perkins and Simmons. (1988). Saxena, A.B (1995). Developing classroom strategy for more effective teaching. Journal of Indian Education, Vol. 20, No.5, January, p 46.

Piaget, J. (1975). The development of Thought: Equilibration of Cognitive Structures, New York, Viking.

Sharma, S. (2006). Constructivism. In Sharma, S. (Ed.). Constructivist approaches to teaching and learning: Handbook for teacher of secondary stage, NCERT, New Delhi.

Study conducted by MadhavChavan and Rukmini Banerji entitled 'The Challenges of Achieving Desirable Level of Learning in Elementary Education.

The English Impact Report: Investigating Learning Outcomes at the Primary School Level in Rural India conducted by British Council 2012-2013 raises this concern.

Von Glaser field, e. (1984). The invented reality. Norton & Co, New York.

Vygotsky, L.S. (1978). Mind in society. Harward University Press, Cambridge.

Appendices

Appendix -A PROFORMA FOR FORMULATION OF PROPOSAL FOR EDUCATIONAL RESEARCH

ERIC – RESEARCH PROJECT Programme No. 16.04

1. Title of the Study/Project-

Impact of constructivism on Learning Outcomes in English at Upper Primary Level in DMS, Bhopal.

2. Introduction

Rob Lynes, Director, British Council, India emphasized in his message that "Research shows that all's not well with English learning across India, specially at the Primary level where foundations are supposed to be laid." *The English Impact Report: Investigating Learning outcomes at the Primary School level in Rural India* conducted by British Council in 2012-2013 raises this concern.

Another study conducted by MadhavChavan and Rukmini Banerjee entitled 'The Challenges of Achieving Desirable levels of learning in Elementary Education' pointed out that assessment anchored in textbook led grade level curriculum defeats the purpose for which it was conceived. It mentioned that PISA (Programme for International Student Assessment) placed Indian students in lowest in reading literacy. This study stated that a decline is seen in learning over the years.

There are several approaches which are used to develop language skills. Constructivism is a major paradigm shift in the field of learning. Constructivist approach is a learner centered approach which emphasises on collaborative learning. Language learning is facilitated through social interaction. Therefore, constructivism is an approach which promotes language learning.

Demonstration Multipurpose School is an experimental school where all new theories are tried and implemented. Learning outcomes document has been published by NCERT, New Delhi in 2017. This document establishes a linkage between pedagogical processes and learning outcomes. This study on constructivism and its impact on learning outcomes in English at Upper Primary level in DM School is an attempt to conduct a meaningful research to showcase that an improvement in language learning, specially English is possible if constructivist strategies are adopted in the English classroom and learning outstcomes can be attained.

3. Objectives

- 1. To study impact of constructivism on the learning outcomes in:
 - Grammar in context.

- · Vocabulary in context.
- Short composition.
- · Reading comprehension.
- 2. To study pedagogical process which involve opportunities provided to learners by teachers.
- 3. To study how pedagogical processes affect learning outcomes.

4. Research Questions

- 1. To what extent does constructivist pedagogy influence learning outcomes in English regarding grammar, vocabulary, short composition, reading comprehension?
- 2. Do the teachers provide opportunities to learners of English through constructivist pedagogical processes?
- 3. How effective are the constructivist pedagogical processes in achieving the desired learning outcomes?

5. Hypotheses

- 1. Constructivist pedagogy has a positive influence on learning outcomes in English in the area of grammar.
- 2. Constructivist pedagogy has a positive influence on learning outcomes in English in the area of vocabulary.
- 3. Constructivist pedagogy has a positive influence on learning outcomes in English in the area of short composition.
- 4. Constructivist pedagogy has a positive influence on learning outcomes in English in the area of reading comprehension.

6. Likely outcome and benefits

This study is based on learning outcomes in English at Upper Primary Level and is also focused on the Demonstration Multipurpose School, Bhopal. It will serve as a model to other researchers. Best practices and innovations to promote learning and improving performance in English at Upper Primary School Level can be shared which can mutually benefit school teachers and learners. Findings of this research study through report can be disseminated to other stakeholders.

