Chapter III

Curriculum and Textbook
3.1 Preliminaries

The principles of Sri Aurobindo have been adopted and now being implemented nationally in the form of National Curriculum Framework (NCF)-2005. It is child-centred and most progressive learning process practised in many classrooms of the nation. The draft NCF-2005 is a unique one, as ‘extra-curricular subjects' are emphasised correctly in it. It puts the learners in the central position and proposes the Constructivist approach to develop their conceptual understandings. The curriculum and texts revolve around the question of curriculum load on the children.

The aims of education, aims of curriculum, principles of the constructivist approach, guiding principles of NCF-2005, changing roles of teacher and student, the design of textbooks, Constructivist approach and theorists of Constructivism are discussed in this chapter.

3.2 Aims of Curriculum

The word ‘Curriculum’ derived from Latin verb ‘Currere’ means ‘to run or to proceed.’ It was referred to by Professor Petrus Ramus in his work ‘Professio Regia’ in an educational context. The University of Glasgow referred to the curriculum as a ‘Course of study’ in the seventeenth century. Curriculum has been defined by Kerr as follows:

All the learning which is planned and guided by the school, whether it is carried on in groups or individually, inside or outside of school. (‘Curriculum-Wikipedia’)

The curriculum included the learning that is planned, guided, and conducted by the school. The term curriculum is not only referred to as a course of studies but also the learning which takes place outside the school.

National Curriculum Framework 2005 (NCF-2005) has described aims of the curriculum as follows:

The curriculum must enable children-
- to find their voices.
- to nurture their curiosity- to do things.
- to ask questions and to pursue investigations.
- Sharing and integrating their experiences with school knowledge- rather than their ability to reproduce textual knowledge
- Reorienting the curriculum to this end must be among our highest priorities.
- informing the preparation of teachers, the annual
plans of schools, the design of textbooks, learning materials and teaching plans, and evaluation and examination patterns.
(National Council of Educational Research and Training 13-14)

The curriculum ensures the health, nutrition and school environment empowering all the learners in their learning and considering the differences of their caste, religion, gender and disability. It takes care to prepare curriculum free from stress and burden. Textbooks should be carefully prepared and should consider the following to focus on understanding concepts. NCF-2005 says:

Though curriculum planning is a much wider process, curriculum reform seldom goes beyond changing the textbook. Improved textbooks that are carefully written and designed, professionally edited and tested, offering not merely factual information but also interactive spaces for children are important. But curricular reform can go much farther if textbooks are accompanied by several other kinds of materials. Subject dictionaries, for instance, can relieve the main textbook from becoming encyclopaedic, burdened by carrying definitions of technical terms and instead allow the teacher to focus on understanding concepts.
(Ibid 89)

It is believed that if textbooks should focus on the concepts, activities, and opportunities to solve problems, small group work and emphasis on reflective thinking, it will reduce the stress and burden of learners. There is a reflection on the school curricular significance of the learners in NCF-2005 as follows:

It is necessary to realise their curricular significance, not only as forms of work but equally as forms of knowledge, and as mediums for other learning. This important area of human knowledge needs to become a substantial part of the school curriculum.
(Ibid 27)

The focus of the curriculum should be on the forms of knowledge, and human knowledge needs to be the most important part of school curriculum. It is the need to encourage the process of constructing knowledge in the learning process.

3.3 Aims of Education

Current needs and aspirations of a society and its lasting values are reflected in the aims of Education. NCF-2005 sets out the following aims of education:
1. …a commitment to democracy and the values of equality, justice and freedom,
2. Concern for others’ well-being,
3. Secularism,
4. respect for human dignity and rights.
5. Education should aim to build a commitment to these values, which are based on reason and understanding.

6. Independence of thought and action points to a capacity of carefully considered, value-based decision making, both independently and collectively.
7. A sensitivity to others’ well-being and feelings, together with knowledge and understanding of the world, should form the basis of a rational commitment to values.

(Ibid 10-11)

All the values can be developed in the learners by implementing various activities in the classrooms. It can help students to respond creatively and flexibly. They can share and respect the ideas, views and feelings of their colleagues in a proper way.

3.4 Aims of Textbooks (Coursebooks)

New textbooks (Coursebooks) introduced from 2012 in Maharashtra, are based on the Constructivism. It is a new approach presented in the National Curriculum Framework- 2005, and these coursebooks are designed in accordance with the principles of Constructivism. The aims of coursebooks described in the English Reader, A Coursebook in English (Standard X), at the secondary level are:

…the coursebook would help the students in Maharashtra become better users of English and prepare them to compete the world outside. Attempt is being made to help learners understand English as a language. (Damodare et al. vii)

It is expected to accept the approach and the techniques of learning to make the students better users of English. They should be prepared to compete the world outside the classrooms.

3.5 Constructivist Approach

Constructivism is the emerging concept in Indian Education adopted by National Curriculum Framework (NCF) – 2005. It is the theory based on the observation about how people learn. With the introduction of this new theory, there are major shifts regarding teaching-learning process, roles of teachers and students,
evaluation process, teaching methods and techniques.

Constructivist teachers believed learners as being active participants rather than passive. The learner is at the centre of the learning and teacher is a facilitator. The constructivist approach is the active process of learning where students construct their understanding and knowledge with the help of their own experiences.

The coursebooks are prepared on the basis of Constructivism and as per recommendations of NCF-2005 and State Curriculum Framework (SCF)-2010. It intends to produce better users of English. Constructivism has been defined by some writers as follows:

**National Curriculum Framework- 2005** has defined the term as follows:

In the constructivist perspective, learning is a process of the construction of knowledge. Learners actively construct their own knowledge by connecting new ideas to existing ideas on the basis of materials/activities presented to them (experience).

(National Council of Educational Research and Training 17)

**Alan Pritchard and John Woollard** (2010) described the term in *Psychology for the Classroom: Constructivism and Social Learning* as:

This theory is based on the central notion that as learners we construct our own understanding of the world around us based on experience as we live and grow. We select and transform information from past and current knowledge and experience into new personal knowledge and understanding.

(Pritchard and Woollard 8)

**Jacqueline Brooks and Martin Brooks** (1993) mentioned in *In Search of Understanding: The Case for Constructivist Classrooms*:

…we construct our own understandings of the world in which we live. We search for tools to help us understand our experiences…

Each of us makes sense of our world by synthesizing new experiences into what we have previously come to understand.

(Brooks and Brooks 4)

**Noushad Husain** defined in *Learning and Teaching- A Constructivist Approach* as:
Constructivism is theory of learning based on the idea that knowledge is constructed by the knower based on mental activity. Learners are considered to be active organisms, seeking meaning. (Husain 47)

Virginia Richardson described this concept in *Constructivist Teacher Education- Building a World of New Understandings* as:

Constructivism is a learning or meaning-making theory. It suggests that individuals create their own new understandings, based upon the interaction of what they already know and believe, and the phenomena or ideas with which they come into contact. Constructivism is a descriptive theory of learning (this is the way people learn or develop); it is not a prescriptive theory of learning (this is the way people should learn). (Richardson 3)

In constructivist learning, learners are not considered as clean slates, which are assumed in traditional classrooms. Previous knowledge helped them to create new understandings.

To summarise these definitions, it can be said that Constructivism is a theory of knowledge. Learners construct their concepts and knowledge with the help of their previous experiences. Presently constructivist approach is the best option to the traditional teaching-learning process. English teaching has been changed from traditional to the activity based curriculum which emphasises fluency and accuracy in using the language.

### 3.6 History of Constructivism

The roots of constructivism go back to Socrates, who conversed with his followers and asked them to realise their weakness in thinking. The conversation of Socrates with his followers was one of the tools in the way constructivism.

Allan Pritchard and John Woollard described the writing of Walsh referred to Gautam Buddha in *Psychology for the Classroom: Constructivism and Social Learning* as one of the Constructivist theorist in the following lines:

We are what we think. All that we are arises within our thoughts. With our thoughts, we make the world.  
(Pritchard and Woollard 2)

It indicates that every individual constructs his world by his thoughts. Our thinking process helps us to understand our surroundings in a better way.
Heraclitus (535-474B.C)- He is also known as the Pre-Socrates thinker of constructivism. He points out the distinction between ‘an inner’ state of beliefs and an ‘outer’ state of facts. It means the facts of an external world are interpreted as the form of the individual’s version of reality. It is the constructivist’s view of the reality. Giambattista Vico elaborated about human “knowing”. Here ‘Know’ meant ‘knowledge’. It said that people could understand what they have constructed. He is known as one of the pioneers of the Constructivism.

The term Constructivism has been traced from the past, where the great philosophical thoughts and theories of the thinkers provide the foundation for this theory.

Socrates was the first philosopher who believed that knowledge could not be transmitted by a teacher or any other person, but it is developed by the techniques of questioning. He believed that a person is unable to discover the truth himself, so it is the duty of a teacher to help him understand and know the truth. Immanuel Kant (1724-1804) – He is considered to be the first thinker who introduced ‘Constructivist Ideas’. He described the idea of constructivism by asserting that human beings are not passive learners of information. They learn actively and connect it to previous knowledge. He described the mind as an active part of the body which transforms the chaos of experience into orderly thought. Jean Piaget had a significant influence of Immanuel Kant. Kant rejected the traditional way of teaching which escapes from the experiences.

The nature of knowledge and the nature of learning are essential considerations for constructivism.

Jean Piaget, John Dewey and Bruner developed cognitive and child development theory that led to the Constructivism.

Piaget- Humans learn through the construction of one logical structure after another.
Dewey- Inquiry is an essential part of constructivist learning.
Bruner- emphasised on the curriculum change that makes learning the active and social process. In this learning process, students construct new ideas and concepts that are based on their current knowledge.
Seymour Papert- used computer and information technology in the constructivist environment. He was the developer of a theory on learning called ‘Constructionism', built on the work of Jean Piaget.

Lev Vygotsky, Bruner, Chomsky and David Ausubel added new perspectives
to Constructivist learning theory.

3.7 Theorists of Constructivism

Constructivist theory transforms the learners from passive recipient of information to an active participant in the learning process. The students actively construct knowledge, and it helped pupils to be creative and to increase the curiosity of the world. Lev Vygotsky, John Dewey, Jean Piaget, Noam Chomsky, Jerome Bruner and Gardner are known as the modern Constructivist theorists.

a) Lev Vygotsky's Social Development Theory

Social Development theory of Vygotsky is the foundation of Constructivist theory. It is believed that social interaction precedes the development of knowledge. Vygotsky emphasised on three major themes.

- Social interaction is the significant part of the process of cognitive development.
- A stress on MKO (More Knowledgeable Other) which is a higher level of ability than the learners. Teachers, older adult, Coach and Guide are some of the examples of MKO.
- The concept of ZPD (Zone of Proximal Development) that referred to the ability of students to perform under adult guidance and his ability to solve his problem independently.