7. Methodology

An in – house planning meeting of 2 days will be organized at RIE, Bhopal to lay a plan for this research study. Thereafter an in house workshop of 3 days will be conducted at RIE Bhopal to develop the tools.

Then a five days workshop for data analysis will be conducted at RIE, Bhopal. Report preparation

would be the last phase.

Tools-

- 1. Pre-test on grammar, vocabulary, short composition and reading comprehension.
- 2. Post-test on grammar, vocabulary, short composition and reading comprehension.
- 3. Classroom Observation Schedule
- 4. Questionnaire for teachers
- 5. Focus Group Discussion with students.

Sample-

It wil consist of two sections of class VI and VIII from DM School. One section of each class will be Experimental group and the other will be the Control group.

8. Time Budgeting

S.No.	Activities proposed to be organized	Proposed dates
1	Planning meeting (In house -2 days)	21-22September 2017
2	Appointment of JPF	October 2017 to March 2018
3.	Workshop for development of tools (In house)	23-27 October 2017
4	Data Collection	November 2017 to January 2018
5	Workshop for data analysis	February 2018
6	Report preparation	March 2018

9. Organizational Framework

Role	Task
Principal	1. Recruitment of JPF
Investigators	Organizing workshops for development of tools to conduct the study
	3. Field visits
	4. Monitoring the process of data collection
	5. Organizing workshop for analysis of data
	6. Preparation of Report
JPF	1. Helping in development of tools for data collection
	2. Data collection from the field
	3. Assisting in compilation of data
	4. Assisting in analysis of data
	5. Assisting in preparation of report

10. Cost estimation

S.No	Activity	Proposed dates	Estimated Expenditures
1	Planning meeting (In house -2 days)	21-22 September 2017	1000/-
2	Salary of JPF	October 2017 to March 2018	96000/-
3.	Workshop for development of tools (in house)	23-27 October 2017	5000/-
4	Data Collection	November 2017 to January 2018	25,000/-
5	Workshop for data analysis	February 2018	1,31,625/-
6	Report preparation	March 2018	25,000/-
	Total		Rs. 2,83,625

11. References-

- 1. The English Impact Report: Investigating Learning Outcomes at the Primary School level in Rural Indiaconducted by British Council 2012-13 raises this concern.
- 2. Challenges of Achieving Desirable levels of learning in Elementary Education.'
- 12. (a) Name and designation of the Programme Coordinator:
 Prof. Nidhi Tiwari
 - (b) Name and designation of Programme Co-coordinator Dr. ShrutiTripathi

Signature of the Head of Department Date:

Signature of the Programme Coordinator Date:

Signature of the Programme Co-coordinator Date:

<u>PRE-TEST</u> ENGLISH CLASS-VI

STUDENT'S NAME	
SECTION Duration: 1 hr.	DATE: M.M40
Q.1Read the passage carefully and answer the	following questions: (10 Marks)
The name hippopatamus means "river horse". Th	e hippo(short for "hippopotamus")walks about
at the bottom of a river or pool and eats water p	lants. Although it looks clumsy and weighs as
much as four tons, it swims easily. It often floats at	the surface and you can see a pair of small ears,
rounded eyes and raised nostrils. When it lifts its	head out of the water and roars, you will see a
huge red mouth with large teeth. You will see tusks	in the lower jaws.
"sweats blood". However, the blood forms no part	of this reddish sweat.
Hippos are vegetarian. They often travel eight or n	ine miles in search of pasture. They sometimes
cause great damage to crops.	-
In general, hippos are peaceful animals. Because	of their thick skin and great size, they have no
enemies except the lion and man. The natives of	
teeth. Baby hippos are born in water. They can swin	
Questions	
Q1. Why hippos are known as peaceful animals?	
Q2. Why hippos are hunted?	
••••••	
Q3. Why do hippos have few enemies?	
······	

Q4. Who are the enemies of hippos?	•
O5 Write shout four charge a ball of the binner	
Q5. Write about few characteristics of baby hippo?	
Q2 Write the meaning of the following words and	use them in the sentence.(10 Marks)
1. Floats-	

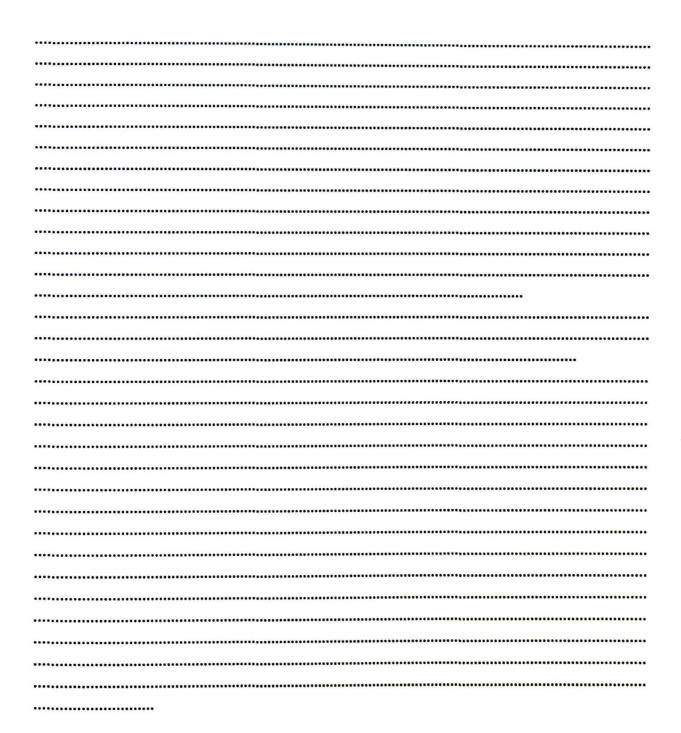
2.	Pasture	
•••••		
•••••	••••••	
3.	Native-	
•••••	••••••	
4.	Clumsy-	
5.	Damage-	
•••••		
Q.3 (10 M	Rearrange the following words and phrases to	form meaningful sentences
•	most/now-a-days/the attitude/parents is /different	
(b) has	s been/working/since/she/last two hours.	············
© did/	not/school/yesterday/I/go to	
(d)the	y/playing/in/the/ground/were	
(e)best	t/Ram/is/of/the school/the/boy	•••••
(f) is th	ne/which she/needle with/knits/This	
	iceman/The/enquired/we were/going/where	•••••
	e/as swiftly/as he/ can/He	
••••••	Eats/He/as much/as he/can	
(j) ran a	way/ He/he was/because/afraid	
••••••		
Q.3 Wr	ite complete story based on the following outlines:	(10 Marks)
A STATE OF THE PARTY OF THE PAR	rowdedrobbers enter masks, gun	Don't move'pushed
custom	ers aside threaten stafftwo robbers at the en	trancetwo go behind the
counter	take moneyput in their bagsManager h	elplessly watchingalarm
	robbers ran awaysaw car outsidef	ire into the airpolice
aama	collected information	

(word limit:100-120)