Vygotsky's theory focused on the learning contexts in which students have an active role in learning. The theory changed the roles of teachers and students. Teachers should help them to understand the meaning, so learning has become an experience to students and teachers. His theory stressed on the significant part of the social interaction in cognition development.

Saul McLeod described the argument of Vygotsky in the article *Lev Vygotsky: Simply psychology*,

> Learning is a necessary and universal aspect of the process of developing culturally organized, specifically human psychological function.  

(McLeod 1)

Cognitive development was designed from a socio-cultural perspective by Vygotsky. He believed that social interactions are developed from the language for communication. According to Vygotsky, language is the greatest tool of a man to communicate with the world outside.

Vygotsky introduced the concept of Zone of Proximal Development, known as
ZPD. It is used to elaborate the difference between a learner, who can learn without any help and a student, who can learn with the help of a teacher. Further, he said that children always followed adult people and developed the ability to do certain things. Vygotsky observed that language and its concepts are acquired naturally by learners, but some skills like writing skills and the skills of Mathematics are not learnt naturally. He believed that children wouldn't learn independently. Most of the cultural experiences are handed over from their previous generations, and it is a teacher, who can present difficult concepts. In fact, students need help for their development. The concept Zone of Proximal Development (ZPD), has been defined in the Wikipedia as follows:

The zone of proximal development is an area of learning that occurs when a person is assisted by a teacher or peer with a skill set higher than that of the subject. The person learning the skill set cannot complete it without the assistance of the teacher or peer.

(“Zone of Proximal Development- Wikipedia”)

ZPD, the concept is related to the mental development of children in education. It refers to the help of an adult or more competent person to the learners. This term is mostly used when children learn to speak English. They don't copy the person, but they try to add some new things to improve their personality. According to Vygotsky, one should assess capabilities of a child when he is performing activity alone and with a competent person.

Vygotsky also introduced socio-cultural theory which believed in the ways of people interact with others to shape their mental abilities. Society, relatives and the people around us play an important role in the mental development. It shows that children learn their first skill by interacting with others, taking information and use it within themselves. Zone of Proximal Development and Private Speech are the key areas of socio-cultural theory. In this theory, the importance of society and culture are stressed for cognitive development. With the help of parents and teachers, students can perform difficult and challenging activities successfully. In fact, learning and development are interrelated from the child’s very first day of life.

b) John Dewey

John Dewey is known as the philosopher of education, who recommended that curriculum shouldn’t be imposed on students by educators. He encouraged the importance of personal experience in learning. Learners understand knowledge
through interaction in the society. It helped them to construct their knowledge. According to Dewey, education and learning are social and interactive processes. Social reforms can take place through school in which learners are allowed to experience and interact with the curriculum, and an opportunity should be given to students to take part in their learning. Dewey believed on social constructivism, and according to his theory, schools are the social organisations where knowledge and ideas emerge from a situation and learners draw out ideas from experiences. These experiences are meaningful and significant for the learners. Such conditions are found only in the classrooms, where a community of learners builds their knowledge together.

Dewey emphasises on the Progressive education, the need to learn by doing. The philosophy of education is known as ‘Pragmatism' in which reality has been experienced. It means the learning process can take place by interacting with their past experiences. His child-centred approach focused on the needs of learners. Teachers should play the role of facilitator and help them develop problem-solving skills. Students should be allowed to work in groups to explore the new concepts within the content.

Dewey has considerably contributed to the development of learning process of learners. His progressive education insisted a continuous reconstruction of living experience. He emphasised on the learner-centred process. According to Dewey, traditional education plays the passive role for the learners. Every child is unique and active, who can construct his knowledge with the help of previous experiences. He recommended the questioning technique to be used in the class to discover the truth. Active learning helps learners to develop the ability of critical thinking.

Progressive education is the social aspect of learning, and the use of knowledge is an integral part of learning. It is not possible to assimilate new knowledge without previous experience. Motivation also helps learners in the learning process. It is essential to learn new ideas and knowledge.

Learning involves the participation of the learners in the activities. It is an active process of engaging students with the world. Learner-centered education gives freedom to the learners. In traditional education, students have a lot of external imposition which prevents their intellectual development. Dewey expressed the purpose of instruction and discipline in *Experience and Education* as follows:

The main purpose or objective is to prepare the young for
future responsibilities and for success in life, by means of acquisition of the organized bodies of information and prepared forms of skill which comprehend the material of instruction… Books, especially textbooks, are the chief representatives of the lore and wisdom of the past, while teachers are the organs through which pupils are brought into effective connection with the material. Teachers are the agents through which knowledge and skills are communicated and rules of conduct enforced. (Dewey 18)

Teachers are more important in the learning process than the textbooks. They play the role of facilitators to cultivate learning skills in students and textbooks are the effective medium to connect them with skills. Traditional education focused on the material like textbooks whereas Constructivist education emphasised on the experience of learners for conceptual understandings.

Dewey described the theory of Experience in *Experience and Education*, as follows:

The belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative. Experience and education cannot be directly equated to each other. For some experiences are mis-educative… (Ibid 25) Again, a given experience may increase a person’s automatic skill in a particular direction and yet tend to land him in a groove or rut; the effect again is to narrow the field of further experience. (Ibid 26)

Dewey’s theory of experiences described that present experiences are the result of the way of dealing and interacting with past experiences. It has great influence on the present situation. According to Dewey, educational experiences are the result of two fundamental principles of continuity and interaction. He suggests that the fact based comprehension is organized through meta-cognition based on experiences and pre-connections. So teachers should create educative experiences for their students.

Dewey argues that all the experiences are not educative. Some of the experiences are mis-educative. So it is a challenge for the teacher to create fruitful experiences to improve the learning process of students. Mis-educative experiences discouraged the growth of learner's further experiences. It is the duty of the teacher to decide the quality of experience.
c) Jean Piaget’s Cognitive Development Theory

Piaget’s theory deals with the construction of knowledge in which he states the process of human to construct and acquire knowledge. His theory is also known as “Cognitive Development Theory”. He proposed in his theory that every learner constructs his knowledge and understandings with the help of previous knowledge or experiences. He focused on two major processes of understandings: assimilation and accommodation.

External experiences are assimilated into new information. It is the process of this data fitting into pre-existing cognitive schemas. On the other hand, accommodation is the process of a human being to interpret with new concepts and schemas.

Accommodation changes pre-existing schemas into new information. Assimilation and Accommodation are the two sides of a coin, and they cannot exist without the other.

Schemas are used in the assimilation to make predictions and interpret new information. Schemas are described by Alan Pritchard and John Woollard in *Psychology for the Classroom: Constructivism and Social Learning*, as follows:

> “schemas” that are used to interpret their everyday surroundings. Schemas are integrated networks of knowledge which are stored in long-term memory and allow us to recall, understand and create expectations. This allows us to operate in a world that becomes increasingly familiar and understandable with the passage of time as the schemas are built up and increasingly interlinked. (Pritchard and Woollard 10-11)

Assimilate and Accommodate maintain the state of equilibrium that is the state; one is not attempting to deal with contradictions, present in his mental representations of the environment. Knowledge has been developed through biological processes of assimilation and accommodations, leading to adoption. Equilibration process are used to keep the balance of assimilation and accommodation.

Cognitive development theory fits into endogenous constructivism which stresses on the coordination of cognitive learning. It believes that the knowledge is acquired through cognitive activity. Cognitive Constructivism has been developed by Piaget, who suggested operative and figurative forms of knowledge. Knowledge of
action performed by people is Operative kind of knowledge whereas the knowledge of facts around one is a figurative knowledge.

Piaget has described four kinds of Cognitive development of learners.

1. Sensory Motor Period- It is the learning development of an infant, aged from 0-2 years. Signs and symbols are not used at this stage. The child tries to do interesting things and manipulate them itself.

2. Pre-operational period- At this stage (2-7 years), children can use various symbols to represent the world. It is the primitive form of concepts and learners find it difficult to classify the tasks.

3. Concrete operational period- At this stage (7-11 years), learners acquire the skill of logic to solve problems. Though they have some personal experiences, they are unable to deal with abstract tasks. The learners take logical decisions in the concrete operational period.

4. Formal operational period- At this stage (11 years and above), learners use abstract thinking by applying mental operations. Formal procedures allow learners to take a more sophisticated approach to solve problems.

Cognitive constructivists believed that learners are active and construct their knowledge through the process of adoption. Learning experiences, which are based on situations, should be provided in the classes. Teachers should give direct experience to learners during teaching. These learning processes allow students to participate in the group activities. Students should be encouraged to construct their meaning. Classrooms should be arranged according to the level of learners. Cognitive Constructivism does not allow imposing new skills unless learners are ready to learn.

**d) The Educational Theory of Noam Chomsky**

Chomsky is known as the father of Linguistics. He proposed the theory of Generative grammar. It deals with the idea that the human language originates from a common source and it is the set of grammatical rules and approaches deep-rooted into the human mind. It is a naturalistic approach.

According to Chomsky, previous knowledge is associated with the new information or knowledge. This process is referred to as “building on prior knowledge”. Generative grammar has direct parallels with the ideas put forward for information processing theory.

Noam Chomsky made generative grammar term popular in his theory. The term is described in *Oxford Grammar Dictionary*, as:
A Grammar that incorporates a set of rules capable of producing (generating) an infinite number of grammatical (and only grammatical) sentences of a language. This is a sense of the term, often written with lower-case initials… is concerned primarily with the intelligence of the reader, the principles and procedures brought to bear to attain full knowledge of a language. (Aarts, et al. 175)

A deep structure is generated by the grammar of English, and the rules show that deep structure is related to surface structures. The relation between deep and surface structures is indicated by the grammar rules called as “Grammatical transformations.” So it is called “Transformational- generative grammar.”

Generative Grammar formed the knowledge of the language of a person. It includes the ability of learners to create and understand sentences that were never heard before. It helped to develop competency of students.

The theory of Transmission of Chomsky has been described briefly in the article The Educational Theory of Noam Chomsky as follows:

…the goal in teaching is to help cultivate growth and to help the students become interested in learning...“typically they (students)...interested, and the process of education is a way of driving that defect out of their minds. But if children’s normal interest is maintained or even aroused, they can do all kinds of things in ways we don’t understand… In other words, the teacher’s role in the transmission of learning is to keep the children engaged in the learning process and interested in exploration and independence. The focus is on the students learning rather than the teachers teaching. (Bovitch, et al. 5)

It means the role of the teacher is to facilitate, motivate and engage learners in the learning process. The process of education should be learner-centred and not teacher-centred. It is the duty of a teacher to arouse an interest so that learners can do and understand all kinds of activities. Learning is an active process, and students construct new knowledge and concepts based on their past experiences or knowledge.

e) Jerome Bruner

Bruner proposed action based, image-based and language based modes of representation in human learning and development. Knowledge and skills are constructed with the help of experiences which is based on human development and cognitive process. According to Bruner, learning is a social process, and students construct new ideas and concepts based on current knowledge. It is the student, who
selects information and makes decisions with the aim of integrating new experiences into his existing mental constructs. The cognitive structures provide meaning to experiences. Learners are allowed to transcend the boundaries of the information given.