PRE-TEST ENGLISH CLASS-VIII

Duration: 1 hr Date:	
17/3 V 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Saving the tiger means saving mankind. Not only is tiger a beautiful animal but it is also the indicator of the forest's health. If we make sure tigers live, we have to make sure that deer, antelog and all other animals that tiger eats (its prey base) live.	pe
By destroying the tiger's home, we not only harm tigers, but also ourselves. The tiger, the becomes the symbol for the protection of all species on our earth since it is at the top of the for chain.	
Key conservation efforts can save the tiger species from extinction and protect some of the planet's last wild habitats and help sustain the local communities surrounding them. Exprotecting this iconic species, we can save so much more.	
Poaching continues today despite the efforts to save the tiger. Create awareness of the plight of the tiger among people, help in ending poaching poaching, punish poachers to really deter people from engaging in tiger poaching, protect tiger habitat, ban the goods made of tiger skin and supporting conservation organisations by donating money to them.	m
"Save the tigers before they are silenced forever and our own graves are dug". 1. Why is the existence of the tiger important?	
	•••
2.On which thing does the survival of the tiger depend upon?	
	•••
3. Why is tiger the symbol for the protection of all species?	
	•••
	•••
4.Mention some measures that can be taken to prevent tiger poaching.	
	•••
	•••
5. How can the wild habitat and the local communities surrounding them can be sustained?	?
	••
***************************************	••
•••••••••••••••••••••••••••••••••••••••	
Q.2 Write the meaning of the following words and use them in sentence.(10 Marks) 1. Poaching -	

2.Conservation -
Z.Consci vation -
3. Local -
······································
4. Habitat -
T. I I a Ultat
5. Donating -
Q3 Rearrange the following words and phrases to form meaningful sentences.
(10 Marks)
(a) was developed/a child's toy/in 1965/The Snuffers/as
(b) declared/Snow boarding/in 1994/was/event/an Olympic
(c) Nairobi's Uhuni Park/ in 1989/saved/single-handedly/She
(b) Itanobi y Cham I and in 1703/baroadonigio handouty i she
(d) which is an NGO/ She is/the Green Belt Movement/the founder of
(e) has earned/DrWangari Maathai/"Tree Mother of Africa"/the title
(f) I could not/a noise that/ make such/ You/ work
(1) I COUITE HOUSE HAD INAKE SUCIL TOW WORK
(g) climbed higher/They/that/get a/they might/better view
(h) are/Local officials/of correct/operational procedures/unaware
(i) to distance the could be a co
(i) to distract/the soldiers/so/they could/They wanted/escape
(j) was/There/the global economy/in/a slow down
Q.3 Complete the following story with a suitable title in about (120-150)words.
"Kim and Ray were very close companions. They were neighbours, studied together, completed
their graduation and worked together. They planned to enjoy a vacation and took a sea voyage to
explore different places. Unfortunately, their ship wrecked (10 Marks)



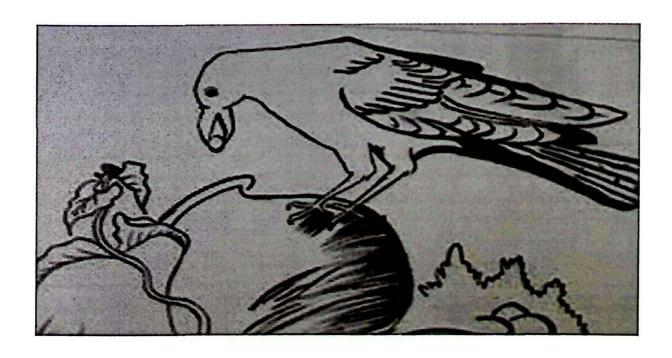
POST TEST ENGLISH CLASS VI

STUDENT'S NAME SECTION Duration: 1hr.	DATE M.M:40
Q1 Read the passage carefully and answer the questions the alternative. (10 marks)	nat follow by choosing the right
Sarojini Naidu was educated in her carely years under her fatt become a great mathematician or scientist but she loved to dhardly eleven when she wrote her first poem. At thirteen she wrote a long poem in the manner of famous Englin India. She went to England for higher education. She met Si letters. He was impressed by her knowledge and intelligence. He written poems in flawless English but felt disappointed to find them. They were all about English sights, from this day onward verses about India.	ream and write poems. She was lish poets. After her matriculation r Edmund a distinguished man of e was surprised to see that she had hat they had nothing of the East in
Questions	
Q1. What did Sarojini Naidu wanted to become and what was h	er dream?
Q2. Why was Sir Edmund surprised?	
Q3. How was Sarojini Naidu educated?	
Q4. When Sarojini Naidu started writing poems and when she v	
	•••••••••••••••••••••••••••••••••••••••

•••••	***************************************
Q5. What did	l Sarojini Naidu do after matriculation?
•••••	
Q2 Write the	e meaning of the following words and use them in the sentence. (10 marks)
1	Flawless -
•••••	
2	Devoted -
3	Impressed -
4	Diggonainted
A	Dissapointed -
5	Distinguished -
00.5	
.790	ge the following words and phrases to form meaningful sentences.
(10 marks)	
1.	honest/is/man/He/an
•••••	
2.	called/Diwali/festival/is/oflight/the
•••••	
3.	in the world/The Himalayas/mountains/the highest/are
	•
4.	rises/The sun/in/the east
••	110-00, TWA DOWN WE HAVE ARROW
5.	have been/waiting/I/for you/for two hours

6.	benefited/They have/the/from/compensation/them/awarded
7.	it will/ensure//implementation of/He feels/the scheme/flawless
8.	upset to/hear about/his bad/experience/They were
9.	encouraged/investment/foreign direct/Reforms/in India
10.	barrels/keep/five/adulterant ghee/Nagarjan/of
•••••	•••••

Q3 Write a story on the topic " $\underline{ATHIRSTYCROW}$ " by using the guidelines. (10 marks)



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<i>2</i> .	What Marie did to get her higher education?
3.	How was Pierre killed?
	•••••••••••••••••••••••••••••••••••••••
•••••	
4.	Give the reason for the fatal illness of Marie?
5.	How the Marie's feeling of desolation finally began to fade?
Q2 Write the	meaning of the following words and use them in sentence. (10 marks)
1 Fatal-	
•••••	
2 Anguish-	
•••••	
3 Fortunate-	
•••••	
4 Consequence	ce—
•••••	••••••
5 Collaboratio	on -

POST TEST ENGLISH CLASS VIII

STUDENT'S NAME SECTION Duration: 1hr.	••••••	DATE M.M40
Q1 Read the passage given	below carefully and answer the questions	s that follow:(10 marks)
Pierre, she discovered radiu	most accomplished scientists in history. To m. An element widely used for treating can tances. Pierre and Marie's amicable colla n.	icer, and studied uranium
early age, she displayed a learning prompted her to co however, when she learned receive a higher education, s	Warsaw, Poland, where her father was a probrilliant mind and a blithe personality. Hontinue with her studies after high school. I that university in Warsaw was closed to she defiantly left Poland and in 1891 entered her master's degree and doctorate in physics.	Her great exuberance for She became disgruntled, women. Determined to d the Sorbonne, a French
day, one of whom was Pier productive years working to radium, Pierre was killed by misfortune and endured le relationship and the joy that	e studied at the Sorbonne with some of the cre Curie. Marie and Pierre were married a segether in the physics laboratory. A short time a horse-drawn wagon in 1906. Marie was the heartbreaking anguish. Despondently should be they had shared in scientific research. The herself greatly increased her distress.	in 1895 and spent many me after they discovered stunned by this horrible ne recalled their close
physics professor at the Sor world famous university. In Although Marie curie event never became disillusioned	finally began to fade when she was asked to abonne. She was the first woman to be given 1911 she received the Noble prize in chemically suffered a fatal illness from her long about her work. Regardless of the consequent aling the mysteries of the physical world.	en a professorship at the stry for isolating radium. exposure to radium, she
Questions		
	ent did Marie discovered and what is its use?	
		•••••••••••

Q3 Rearrange the following words and phrases to form meaningful sentences. (10 marks)
1.emphasized on/use of/grammar/correct/Our/the/teacher
2. not listen/ to their/ Very few/ Commander's in chief/ soldiers do
3. cross the/safely with the/The old man/road/help of his son
4.is too heavy/Aton's weight/carry/for/on his head/anyone to
5. of visitors/The beautiful/the/premise of/building attracts/a lots
6 and European/American/had a /markets have/of credit defaulters/large number
7 confident/They were/ would listen/ that he/to their complaint/ and give/a fair/judgement
8 focused/their position/in the domestic/market/on strengthening/Software companies
9 formalities/consuming/to be completed/have/by the workers/Time
•••••••••••••••••••••••••••••••••••••••