The main focus of his book The Process of Education was the learners, who construct their understandings. Bruner believed that the child of any age could understand any complex information, through the concept of "Spiral Curriculum." It is structured with complex ideas to be taught simply at first level and more complex levels. Bruner elaborated that knowledge has been constructed by organising information using the coding system. This coding system is to be discovered by learners and cannot be taught by the teacher. Discovery learning revealed that students construct their knowledge which is known as the Constructivist approach. He proposed that the discovery of coding system by the learners helped them to construct their knowledge.

The role of a teacher is to help students to discover their understandings and facilitate the learning process. The spiral curriculum can help learners to solve complicated activities.

Bruner proposed the learning process as the acquisition of new information is the first step, every new information counter to or replaced with his previous experience and knowledge has been refined with new information. Transformation is the second phase and process of manipulating knowledge. It includes the ways of dealing with information. Evaluation is the third aspect of a learning process to check the ways of managing information. It is the duty of the teacher to help learners with evaluation. The emphasis of the learning should be on acquisition, transformation and evaluation – getting facts, manipulate and evaluate or check them.

**Bruner’s three modes of representation** - Bruner asserted the modes of representation for cognitive development of children

- Enactive representation (active based) - It elaborates action based information stored in the memory. It builds on learning from responses and forms of habituation.
- Iconic representation (Image based) – Information has been stored in the form of images. This representation is conscious, and it is the mental picture of mind's eye. Diagrams are always useful and helpful to accompany the verbal
information.

- Symbolic representation (language based) - In this representation, information is stored in the form of symbol and code. i.e. language knowledge is stored as words and symbols in the symbolic representation.

The movement of Enactive to Iconic and Symbolic representation deals with the constructivist theory of Bruner. It indicates that the learner is capable of learning any concepts at a young age if he is instructed properly. He thinks every child is intelligent and active from the birth having learned abilities to construct his knowledge and capacity to understanding complex information.

f) **Howard Gardner**

Gardner asserted that each learner possesses some intelligence. **Thomas Armstrong** described Gardner’s theory in the beginning of the text *Multiple Intelligence in the Classroom*:

> It is of the utmost importance that we recognize and nurture all the varied human intelligence, and all the combinations of intelligences. We are all so different largely because we all have different combinations of intelligences. If we recognize this, I think we will have at least a better chance of dealing appropriately with the many problems that we face in the world. **(Armstrong 5)**

Multiple Intelligence theory is the way of understanding the intellect. It is a recent advance in cognitive psychology that indicates the intelligence of learners. It is one of the theories of learning based on the intelligence of eight areas. According to Gardner, one should not expect to function alike because of physiological differences in the brain. So, teachers should provide multiple opportunities to students to learn different kinds of intelligences.

Gardner proposed the list of seven intelligences:

1) **Body/Kinesthetic Intelligence** - It is the mental ability to use the body effectively or communicate through body language. It includes role play activity, physical activity and acting.

2) **Verbal/Linguistic Intelligence** – This intelligence is the ability to learn a language and use it to achieve a particular goal. It is the sensitivity to written and spoken language. These learners have knowledge of auditory skills and use words effectively. Gardner sees such intelligence in writers, poets, lawyers
and speakers.

3) **Visual/Spatial Intelligence** – Visual or Spatial intelligence involves the sensitivity to colour, space, line, charts or graphically represented things or ideas. Interior decorator, artist, architects and sailors possess spatial intelligence. Ishan in *Tare Jameen Par*, could not read and write properly, but he could draw excellent pictures. It is Visual/Spatial intelligence.

4) **Logical/ Mathematical Intelligence** – This intelligence develops the capacity of learners to use numbers effectively and reasonably as the mathematicians and statisticians use. It improves the sensitivity of consistent patterns and abstractions. It is also known as "Scientific Thinking" and observations, and deductions are used to solve mathematical problems.

5) **Music/ Rhythmic Intelligence** - It is the ability to recognise the rhythm and pitch and use it to create a musical composition. Musically gifted learners possess the potential to sing, to create songs, rhythms, to play musical instruments, a composition of music and musical performance. They have to study music to develop this ability, and if there is none, they could hum or whistle. A.R. Rehman is a great music composer and director, but he is not good in auditory.

6) **Natural Intelligence** – This intelligence includes the sensitivity to the natural environment. The learners are capable of classifying the species of plants and flowers. People of the urban area (with this intelligence) can develop to differentiate natural and artificial things.

7) **Interpersonal Intelligence** – It improves the ability of learners to discriminate the difference in the feelings, motivations and moods of other people. It includes the sensitivity to voice and facial expressions. It also develops the capability to respond appropriately and effectively.

8) **Intrapersonal Intelligence** – This intelligence creates the capacity to understand self. These people appreciate fears, feelings and motivations. It also includes the accurate picture of self.

Most of the intelligence is not focused at the school level. This theory proposes the significant transformation in the way the schools run. Teachers should be trained to perform their lessons using role play, multimedia and music. Teachers can provide some learning experiences to cater to intelligence.

Howard found intelligence as the capacity to solve problems or to fashion
products that are valued in one or more cultural setting.

### 3.8 Communicative Competence Theory of Dell Hymes

American sociolinguist Dell Hymes proposed the notion of communication competence. It involves the ability to speak—when to speak, when not to speak, what to talk about, with whom, when, where and in what situation. Hymes opposed Chomsky's theory of competence. He introduced the concept of communicative competence concerning the **appropriateness of socio-cultural significance of an utterance.** *(Canale and Swain, 1980)*

Hymes carried Chomsky’s idea of grammatical competence. He introduced the theory of communicative competence to indicate his discontent to Chomsky’s terms—Competence and Performance. He emphasised that grammatical rules are not enough to speak or communicate good language. He argued that Chomsky's concept does not relate to a real-life communication theory.

Communicative Competence is significant for practical application. Many individual and social problems arise in the societies, as people are not competent in using language appropriately.

Communication is the word which is originated from Latin word ‘Communis’ means ‘Common.’ The word is related to sharing of information. Listening, Speaking, Expressing ideas, Opinions and Writing help learners to communicate their thoughts with others. Communication is an unending process which goes on continuously.

**Dell Hymes** defined *Communicative Competence* as:

> Communicative competence is a term in linguistics which refers to a language user's grammatical knowledge of syntax, morphology, phonology and the like, as well as social knowledge about how and when to use utterances appropriately. (“Communicative Competence- Wikipedia”)

Gert Rickheit, and Hans Strohner described Brian Spitzberg’s term of Communicative Competence in *Handbook of Communicative Competence* thus,

> However, combining appropriateness and effectiveness provides a framework that most competence theorists accept as generally viable. Competence, according to the dual criteria of appropriateness and effectiveness, is the extent to which an interactant achieves preferred outcomes in a manner that upholds the emergent standards of legitimacy of those judging the interaction. (Rickheit and Strohner 26)

Communicative competence includes using language appropriately and more
efficiently while interacting with others. It should achieve the preferred outcome of it.

Hymes proposed a broader view of competence. Not only grammatical competence but also context or socio-linguistic competence is necessary to develop communicative competence.

Savignon used the term “Communicative Competence” to distinguish the ability of student’s language to interact with other listeners to make concepts meaningful. Dell Hymes’ notion of communicative competence involves not only knowledge of linguistic structures but also the knowledge of using them in particular communicative contexts.

Communicative competence is the term related to the knowledge of language users about grammar, syntax and phonetics. It also involves social knowledge of using utterances appropriately.

In a foreign country, this theory is used as the Communicative approach. The goal of the language learning is to be able to communicate in the target language. At the secondary school, the aim of the second language learning has moved from learning grammar, syntax and vocabulary to develop communicative skills.

As Richard Nordquist describes the term of Hymes in *Communicative Competence Definition and Examples* as:

...a normal child acquires knowledge of sentences not only as grammatical, but also as appropriate. He or she acquires competence as to when to speak, when not, and as to what to talk about, with whom, when, where, in what manner. In short, a child becomes able to accomplish a repertoire of speech acts, to take part in speech events, and to evaluate their accomplishment by others.

(“Communicative Competence Definition and Examples”)

It means a language user should use language correctly based on linguistic as well as appropriately based on communicative competence. There are four kinds of competence in Communicative Competence;

1. **Linguistic Competence**- It is the knowledge of vocabulary, grammar, phonetics and syntax. It also helps to convey the meaning of language.
2. **Sociolinguistic Competence**- It is the knowledge of rules to use the language correctly. The effectiveness of the competence depends on the relationship of the people and attitudes and politeness expressed by the speaker.
3. **Discourse Competence**- It is the knowledge of producing oral and written
texts while speaking and writing. It also includes the knowledge of constructing language coherently in oral and written forms. It deals with words, phrases and sentences to prepare speech and conversations.

4. **Strategic Competence** - It enables the speaker to understand the breakdowns in communication due to the interpretation and lack of vocabulary. It is also referred to in wiki-spaces as follows:

   Strategic competence refers to a speaker’s ability to adapt their use of verbal and non-verbal language to compensate for communication problems caused by the speaker’s lack of understanding of proper grammar use and/or insufficient knowledge of social behavioral and communication norms. (“SLA EncyclopediaF10-Strategic Competence (Michael Canale & Merrill Swain)"

   Linguistic competence, Sociolinguistic competence, Discourse competence along with Strategic competence determines the proficiency of the learners. These four competencies are considered the backbone of second language acquisition and prepare students to improve their communicative competence. It has also examined that ability required appropriateness that is based on the individual knowledge and skills of learners.

   In the Twenty-first century, communication skill is the greatest asset for learners. The success of people in any occupation depends on the ability to communicate in English. Communication is also used to achieve desired goals.

   Communicative competence is not only applying rules of grammar to make correct sentences, but it is also the knowledge of when, where and how to use sentences at a proper place. Fluency and accuracy both are significant in communicative competence.

3.9 **Principles of Constructivist Approach**

   NCF -2005 recommended making education more relevant to the present needs of the learners. It aims to alleviate the stress and burden of students which they are coping with today. The document revolves around the question of curriculum load. Presently, it is the need to give the understandings to and to be able to learn and create their knowledge. The theory of creating own understanding with the help of previous knowledge is known as Constructivism. The growth of the knowledge should be more than the rote memory.
Textbooks, which are framed with activities, are based on the principles of the constructivist approach. It is recommended to realise these principles while conducting activities in the classroom. The teacher should plan his/her techniques according to the principles mentioned in the coursebook *English Reader- A Coursebook in English (Std.X)*. They are as follows:

1. Learning takes place by associating previous knowledge.
2. Children are never like clean slates.
3. Acquiring knowledge is not just storing it.
4. Method of acquiring knowledge differs individually.
5. Process of acquiring knowledge is important.
6. While acquiring new things previous knowledge helps to create new knowledge.
7. While acquiring new concepts self checking is done.
8. Acquisition of knowledge is a continuous and informal process.
9. While acquiring knowledge novelty, change and difference from the others is naturally developed.
10. Child-centered and learning-centered.
11. Learning is not one sided or inactive process.
12. Create more opportunities for learning interactions.
13. Concept understanding is better through activities.
15. Knowledge expands by giving.
17. Analysis of knowledge and self-definitions.
18. Opportunities to ask questions.
19. Create opportunities for experiments.
21. Teaching is not just passing on information.
22. Encourage co-operative learning.
23. Help students in constructing their own answers.
25. Teaching is not equal to ‘buying’ and ‘selling’.
26. Learning is acquiring skills and techniques.
27. Learning is more an informal process than formal.

(Damodare et al. x)

All the principles should be kept in mind while conducting activities in the class. It is expected that teachers should change their approach, methods and use innovative techniques to implement Constructivism effectively at Secondary Level. The new approach has changed the role of teachers as well as the students.
3.10 Characteristics of Constructivist Teaching

The syllabus aims to help learners to improve the language skills through activities. The Maharashtra attempts to implement this new curriculum successfully with the help of innovative methods and techniques.

In constructivism, students are given opportunities to seek new knowledge and to learn to acquire second language skills. Jong Suk Kim has stated some characteristics in the article *The Effects of a Constructivist Teaching Approach on Student Academic Achievement, Self-Concept, and Learning Strategies* thus:

- Constructivist teachers invite student questions and ideas.
- Constructivist teachers accept and encourage students’ invented ideas.
- Constructivist teachers encourage student’s leadership, co-operation, seeking information and the presentation of the ideas.
- Constructivist teachers modify their instructional strategies in the process of teaching based upon students; thoughts, experience and or interests.
- Constructivist teachers use printed materials as well as … to get more information.
- Constructivist teachers encourage free discussions by way of new ideas inviting student questions and answers.
- Constructivist teachers encourage or invite students’ predictions of the causes and effects in relation to particular cases and events.
- Constructivist teachers help students to test their own ideas.
- Constructivist teachers invite students’ ideas, before the student is presented with the ideas and instructional materials.
- Constructivist teachers encourage students to challenge the concepts and ideas of others.
- Constructivist teachers use cooperative teaching strategies through student interactions and …, sharing ideas and learning tasks.
- Constructivist teachers encourage students to respect and use other people’s ideas through reflection and analysis.
- Constructivist teachers welcome the restructuring of his/her ideas through reflecting on new evidence and experiences.

(Kim 10-11)

The strategies of constructivism lead to explore and share ideas. Teachers should encourage students to respect ideas of others. A pair, group work and co-operative learning are the effective classroom techniques to implement the strategies
of constructivism. Free discussions should be promoted by inviting new ideas through question and answer techniques in the classes.

3.11 Teaching for Construction of Knowledge

The document NCF-2005 recommended using the constructivist approach in the classrooms to develop the cognitive learning process of learners. The concept has been defined in the following lines as:

In the constructivist perspective, learning is a process of the construction of knowledge. Learners actively construct their own knowledge by connecting new ideas to existing ideas on the basis of materials/activities presented to them (experience)…

Construction indicates that each learner individually and socially constructs meaning, as he/she learns. Constructing meaning is learning. The constructivist perspective provides strategies for promoting learning by all…

A child constructs her/his knowledge while engaged in the process of learning. Allowing children to ask questions that require them to relate what they are learning in school to things happening outside, encouraging children to answer in their own words and from their own experiences, rather than simply memorising and getting answers right in just one way. (National Council of Educational Research and Training 17)

Learners construct their mental ability of learning by connecting new ideas with existing ideas from textual activities. Active engagement of the students involves questioning, enquiry, exploration and reflection, leading to the creation of ideas. This is the shift from teacher-centred to learner-centred education. It has recommended preparing a curriculum on the basis constructivist perspective which allowed learners to participate in the classroom activities.

NCF-2005 shows the major thrust on the constructivist approach. Teaching should not be a coaching for memorisation or as a transmission of facts.

3.12 Changing Roles of Teacher and Student

Teacher’s role has changed to a multi dimensional and manifold in the new context. He should play the role of an artist, singer and actor to make learning more enjoyable. It can also help to reduce the burden of learning. He has to play the role of a facilitator, provider, diagnostician, administrator, planner, guide and creator of
knowledge. The roles of teacher and student are described in *English Reader – A Coursebook in English (Standard X)* through the following diagrams.

**Diagram 3.1**

**Teacher’s Role**

(Student are smart and active in the class, so teachers should allow them to enjoy their creative freedom. Teachers should play the role of administrator to adjust the situation of the classroom. Great involvements of teachers are expected in the teaching. A group of students should be helped to understand the common objectives and assist them to achieve these aims. The other roles of a teacher in constructivism are:

- A warm and caring personality.
- Well informed.
- Caring and concerned about weak students.
- Teaching with disciplined freedom and innovation.

The role of the student has also changed in the constructivist classrooms. NCF2005 ensured that learners would enjoy learning without stress and burden of textbooks. The changing roles of the students are described in the following diagram from the *English Reader – A Coursebook in English (Standard X)*:
Learners don’t rely only on the knowledge from schools, but most of them are digitally literate and socially connected. So technology should be introduced in the classrooms. The needs of the learners must be given priority. Students are seen as active participants rather than passive recipients in the process of learning. So teachers should understand their roles to implement constructivist approach effectively in the classrooms. They need to behave in different ways at different stages of a lesson to manage the classroom.

3.13 The Role of the Textbook (Coursebook) and Parents

Curriculum framework expected teachers to improve the skills of learners. The focus of the teaching-learning process should be on the learners only. NCF2005 has expressed the need for parents to play their roles in encouraging their children to understand the concept appropriately. The Coursebook of Xth described it in the following diagram. Teachers should know the role of textbook and parents before using the text.
English proficiency is considered as the important skill at the secondary level, so above chart indicates the steps to acquire proficiency in the English language through the Coursebook. Learners need high motivation from teachers and parents in improving their skills.

Majority of parents believed English is an important language for their children to get good jobs in future. Their role has been described in the text through the following diagram.
Parents should not only motivate children but also help them by monitoring their activities at home. They can provide real experiences to improve the skills of their children.

3.14 Activity Based Testing

New Curriculum has changed the evaluation process of the learners. Question paper has turned into activity sheet, and the evaluation pattern is made more free and exciting that reduces the stress and fear of examination by involving more activities in the coursebook. Following recommendations are made to consider while designing the activity sheet at the secondary level:

1. Activity based comprehension should replace the interrogative testing.
2. Give scope for the students to express their responses openly and multiple possible answers.
3. Proper place should be given to the questions testing Higher order Thinking Skills.
4. Activities should include testing of thinking skills and the mental abilities.
5. Testing should be made more and more informal and natural.
6. Testing should integrate the different skills.
7. Testing should be more learner centric and based on their interests and needs.
8. There should be scope for imagination, innovation and creation.

(Ibid xi)

Teachers should ensure that children should solve activities in the group work or pair work, wherever it is necessary. These recommendations would help teachers to implement constructivist approach effectively.

3.15 Various Activities in the Text

1. Pre-learning (Pre-communication) activities
2. Learning/practice activities
3. Communicative activities – Interviews, debates, role play and preparing a speech.
4. Summing up, summarising activities – Presentation of activities, Narrate the story, Speech presentation, complete the story.

Various activities are introduced in the Coursebooks, and they cannot be solved by traditional teaching methods. English teachers should adopt New Approach and techniques to conduct activities effectively in the classroom. Modern approach
and new methods are described through the following diagram presented in *Teacher Training Programme for Revised Syllabus: Std. VIII: English 2007: Resource Book*:

**Diagram 3.5  Modern Approach/Method**

(Bedge 107)

Teacher: Facilitator – It is expected that the teacher prepares his class ready for activities and allow his learners to participate freely. When the students need help, he facilitates the process. He is a moving agent. He allows his students to speak more than he.

Learner: active participant – the student, is the interactor and negotiator. He is free to do activities without fear of committing errors. He works with the others in a group. Every learner shares his experiences with his classmates. Here learner is active and ready to change.

Learning by doing – Learners learn many things from his surroundings. He meets people, friends, works on a project, and talks on a phone. He uses T.V., Radio, computers and dictionaries for self-learning. His surrounding is related with activities. He enjoys doing activities himself.

Working in pairs/groups- Learners learn in a group by talking with friends, sharing ideas and views with friends and moving with friends. They do activities without tension and stress.
Team teaching/team work – Teachers can work together to solve their problems in teaching. It can be known as language club activity. It will be a problem-solving measure. It will be useful for communication, and it can be arranged in the form of seminar, workshop, project, presentation and exhibition.

Continuous Comprehensive Evaluation - A single examination won’t evaluate the learner, so teachers will have to change the assessment method. Students should be assessed with the help of Modern Methods and Approaches. Students should be evaluated by watching them throughout the year.

3.16 Recommendations for Innovative Approach, Methods and Techniques

National Curriculum Framework (NCF) 2005 and State Curriculum Framework (SCF) 2010 recommended using innovative approach, methods and techniques in the classrooms to improve the learning process. English Reader- A Coursebook in English (Std X) has made some recommendations to implement constructivist approach:

1. In the process of learning instead of providing just the information the students should be encouraged to rearrange the information that they collect.
2. Learning process should make the students active in thinking and action oriented.
3. Learning process should include interaction between: student-student, student-teacher, student and learning material.
4. The learning process should include techniques like brainstorming, problem-solving and solving doubts.
5. Curricular material should include audio-visual aids, visits, films, realia and activity corner. (Damodare et al. xi)

It is expected to follow the innovative approach, methods and techniques for various textual activities in the classroom. It is needed to make the learning and teaching process successful and develop communication between learners and teachers. Dr Samuel Roy has suggested some innovative methods and techniques in Shikshan Sankraman (2014), to conduct vocabulary activity in the classroom:

Some methods and techniques to improve vocabulary:

1. Tongue-twisters: The tongue-twisters help the learners to get through difficult words and speak flawless English fluently...
2. Anagram – It is a word or phrase formed by rearranging
the letters of another word or phrase. Ex.- Listen- silent…

…

3. Pun- Puns are jokes that play with the words of the language.

…

4. Vocabulary games- Students may be divided into two groups to play the word-antakshari game. It is helpful to build the vocabulary of learners…

5. Techniques of teaching vocabulary- vocabulary can be taught by showing objects, models, by silent actions, by using flash cards, charts and pictures, etc. (Roy 10-11)

A short extract of a story or joke can be given for practice to improve reading skills. A group of students should be asked to read the story and present it the next day. Other groups would present main points from the story or the joke.

To improve the listening skills, storytelling, elocution, poetry recitation, repeat after me, spontaneous speeches etc. are effective methods and techniques.

Group discussions, mock interviews, pronunciation drills, role play, look and say etc. techniques can be used to improve the speaking skills of learners.

Spelling dictations, look and write, do and write, doing writing skill activities from the texts are some useful techniques to improve the writing skills of students.