10 impressed by/the/ wisdom/He was/courtiers/of the Empereor's
Q4 Write complete story based on the following outlines: (10 marks) Outline: A wood-cutter cutting wood on the bank of a riverthe axe falls into the water below

Questionaire for the Teachers

Date:

Genera	al Inf	orma	tion

E	e of School:
	Name of the teacher
	Classes taught
	Subject taught Which books are followed to teach English Language in the Class?
	What are the activities conducted in the class to give concepts of grammar?
	What are the activities conducted in the class to improve vocabulary?
	What are the activities conducted teach short composition writing to the students?
	What are the activities conducted to enhance reading comprehension of the students?
	Are constructivist/traditional pedagogical processes effective in achieving the desired learning outcomes? If yes how?
	What are the learning outcomes achieved after utilizing constructivist pedagogica processes?

Appendix - G

S.No	Activities Conducted	Number of Classes Observed	ofClas	ses Obs	erved						ubje
		1 2		4	2	9	7	00	6	01	T
1.	Learning through lectures		1				_			_	
2.	Teacher more active that students									_	Г
3.	Use of journals for writing down learning experiences										
4	Opportunities of cooperative work										<u> </u>
5.	Opportunities to make presentations and speeches										Г
9.	Encourage peer learning									-	- -
7.	Work is added to portfolios						-			_	
·86	Use of different learning activities (role-play, drama, simulation etc.).										Ι
6.	Opportunities to do individual projects										Ι
10.	Opportunities to do group project									-	Γ-
11.	Opportunities for discussion										_
12.	Assignments were given to find facts not given in the textbook									-	ı -
13.	Encourage to learn the new topics through self-discovery									-	Γ-
14.	Opportunities to develop concept maps						-			_	Γ.
15.	Opportunities to raise questions based on reading										Г
16.	Provide learning activities for developing creative thinking and provide suggestions										
17.	Use of various equipments such as dictionaries, LCD projector, computer, audio, video, pictures etc.										las
18.	Opportunities to evaluate themselves										s:
.61	Opportunities to evaluate peers								\vdash	-	
20.	Opportunities to reflect on their learning								\vdash	\vdash	
21.	Regular feedback is given to the students								_		 T
22.	The teacher acts as a facilitator and guide									-	- -

Focus Group Discussion

Date	:
Nam	e of School :
Class	s:
Q1	According to you why do you need to learn English Language at the school level?
Q2	Mention the problems that you face in an English Language Classroom.
Q3	Is group discussion/debates done in class? If yes, how has it helped you in improving grammar, vocabulary, short composition and reading comprehension?
Q4	Is role-play/drama/ skit done in class? If yes, how has it helped you in improving grammar, vocabulary, short composition and reading comprehension?
Q5	Are multimedia aids used in the class? If yes, how has it helped you in improving grammar, vocabulary, short composition and reading comprehension?
Q6	Is collaborative/peer learning encouraged in the class? If yes, how has it helped you in improving grammar, vocabulary, short composition and reading comprehension?
Q7	Are projects given in the class? If yes, how has it helped you in improving grammar, vocabulary, short composition and reading comprehension?
Q8 _,	Are language games or puzzles given to be solve in the class? If yes, how has it helped you in improving grammar, vocabulary, short composition and reading comprehension?

Exemplar Constructivist Learning Design—Writing Composition

Topic	Phases of 5E Model	Teaching-Learning Processes
Writing Composition (Story – Thirsty Crow)	Engage	A role play is performed in the class where two students played the role of elephant whoare thirsty and they are in search of water. They search for water in jungle. They found a pond and went near it but there was very little water, one elephant said to other, there is very little water, let's go to some other place to search for more water. This is done to engage the students.
	Explore	Students are divided in groups. Ask the groups to explore their knowledge and through discussion complete the above shown story in the role play and give 10 min time to complete the story.
	Explain	Each group will tell their story which they have written.
	Elaborate	Correct answers are appreciated and teacher's guidance is given wherever required. Then teacher shows the outline of the story 'The Thirsty crow' and few pictures related to it on the smart board. Students are asked to complete the story with the help of the guidelines given.