Teachers should use a play-way method or any innovative approach as per the need of his classroom situation. They can also use their constructive ideas to make the learning interesting and stress-free.

3.17 Objectives of Teaching English at the Secondary Level

The curriculum of English for Std. IX and X has been prepared on the basis of the recommendations by National Curriculum Framework and Maharashtra State Curriculum Framework. It is expected to use technology for the effective implementation of English curriculum. The curriculum has adopted the Constructivist approach and is learner-centred, so students should construct their knowledge with the help of teachers and self-experiences. Before preparing the curriculum, it was considered that English was to be introduced in Non-Marathi medium schools from the first standard in Maharashtra as the importance of English is increasing at the National level.

Students are expected to improve their conceptual understandings of English
within two years of Course at the secondary level. The major objectives of teaching the English language are given in the Syllabi – For Standards IX and X, as follows:

**General Objectives:**
To enable the student to
- Learn to use English appropriately.
- Understand spoken English, use... in and outside the school.
- Speak with confidence using appropriate vocabulary, grammatical forms and acceptable pronunciation.
  ...
- write in simple and acceptable/ reasonably correct English.
- acquire the necessary communication skills required for their day to day social interaction.
- Cultivate a broad, human and cultural outlook.
- Facilitate self-learning.

**Speaking Skill Objectives:**
To enable the student to
- enjoy reciting poems with appropriate rhythm.
- make meaningful use of words, phrases and sentences in context.
- use a variety of words and phrases in different contexts.
- learn to speak fluently and intelligibly on a given topic for a reasonable period of time.
  ...
- produce simple statements, questions, commands and requests.
- converse appropriately in formal and informal contexts.
- express his/her ideas coherently and logically.
- narrate events, stories and experiences in brief.
- describe states and processes that he/she observes.
- participate in discussions, debates and conversations.
- use a variety of expressions for complimenting, requesting, apologizing, etc.

**Writing skill Objectives:**
To enable the student to
- write short imaginary write ups e.g. personal essays,
- compositions with the help of guidelines.
  ...
- describe states and processes with the help of given guidelines.

(Syllabi: For Standards IX and X 123-125)

The new curriculum focuses on the needs and aspirations of the learners and the society. While setting objectives, the syllabus has considered the teaching-learning process and evaluation process in Maharashtra. The Syllabi has also considered the
local needs and the background of the learners. It is a great effort of the State curriculum to keep the syllabi at par with national standards.

3.18 Expectations from Teachers in the Classroom

It is the need to develop the ability of teachers to help learners to construct knowledge and understandings, concerned with various contexts. Abilities should be developed to judge in the moments of uncertainty and fluidity. Following activities are expected from teachers in the classroom. Teacher’s role and practice described in National Curriculum Framework for Teacher Education (NCFTE)-2009 are:

1. Teachers need to be prepared to care for children, enjoy to be with them, seek knowledge, own responsibility towards society and work to build a better world, develop sensitivity to the problems of the learners, commitment to justice and zeal for social reconstruction.
2. Teachers need to view learners as active participants in their own learning and not as mere recipients of knowledge; need to encourage their capacity to construct knowledge; ensure that learning shifts away from rote methods…
3. Teacher education must engage with theory along with field experiences to help trainees to view knowledge not as external to the learner but as something that is actively constructed during learning…
4. Teachers need to be trained in organizing learner-centered, activity-based, participatory learning experiences- play, projects, discussion, dialogue, observation, visits, integrating academic learning with productive work.
5. Teacher education should engage teachers with the curriculum, syllabi and textbooks to critically examine them rather than taking them as ‘given’ and accepted without question.
6. …emphasize environment and its protection, living in harmony within oneself and with natural and social environment; promote peace, democratic way of life, constitutional values of equality, justice, liberty, fraternity and Secularism, and caring values.

(“National Curriculum Framework for Teacher Education: Towards preparing Professional and Humane Teacher” 20-23)

Teaching is considered as the profession in which professional skills like knowledge and understanding of educational theory, practical field expertise and competencies related to learning and teaching and professional attitudes and values should be developed. Learners should be helped to construct knowledge, as they are
not passive learners in ‘Constructivist classroom’. Teachers should ensure that rote methods are not used because it creates stress and burden for students.

### 3.19 Design of Textbooks (Coursebooks)

The features and design of the coursebooks are given in the *English Reader- A Coursebook in English (Std.X)*:

- **a) Size** - The size of the current coursebook is different from the traditional kind of textbooks. It is A4 in size and easy to handle.

- **b) Websites and use of Internet** – Most of the prose and poetry are referred with web-addresses or URL to help learners to collect required additional information.

- **c) Fewer numbers of lessons and more activities** - Coursebook has been prepared with more activities, and the numbers of lessons are reduced. It is expected to emphasise on the interaction for the effective learning.

- **d) Integrated approach** - Learners get various flavours of the language, as different subjects like History, Geography, Science, Environment, etc. are interlinked with the lessons of language, and it also helps to provide learning experiences to the students.

- **e) Going beyond the text** – the coursebooks attempt to take the learners beyond the textual experiences with the help of websites and libraries to develop the reference skills. It is believed that textual experiences are not enough for the students to develop different skills.

- **f) The cover page** - The cover front and the back page of the course books indicate the methodology and techniques to be used in the classrooms. It shows the individual progress of learner in steps from thinking skills to communicative skills.

The course books are full of meaningful pictures, photographs and images based on the activities. Overall it can be said that the coursebooks of English have unique features.

### 3.20 Scope for Multiple Choice Questions and Answers and Creativity

Maharashtra State Board of Education has introduced activity sheet in the examinations of Xth and XIIth instead of question papers. Multiple choice questions are considered as the major change in the new curriculum pattern. It is described in the *Shikshan Sankraman*, thus:
Multiple choice questions are composed of one question (stem) with multiple possible answers (choices), including the correct answer and several incorrect answers which are also called as distracters. Students are asked to select the correct answer and write it down in their answer book. Students can generally respond to these types of questions quite quickly. As a result, they are often used to test student’s knowledge of a broad range of content…

(“Framing Multiple Choice Questions” 23)

It reduces the writing work of learners and takes less time in the examinations. The questions like True or False, choose correct options and find out right alternatives, are the multiple choice questions. These questions are given with multiple possible answers to understand the level of logical thinking and reasoning of learners.

Creativity: The changing pattern of question paper into activity sheet helps learners to be more creative. They work together in the group and support everyone’s learning. Learners always like to solve problems, so they must know the concepts of doing activities. It is believed that students are naturally curious and creative. NCF-2005 expresses the need to cultivate the creativity of children, as it is helpful for them in the fast changing and competitive world. The importance of creativity has been described in the document as follows:

> Education must provide the means and opportunities to enhance the child’s creative expression and the capacity for aesthetic appreciation. Education for aesthetic appreciation and creativity is even more important today when aesthetic gullibility allows for opinion and taste to be manufactured and manipulated by market forces.

(National Council of Educational Research and Training 11)

Teachers should help learners by providing opportunities to develop creative expressions.

3.21 Scope for Imagination and Independent Learners

Children's wisdom and vision should be respected to improve their self-esteem and creativity and the fantasy alive. Imagination is the creative ability of students to form ideas in mind. It is the duty of the teachers to provide such activities to improve their imagination skills. At the secondary level, dialogue writing, report writing, letter writing and non-verbal writing activities are given to check the imaginative power of
the learners. In fact, it is the freedom from external limitation, and it is the real source of pleasure.

Independent learning can be defined as an individual ability to think, act and to engage in their studies without getting support from teachers. These learners can plan their study effectively. At the secondary level, teachers should promote independent learning in students to improve their academic performance. Increasing their motivation, confidence and creativity is helpful. Students should be provided with opportunities to self-monitor and encourage them to learn from each other.

3.22 Traditional Classrooms and Constructivist Classrooms

New course books recommend to use innovative techniques and methods to implement the constructivist approach in the classrooms. It is activity based learning, and students are given the opportunity to construct their knowledge and understandings with the help of educative experiences. In contrast, traditional teaching approach is teacher centred, and the majority of teachers prefer to use this approach in the classrooms, as it seems more convenient to them. Learners are passive, and they are not allowed to express their views freely. The difference between traditional classrooms and constructivist classrooms are described in the article “Effects of Constructivist Teaching Approach on Student Academic Achievement, Self-Concept, and Learning Strategies”, as follows:

Table No 3.1

<table>
<thead>
<tr>
<th>Traditional Classrooms</th>
<th>Constructivist classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum is presented part to whole, with emphasis on basic skills.</td>
<td>Curriculum is presented whole to part with emphasis on big concepts.</td>
</tr>
<tr>
<td>Strict adherence to fixed curriculum is highly valued.</td>
<td>Pursuit of student questions is highly valued.</td>
</tr>
<tr>
<td>Curricular activities rely heavily on textbooks and workbooks.</td>
<td>Curricular activities rely heavily on primary sources of data and manipulative materials.</td>
</tr>
<tr>
<td>Students are viewed as “blank slates” on to which information is etched by the teacher.</td>
<td>Students are viewed as thinkers with emerging theories about the world.</td>
</tr>
</tbody>
</table>
Teachers seek the correct answer to validate student learning.

Assessment of student learning is viewed as separate from teaching and occurs almost entirely through testing.

Students primarily work alone.

| Teachers seek the students’ points of view in order to understand students’ present conceptions for use in subsequent lessons. |
| Assessment of student learning is interwoven with teaching and occurs through teacher observations of students at work and through student exhibitions and portfolios. |
| Students primarily work in pairs or groups |

(Brooks and Brooks 17)

In traditional classrooms, Learners are passive learners who rarely ask questions, their learning is based on memorisation and repetition. In Constructivist classrooms, students are active learners who raise questions in the classrooms and learning is interactive, there are exchanges of ideas between students and teachers.

Constructivist classrooms emphasise on thinking and understandings and promote students to be curious to ask questions and enjoy learning. But traditional teaching believes in rote memorisation and it doesn’t allow learners to ask questions in the classrooms.

3.23 Learning Without Burden (Report)

National Advisory Committee was appointed by MHRD in 1992 to advise on how to learn without burden while learning in the classrooms. The committee recommended a child-centred approach in which learners should be given more time to carry out experiments and observations (The committee had conducted a survey in schools and organized meetings of parents, teachers and students in Mumbai, Nasik, Baroda, Kolkata and Delhi to get their opinions.). It found that the quality of the learning is unsatisfactory in the country. Their major findings and recommendations are formed on the basis of analysis of the existing instructional materials, questionnaires, observations and reactions of teachers and students.

3.23.1 The Problem of Curriculum Load

The committee was concerned with a major flaw in education system, and it was identified by saying that A lot is taught, but little is learnt or understood.(3)
A school bag was one of the problems concerned with this flaw. A survey revealed that the weight of school bags is so heavy to create a burden for learners. The problem of physical load and the load of learning has been described in the document *Learning Without Burden* as:

> The weight of the school bag represents one dimension of the problem; another dimension can be seen in the child’s daily routine. Right from early childhood, many children specially those belonging to middle classes, are made to slog through home work, tuitions and coaching classes of different kinds. Leisure has become a highly scarce commodity in the child’s, especially the urban child’s life. The child’s innate nature and capacities have no opportunity to find expression in daily routine which permits no time to play, to enjoy simple pleasures, and to explore the world.

(Government of India, Department of Education and Ministry of Human Resource Development 3)

This picture is seen not only in metro-cities but also in rural areas. The committee observes that learners have lost interest in the educational process. Teaching has become a routine work and students are prepared only for the final examinations. The observations of the committee are:

**Opportunities for children to carry out experiments, excursions, or any kind of observations are scarce even in the best of schools.** In the average schools especially the school located in a rural area, even routine teaching of the kind described above does not take place in many cases. In several states, school teachers encourage children to attend after-school tuition given for a fee while regular classroom teaching has become a tenuous ritual. One message of this situation is that both the teacher and the child have lost the sense of joy in being involved in an educational process. Teaching and learning have both become a chore for a great number-of teachers and children. Barring those studying in reputed or exceptional institutions, the majority of our school-going children are made to view learning at school as a boring, even unpleasant and bitter experience. They are daily socialised to look upon education as mainly a process of preparing for examinations. No other motivation seems to have any legitimacy.
Moreover, majority of them (teachers) neither know nor have the necessary skills to realize the goals of education. The recommended pupil-teacher ratio of forty to one is now more an exception than a norm, and in many parts of the country it is customary to have sixty to eighty students in one class. (Ibid 3-4)

Teachers emphasised on completing their syllabus without considering the needs of learners in such classes. It may be one of the reasons that students have lost their interest and joy in education. Unfortunately, teachers are also unable to handle electronic media for improving the quality of their lessons.

It is the examination system that forced teachers to change the objectives of teaching in the classrooms. Examination system focused only on the ability of learners to reproduce information and ability to apply it to the examination. Various ills of the examination system have been elaborated in the report Learning Without Burden:

The influence is so strong that schools start holding a formal written examination several years prior to class X indeed, in the primary classes in many parts of the country, and children receive the message almost as soon as they start attending school that the only thing which matters here is one’s performance in the examination.

Both the teacher and the parents constantly reinforce the fear of examination and the need to prepare for it in the only manner that seems practical, namely, by memorising a whole lot of information from the textbooks and guidebooks...

...Percentage of marks obtained in the high school, higher secondary, or...is what ultimately matters in determining a student’s chance...for employment. (Ibid 5)

Majority of educated and uneducated parents believe that scores of marks in the final examination really matters in the education system. “Understanding” is always confused with “acquisition of facts”.

Learners have to memorise the concepts to prove in the examinations. There is no change in the attitude of the students, parents and teachers, despite the reformation of curriculum. Various skills are neglected by the examination system, as it emphasises memorisation of information and concepts. So, coursebooks do not do
justice to the needs of learners. Teachers cover or finish the prescribed syllabus in the class and prepare learners for the examination. In fact, it is expected that students should be taught to face real life situations through the curriculum.

3.23.2 Recommendations in Learning Without Burden

The problem of the burden on children arise due to over-enthusiastic curriculum designer, poorly equipped teachers and deeper malaise in our society for education has a great impact on learners. So, they could not learn with joy. To alleviate the problem of academic load of students, some recommendations are made by the committee in the document *Learning Without Burden*:

- …mother tongue alone should be the medium of instruction at the primary stage.
- ... However group activities and group achievements must be encouraged and rewarded to give a boost to cooperative learning in schools.
- …All the schools be encouraged to innovate in all aspects of curriculum, including choice of textbooks and other materials.
- We endorse the idea of setting up education committees at village, block and district level to undertake planning and supervision of schools under their jurisdiction.
- The culture of writing textbooks be changed so as to involve a much large number of teachers in the preparation of text-books…
- In the upper primary and secondary classes, homework, where necessary, should be non-textual, and textbooks, when needed for work at home should be made available on a rotation basis.
- …Pre-service teacher education programme, being a professional course, has to be rigorous, thorough and intensive programme. Therefore, B.Ed. degree courses by correspondence be derecognised.
- The public examinations taken at the end of class X and XII be reviewed with a view to ensure replacement of the prevailing text-based and ‘quiz type’ questioning by the concept-based questioning. This single reform is sufficient to improve the quality of learning and save the children from the tyranny of memorisation.
- Language textbooks should adequately reflect the spoken idiom. An attempt should be made in future textbooks to give adequate representation to children’s life experiences, imaginary stories and poems and stories, reflecting the lives of ordinary people in different parts of the country… (Ibid 20-23)
Curriculum designers, academicians and thinkers need to consider the recommendations before preparing the textbooks. It would also help to reduce the academic burden of the learners. It is expected that this reform in the examination system would enable students to apply concepts, information and knowledge in their practical life. Education should make children think and explore.

3.24 National Curriculum Framework (NCF)- 2005

The document opens with the quotation of Rabindranath Tagore from his essay *Civilization and Progress* in which the poet reminds us that ‘Creative Spirit’ and ‘Generous joy’ of children are the most significant part of the childhood. Both the main areas of the childhood are neglected by adults. NCF-2005 has been designed in the light of the report *Learning Without Burden*. NCERT has framed it with the help of responses and opinions of teachers, parents and public, consultations with State secretaries, SCERTs and authorities of examination boards. It has focused on the way of teaching and what should be taught to the children. This document has considered the principles of education reforms recommended by Sri Aurobindo in *A System of National Education*.

The document revolves around the question of academic burden of the learners. Memory based and short term information accumulation based education has been barred away. It is time and necessity to provide learners some taste of understandings, help them create and construct their knowledge to compete in the world. It is the effort of the document to make education system more creative and enjoyable and free from excessive burden of information. Learners should not be forced to remain passive in the classrooms.

Some systematic changes are suggested in the NCF-2005 to improve the quality of education. The draft is unique, as extracurricular subjects like Art, Work and Peace are emphasized properly for the first time. The document proposes the principles of education that are most progressive and child-centred and used in the most of the schools.

3.24.1 Perspective, Structure and General Issues

The opening chapter focuses on Educational policy and reforms since Independence of the country. The National Policy of Education (NPE)- 1986, proposed curriculum framework as a means of evolving a national system of education. The POA (Programme of Action) formulated a child-centred approach and
focused on the improvement of quality of education. *Learning Without Burden* has indicated that learning of a child is not a joyful, as we are not ready to change our perception of the child as a receiver of information or knowledge. It recommended some significant changes in designing curriculum and textbooks.

The document has been considered as an advancement over the past approaches. It is the first National Curriculum Framework to be followed by all the states of the country. It has been observed that the curriculum can be enriched and more creative by the questions and queries of learners, as they observe life and world around them. It is the education which plays a passive role for them rather than being meaningful and empower pupils to choose peaceful life.

The first chapter can be summarised as follows:

- It has recommended reducing the curriculum load as proposed in the document *“Learning Without Burden”*.  
- Systematic changes are given for curricular reforms.  
- It has ensured quality education to all.  
- Curriculum to be based on the values in the constitution, such as social justice and equality and secularism.

There are many expectations from the teachers to use this framework in the schools, but the capacity of the existing teachers to adopt this approach is not possible without proper academic support.

It is impossible to isolate education system from the society of which it is a part. Our society has greatly influenced by teaching and participation of the learners in the school. The competition and the ambitions of parents create stress and burden in the learning of students. It makes this learning joyless for them.

It also discusses on the quality of education and demands the availability of qualified and motivated teachers who can improve the quality of education. The quality should be examined from the child's point of view. Presently, private schools are considered the schools of quality on the basis of examination results.

### 3.24.2 Learning and Knowledge

The second chapter of *NCF-2005* deals with the child's nature of knowledge and strategies of learning. It asks to recognise the child as a natural learner and knowledge is the result of his activity. Children enjoy curiosity, innovations and
querying outside of the school. They observe and engage with the world actively and construct their meanings.

The chapter opens with considering the child as a curious learner, and it establishes:

… the need to recognise the child as a natural learner, and knowledge as the outcome of the child’s own activity. In our everyday lives outside the school, we enjoy the curiosity, inventiveness and constant querying of children. They actively engage with the world around them, exploring, responding, inventing and working things out, and making meaning. Childhood is a period of growth and change, involving developing one’s physical and mental capacities to the fullest. It involves being socialised into adult society, into acquiring and creating knowledge of the world and oneself in relation to others to understand, to act, and to transform. Each new generation inherits the storehouse of culture and knowledge in society by integrating it into one’s own web of activities and understanding, and realising its ‘fruitfulness’ in creating afresh.

Informal learning in society builds on the learners’ natural ability to draw upon and construct their own knowledge, to develop their capacities, in relating to the environment around them, both physical and social, and to the task at hand…The formal processes of learning that school makes possible can open up new possibilities of understanding and relating to the world.

(National Council of Educational Research and Training 12-13)

Formal and informal learning of children develop the understandings related to the environment around them. So, it is recommended to provide them with opportunities to learn. Informal learning helps them to improve their natural ability to construct their knowledge and formal education provided by schools make them understand this world. In fact, every child is a natural learner who knows the world with the help of his daily activities. The experts observed that children have the full capacity to create their knowledge actively, so the teacher needs to provide educative experiences to build new concepts on their understandings.

Learner-centered learning refers to the various educational programmes, learning experiences and academic support strategies, aims to develop autonomy and
Independent Learners. This child-centred pedagogy is defined in the document of *NCF-2005*, as follows:

‘Child-centered’ pedagogy means giving primacy to children's experiences, their voices and their active participation. This kind of pedagogy requires us to plan learning in keeping with children’s psychological development and interests. The learning plans therefore must respond to physical, cultural and social preferences within the wide diversity of characteristics and needs. Our school pedagogic practices, learning tasks, and the texts we create for learners tend to focus on the socialisation of children and on the ‘receptive’ features of children’s learning. Instead, we need to nurture and build on their active and creative capabilities - their inherent interest in making meaning, in relating to the world in ‘real’ ways through acting on it and creating, and in relating to other humans.  

(Ibid 13)

Student-centered learning focuses on the skills and conceptual understandings of the learners. It considers the learning needs, interests, aspirations and cultural background of students. This theory is based on Constructivist learning theory which emphasises the role of learners to construct meaning with the help of their past experiences. Learners are unable to learn with fear, discipline and stress. Therefore the problems of curriculum load and the burden related to the examination should be solved urgently.