$\label{lem:constructivist} \textbf{Exemplar} \\ \textbf{Constructivist} \textbf{Learning} \textbf{Design-Reading} \textbf{Comprehension} \\$

Topic	Phases of 5E Model	Teaching-Learning Processes
Reading Comprehension (Save Tiger)	Engage	A role play was shown in the class where a hunter is killing the tiger. Pictures of tiger hide and tiger killing are displayed on the smart board.
	Explore	Students are divided into groups and they are asked to explore their knowledge by discussion about what they have seen and understood.
	Explain	Students are able to explain about the tiger hunting and for what purpose it is done.
	Elaborate	Passage is displayed on the screen and teacher explains it. Teacher asks students to read the passage carefully keeping in mind the questions asked below. 2-3 questions are asked by the teacher and students are said to answer.
	Evaluate	More questions related to the passage are asked by the teacher to evaluate the student's knowledge and understanding related to the reading comprehension.

Evaluate	Students are evaluated for the story they have written and homework is given to write a story on 'jungle'.
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Appendix – K

Exempler
Constructivist Learning Design-Grammar

Topic	Phases of 5E Model	Teaching-Learning Processes
Grammar Jumbled sentences	Engage	To engage means to excite and to draw student's curiosity. In this phase, with the help of smart board one meaningful sentence is displayed in front of the students with few pictures representation related to the sentence to draw students attention and below the meaningful sentence, its jumbled form is displayed, in this way students are engaged at the beginning of the lesson.
	Explore	Once students are fully in grossed in understanding sentence. Now it is time to allow them to explore the concept. Divide the class in small groups and through discussion they will lead to their conclusions.

Evaluate	Students are evaluated for the story they have written and homework is given to write a story on 'jungle'.
----------	--

Appendix – K

Exempler
Constructivist Learning Design-Grammar

Topic	Phases of 5E Model	Teaching-Learning Processes
Grammar Jumbled sentences	Engage	To engage means to excite and to draw student's curiosity. In this phase, with the help of smart board one meaningful sentence is displayed in front of the students with few pictures representation related to the sentence to draw students attention and below the meaningful sentence, its jumbled form is displayed, in this way students are engaged at the beginning of the lesson.
	Explore	Once students are fully in grossed in understanding sentence. Now it is time to allow them to explore the concept. Divide the class in small groups and through discussion they will lead to their conclusions.

	Explain	Here students give their answers about what they have understood. The correct answers are appreciated whereas wrong answers are corrected by the teacher. Few students were able to understand that the jumbled words of the meaningful sentence are given and some do not.
	Elaborate	Students now have the opportunity to hear from their educators. The teacher role so far has been to mainly facilitate learning. Here teacher gives few sentences to the students and explain them. Here teacher give them time to rearrange the jumble words to form a meaningful sentence.
,	Evaluate	Students are evaluated and few sentences are given as homework.

Exemplar Constructivist Learning Design - Vocabulary

Topic	Phases of 5E Model	Teaching-Learning Processes
Vocabulary	Engage	A short film with animations is shown in the class. Students are asked to watch and hear it carefully. This is done to engage he students.
	Explore	Divide the class in various groups. Teacher ask them to recall and write few words from the story which they have seen. Students in groups will explore through discussion.
	Explain	In this phase, students give the answer.
	Elaborate	Here teacher will give some difficult words in the class and ask students to guess their meanings, consult dictionary or through discussion to find the correct answer. Teacher may also ask students to use those words in framing meaningful sentences.
	Evaluate	The above given exercise is evaluated and few words are given as homework to search and write their meanings.

Project Team





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