All the children have the capacity to regulate their learning, as their thinking process develops by their observations and experiences. The facts are thus described:

- All children are naturally motivated to learn and are capable of learning.
- Making meaning and developing the capacity for abstract thinking, reflection and work are the most important aspects of learning.
- Children learn in a variety of ways-- through experience, making and doing things, experimentation, reading, discussion, asking, listening, thinking and reflecting, and expressing oneself in speech, movement or writing-- both individually and with others. They require opportunities of all these kinds in the course of their development
- …Children may ‘remember’ many facts but they may not understand them or be able to relate them to the
Learning takes place both within school and outside school…

Learning must be paced so that it allows learners to engage with concepts and deepen understanding, rather than remembering only to forget after examinations…

Learning can take place with or without mediation…

Students can learn through experiences, experiments and various skills. In traditional education, learning was considered as the most significant formal process that takes place in the schools. *NCF-2005* described the concept of learning as the most important part of cognitive development. It should be the effort of teachers to implement creative and abstract thinking in students. Learners are unable to understand and relate their experiences in their practical life. There should be no emphasis on memorisation but conceptual and deep understanding.

Interactions of learners are a significant part of the constructivist learning situation, as it encourages students to reflect, analyse and interpret in the process of knowledge construction. Pupils used their own experiences through the classroom interactions in the group work or pair work. They can learn social values from each other.

It is also expected that teacher should allow children to spend more time on deeper and meaningful learning and encourage creativity and independent thinking. Textbooks are not the only source for them to get knowledge or information, but it can be achieved from home, community, libraries, websites and their own experiences. It will be beneficial for the students who depend on the mechanical rote memorisation to pass the examination.

Lesson plans should aim at the outcomes of the learning through the activities. Teachers need to plan sessions for each topic. It is observed that the development of understandings and competencies are possible only through proper activities. Teachers should help learners in solving activities and need to view if they are constructing knowledge all the time. Individual attention could be given through activities to find out the interest of the students.

The way teachers should prepare lesson plan of various activities is described in the following words:

*Teachers need to understand how to plan lessons so that*
children are challenged to think and to try out what they are learning, and not simply repeat what is told to them. A new problem is that in the name of ‘activities’ and ‘play way’ methods, a lot of learning is being diluted by giving children things to do that are far below their capability. One concern is that a focus on activities would become too time consuming and make greater demands on teachers, time. Certainly, doing activities requires that time be spent in planning and preparing for activities. Initially, teachers need to make an effort to establish the classroom culture for activities and to establish the rules that will govern the space and use of materials.

(Ibid 22)

Lesson plans and objectives are necessary to understand the text. It is the fact that teachers have to spend more time on conducting activities. It should be planned properly to reduce the time management problem. Teachers need to create a culture of classroom activities to get appropriate outcomes from the learning. It is expected that all the learners should participate in the classroom discussion. The collective experiences of children and teachers provide the learners opportunities to learn about others. Teachers need to listen to them without judgment and also make them able to listen to others.

The atmosphere of the classroom has been expressed as follows:

An atmosphere of trust would make the classroom a safe space, where children can share experiences, where conflict can be acknowledged and constructively questioned, and where resolutions, however tentative, can be mutually worked out. In particular for girls and children from under-privileged social groups, schools and classrooms should be spaces for discussing processes of decision making, for questioning the basis of their decisions, and for making informed choices. (Ibid 24)

Classrooms are the safe places to share experiences for learners, so, teachers should play the role of facilitator and not be a ‘moral authority’. Learners also have the ability to learn the process of decision making and problem-solving by their experiences and constructive question.

At the beginning of the document the question, ‘What should be taught to the children? How?’ has been raised. In fact, the issue is related to the content and methodology. Presently, knowledge is transferred to the child's mind in the form of
information which is the traditional way of teaching. While transmitting this knowledge, learners receive it passively. *NCF2005* recommended that knowledge can be obtained as experience organised through the language into patterns of concepts, creating meaning and it helps them (children) to understand the world. Learners should construct more knowledge and participate in the very process of knowledge creation, meaning making and human work. In the content of the curriculum, more focus must be on the process of learning.

Secondary level learners are considered as the most significant step to improve the skills and language abilities with the help of their previous learning experiences in the upper primary and middle-class stage. It is described in the following lines:

By the time children reach the secondary stage of education, they have acquired a sufficient knowledge base, experience, language abilities and maturity to engage with different forms of knowledge in the full sense: concepts, structure of body of knowledge, investigation methods and validation procedures. Therefore, the subjects could be more closely linked with the basic forms as listed above and the disciplines as they are recognised in higher education today. (Ibid 34)

At secondary level, learners should be encouraged to engage with various forms of knowledge like concepts, understanding the structure of body of knowledge, innovative methods and procedures of learning.

### 3.24.3 Curricular Areas, School Stages and Assessment

Majority of students come in the school with the ability to use two or three languages appropriately. They can construct knowledge and develop their thoughts and identity with the help of these languages. The document described it as:

Effective understanding and use of languages(s) enables the child to make connections between ideas, people and things, and to relate to the world around. (Ibid 36)

Learners can understand the world around them better with the help of conceptual understanding and efficient use of languages. It connects people and their ideas around the world.

In fact, English is a link language in a multilingual country like India, as it is used in several states to communicate and English has become a part of life for many Indians. In the curriculum, English has two fold goals as mentioned in the *NCF-2005*:

...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 (for example) literacy.

(Ibid 39)

English language is the symbol of aspirations for quality in the education process, and it helps learners to participate in national and international life. It enables students to create awareness of the world through the learning. They should achieve basic language proficiency within four years. Language should be used to develop abstract thoughts and for the acquisition of knowledge. To create multi-lingual learner is one of the aims of English teaching in India. It helps learners to enrich all our languages along with English. It should be taught through exposure in meaningful context. Teaching methods and approaches must be supportive of a broad cognitive philosophy of Piaget, Chomsky and Vygotsky. English Teachers must have basic proficiency in English and skills to teach English, which are appropriate to their situation.

The document *NCF-2005* promotes to teach various skills of English (Second and Third) language with integrated approach. It thus recommends:

Though we strongly advocate an integrated approach to the teaching of different skills of language, the school does not need to pay special attention to reading and writing in many cases, particularly in the case of home languages. In the case of second and third, or classical or foreign languages, all the skills, including communicative competence, become important…
In several communicative situations, such as taking notes while listening to somebody on the phone, several skills may need to be used together… Development of 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. (Ibid 40)

It has recommended introducing life development skills, communication skills, decision making, problem-solving and self-management skills to deal with the problems of everyday life. It discusses the importance of language games in the class:

...the subject matter can be explored further with the help of small group talk among children, and undertaking activities that nurture the abilities to compare and contrast, to wonder and remember, to guess and challenge, to judge
It asks to prepare games and share with learners in the classroom to develop learning skills. Writing is also considered as a very significant part of the education system, and innovative techniques and methods should be introduced in the curriculum to develop their critical skills. But views, ideas and thoughts expressed in the writing, are not given importance by teachers.

At the secondary level, learners are energetic, vibrant and have ability of logical thinking. They have a great physical change and capability of critical understanding of the self and his surroundings. It is a terminal stage for majority of students, who need to acquire productive work skills. *NCF-2005* also recommended creative and productive work skills to pursue jobs in future. It is described in the following lines:

Those for whom this stage becomes terminal on account of socio-economic circumstances need opportunities for learning creative and productive work skills while the system as a whole moves towards universalising secondary education…

These two years are shadowed by the spectre of achieving respectable ‘board examination’ marks in this examination since this will determine future options…

On account of the examinations, many other curricular areas, especially sports and arts, are also compromised…

…The policy of declaring pass-fail in the whole examination, and the meaning of the ‘pass mark’, may also need to be reviewed. *(Ibid 68-69)*

Though it is suggested the importance of creative and productive work skills for the learners of secondary level, most of the curricular activities are compromised because of the marks in the board examinations.

The policy of declaring ‘pass-fail’ needs to be reviewed in the examination system. In India, evaluation is the term related to the examination, stress and anxiety. It has ill effects on the students to make their learning joyful and meaningful. The following lines describe –what is not the purpose of evaluation:

**The purpose of evaluation is not** -
- to motivate children to study under threat.
- to identify or label children as ‘slow learners’, or ‘bright students’ or ‘problem children’. Such categories segregate children, placing the onus for learning solely on them, and detract from the role and purpose of pedagogy.
to identify children who need remediation…
- to diagnose learning difficulties and problem areas while broad indications about conceptual difficulties can be identified via evaluation and formal testing…

(Ibid 71)

Good examination system and evaluation are essential aspects of the learning and teaching process in the education system, so every teacher should consider the purpose of evaluation before assessment in the class.

In fact, the purpose of assessment and evaluation is to develop the learning-teaching process and review the objectives of teaching. There is no need of conducting tests and examination every time, but textual activities and exercises can be conducted regularly and efficiently to evaluate the learning of learners. The evaluation would help to check the attitudes, interest and the ability of students to learn independently.

All efforts will fail to redirect the curriculum towards effective learning, until the examinations assess the ability of learners to remember and recall the knowledge from the textbooks. There is a need to change the types of questions for the assessment so that teachers can accept the answers of learners if they are different from the textbooks or guidebooks. At this stage, the assessment should be based on tests, activities, project reports and examinations for the knowledge based areas of the curriculum.

### 3.24.4 School and Classroom Environment

The layout of classrooms should be changed as per the need of learning so that learners could sit in groups or sit in a circle for presenting stories. The arrangement of the desks would need to change, but the majority of schools have traditional seating arrangement in the classrooms. It forces to accept teacher and blackboard-centred system of learning. Most of the students are unable to sit comfortably to learn in the classes. Class size has been described in *NCF-2005* as follows:

‘Class-size’ is an important factor that influences the choice of desirable methods and practices that the teacher uses in the process of curriculum transaction. ...Way back in 1966, the Kothari Commission Report had warned that large classes would do ‘serious damage to the quality of teaching’ and that ‘in crowded classrooms, all talk of creative teaching ceases to have any significance’.

(Ibid 80)
Large classes are challenges for teachers, as they have to plan activities and techniques for a large class. Kothari Commission had also warned a serious damage to quality due to large classes. In fact, it is observed that majority of teachers face the problems like stress and anxiety in such noisy classes.

Attractive classrooms can encourage learners to participate in the group or pair activities. Classrooms should be nurtured spaces as places where learners can ask questions freely, participate in the pair and group activities. Students must be encouraged to ask questions and express their views and ideas to make the classroom livelier. It can help to develop their self-confidence and improve the quality of learning.

While planning for activities, all the learners should get equal opportunity to participate in the activities. It is observed that only a group of clever students are motivated and get the chance to display their talents, while other learners experienced disappointment. NCF asked to ensure the participation of all the students.

   **Excellence and ability may be singled out for appreciation, but at the same time opportunities need to be given to all children and their specific abilities need to be recognised and appreciated.**

   **This includes children with disabilities, who may need assistance or more time to complete their assigned tasks.**

   ...When planning, therefore, teachers must pay special attention to ensuring the participation of all. This would become a marker of their effectiveness as teachers. (Ibid 85)

Teachers should see if all the learners get equal opportunities to learn and students, with disabilities, get proper help in the classrooms. Effective teachers would ensure the participation of all students in the learning process while preparing lesson plans. Learners' phobia of not having correct answer keeps them silent and denies opportunity to participate in the classroom activities. They should be allowed to make mistakes to remain the part of this learning process and it will be helpful to remove their unwanted phobia. The noise of the learners in the classroom is an indication of a lively and participatory class.

Schools are not the only places, where learners construct their knowledge, but it continues even outside the school. Teachers should consider their experiences in the society while conducting activities in the classrooms. With books, teachers should use the resources like manuals, handbooks and other resource materials from the Internet.
These would provide some tips for effective pair and group work. *NCF-2005* recommended ‘Mixed ability class’ when they plan to teach unit from the text.

**Vertically organised group classrooms (multigrade or multiability) require a shift away from textbooks designed for monograde classrooms, which assume that all children are being addressed by the teacher together and that they are all the same stage and are all expected to do the same thing.** (Ibid 90)

It is the shift from monograde (traditional) classrooms to multigrade classrooms, where learners learn effectively. Teachers need to hold positive attitudes to multigrade teaching. It is considered that all the learners have the same level of language learning ability, but they learn at a different speed. English classes are often seen with mixed ability learners, as the students come from different backgrounds and having different learning histories. Various activities can be conducted in a mixed ability class to suit the level of learners.

**Using Teaching Aids-** It is recommended to access new informational technology, apart from books and magazines. Teachers and learners, both should use resources for learning, pleasure and concentration. Various kinds of resources are suggested in *NCF-2005* to be used as teaching aids.

*Teaching aids and other materials, as well as books, toys and games, help make school interesting for children… A lot of ready-made materials do exist, and teachers, cluster and block-level resource persons need to become better acquainted with the range of materials available and ways of using them. There are also many new kinds of printed materials for teachers and children being produced by NGOs and small entrepreneurs. In addition, there are locally available materials that cost little but which are very useful for keeping in a classroom, especially in the primary school…* (Ibid 94)

*There is a growing emphasis on Educational Technology for ‘effective’ learning. Some schools are now being equipped with computers, and in some areas radio and TV-based instruction is being introduced.* (Ibid 95)

In this way, resources can be collected and used as teaching aids for effective learning in the class. There is a growing emphasis on the technology like mobiles, computers, Internet and TV, as the majority of resources is available on such devices. So, schools and teachers are connected with each other through the social media like
Whatsapp. They can share their ideas and other useful resources through Whatsapp group. Multimedia and educational technology should be used as two-way interaction.

3.24.5 Systematic Reforms

Quality is the significant feature of curriculum changes, which focuses on the learner-centred education process. Students construct their knowledge actively rather than receive information passively. In the multigrade classrooms, students come from different backgrounds. Teachers should enrich the quality of learning, and it would improve the atmosphere of the school. Headmasters and school Inspectors also monitor the school activities and help to improve the quality of education. During the visit of school Inspector, a positive picture of school is presented by teachers and students due to the fear of punishment. It is expected from them to provide constructive feedbacks to the learning and teaching within the classroom context. In all the districts, Block Resource Centers (BRC) and Cluster Resource Centers (CRC) are monitoring the schools to see if they (teachers) performed well to improve the quality of education.

Teacher Education- Teacher Education is a useful process for the professional preparation of teachers. It is considered as the significant part of the school system, but ground reality is major concern due to the duration of the B.Ed. course. It was the recommendation of Chattopadhaya Committee (1983-85) to increase the duration of Teacher Education Course, i.e. B.Ed. for five years (after 12th class). Learning Without Burden also emphasised to focus on the ability for self-learning and independent thinking in the teacher education. Regular teachers and student teachers neither participate in designing curriculum or textbooks nor examined them critically. So, their experiences, views and ideas provide a little scope in curriculum change. Teacher education must be prepared to meet the emerging demands of learning process. It should focus on the following features to enable student-teachers to:

- understand the way learning occurs and to create plausible situations conducive to learning.
  …
- develop appropriate competencies to be able to not only seek the above-mentioned understanding in actual situations, but also be able to create them.
- attain a sound knowledge base and proficiency in language.
  …
- address the learning needs of all children, including those who
are marginalised and disabled.

...  
- develop the needed counselling skills and competencies to be a ‘facilitator’ for and ‘helper’ of children needing specific kinds of help in finding solutions for day-to-day problems related to educational, personal and social situations.
- learn how to make productive work a pedagogic medium for acquiring knowledge in various subjects, developing values and learning multiple skills. (Ibid 108)

A complete reform is suggested in teacher education to improve the quality of learning. Appropriate competencies should be developed to be ‘facilitators’ of children.

There is a significant shift in the role of a teacher. He plays the role of Facilitator, Guide, Diagnostician, Planner and Creator. NCF -2005 described it as follows:

The major shift is in the teacher's role where he/she assumes a position centre stage as a source of knowledge, as custodian and manager of all teaching learning processes, and executor of educational and administrative mandates given through curricula or circulars. Now his/her role needs to be shifted from being a source of knowledge to being a facilitator, of transforming information into knowledge/wisdom, as a supporter in enhancing learning through multiple exposures, encouraging the learner to continuously achieve his/her educational goals. (Ibid 109)

The teacher was considered as the only source of knowledge in the traditional education system, but now his role has changed to a facilitator, guide and planner. He has to help learners to achieve their goals of education by providing good educative experiences and situations in the classrooms. The major shifts in education have been stated as follows:

Table No.3.2 Major Shifts

<table>
<thead>
<tr>
<th>From</th>
<th>Major Shifts</th>
<th>To</th>
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<tbody>
<tr>
<td>1.</td>
<td>Teacher centric, stable designs</td>
<td>- Learners centric, flexible process</td>
</tr>
<tr>
<td>2.</td>
<td>Teacher direction and decisions</td>
<td>- Learner autonomy</td>
</tr>
<tr>
<td>3.</td>
<td>Teacher guidance and monitoring</td>
<td>- Facilitates, supports and encourages learning</td>
</tr>
<tr>
<td>4.</td>
<td>Passive reception in learning</td>
<td>- Active participation in learning</td>
</tr>
<tr>
<td>5.</td>
<td>Learning within the four walls of</td>
<td>- Learning in the wider social context</td>
</tr>
</tbody>
</table>
the class room

6. Knowledge as "given" and fixed - Knowledge as it evolves and is created
7. Disciplinary focus - Multidisciplinary, educational focus
8. Linear exposure - Multiple and divergent exposure
9. Appraisal, short, few - Multifarious, continuous (Ibid 110)

The teacher should understand these major shifts in the education process, which is learner-centered. It is the transition from traditional classrooms to constructivist classrooms where learning is given more importance than teaching. STT (Student Talk Time) should be increased than TTT (Teacher Talk Time) in the classrooms. If teachers talk for half hours, students get little time to speak. Majority of activities do not need to be led by teachers, but pair work and group work are the effective techniques for learning activities.

In-service Training- Education Commissions recommended organising in-service training to update the knowledge of teachers. It should be related to their needs and help them to overcome their lack of confidence. Institutions like DIETs, IASEs, CTEs and SCERT have been set up to provide in-service training. The qualities of the training are concerned with the needs of teachers, but actual requirements are not considered in such programmes. The concepts like teaching to large classes, activity based learning, activity-presentations and teaching in multi-grade classrooms are taught with lecture methods. In fact, in-service training should be a process in which skills, attitudes and knowledge are included through interactions. NCF-2005 has suggested some reforms in pre-service teacher education and in-service training programmes as:

Pre-service teacher education as well as in-service training must build the necessary orientation and capacities in teachers so that they can appreciate, understand and meet the challenges of the curriculum framework. In-service training, in particular, must be situated within the context of the classroom experiences of teachers. (Ibid 113)

These reforms are necessary to meet the challenges of new concepts of curriculum framework. The responsibilities of organising such training programmes are assigned to DIETs and it is their duty to see if both teachers and learners get benefits from such training. Headmasters of the schools must be the part of this process to play the role of facilitator in the changing classroom.
Examination Reforms- National Curriculum Framework (NCF)- 2005 document suggested to review the final examination of X and XII, which is based on stress and rote memory. Some recommendations are made to reduce the stress and get success in the Board examination (X and XII):

1. Better conduct examinations in student’s own school or nearby school. Malpractices could be minimized by having invigilation teams from other schools.

2. ...The boards could work towards ‘on demand’ examinations, in which students can take as and when they feel prepared.

3. Eliminate the terminology of ‘pass’-‘fail’; indicate lack of adequate proficiency through re-examination or reappear or retake recommended.

4. Board should conduct re-examination immediately after announcement of results to enable students needing retake in one or two subjects to move to the next stage without losing a year.

5. Subjects such as Mathematics and English could be examined at two levels; standard and higher level...

6. Examination with a ‘flexible time limit’ can be an effective way to reduce stress among children.

7. Guidance and counseling be made available in schools to deal with stress related problems and to guide students, parents and teachers to lessen the students’ stress. Helplines in boards can also help students and parents. (Ibid 113)

The focus of the examination should be on framing competency-based questions. It must be based on problem-solving rather than rote learning, which causes stress during the examination. There is needed to make Indian examination system more open, flexible, and creative and user-friendly.

Learner-centered pedagogy is expected to be a child-friendly route to disciplinary knowledge and the formation of multiple skills that are useful to face complex challenges of a globalised economy. Various aspects of education system like curriculum planning, sources of texts, teacher education, school inspection, student attendance, parameters of evolution and assessment procedures needed reforms and improvement of quality which can be linked with systematic changes in the education process.

Encouraging Innovations- almost all the teachers explored new ways and methods to meet the needs of learners within the classroom. It is recommended to use creative
and innovative modes of teaching and learning. *NCF-2005* thus suggests:

The sharing of teaching experiences and diverse classroom practices can provide opportunities for an academic discourse to develop within schools as teachers interact with and learn from each other. This will also encourage new ideas and facilitate innovations and experimentation… For a start, there is a need to create structured spaces within schools, and at the level of the cluster and block where teachers are encouraged to share and discuss classroom practices and experiences… One of the main objectives of creating resource centres at the cluster level was to break the isolation of individual schools and bring teachers together on a regular basis for sharing their experiences and ideas with their peers. (Ibid 120)

Peer-observations, attending conferences and resource centres helped teachers to interact with each other, sharing ideas, learn innovative techniques and experimentation. Sharing classroom experiences and practices help them to develop their professional identities and sense to be a part of a larger teaching community.

### 3.25 Maharashtra State Curriculum Framework (SCF) - 2010

At National level, curriculum framework has been formulated in 1986, in which learner-centred concepts and equality were introduced in Education. It was revised in 1992, and the document *Learning Without Burden* emphasised on reducing the physical and mental burden of children. Finally, *National Curriculum Framework (NCF)- 2005* was prepared to improve the quality of the educational process, and it is the first document which focused on the education system at National level. It has influenced and involved State Councils for Educational Research and Training (SCERT) and District Institutes of Education and Training (DIET) in various states including Maharashtra. The state has always followed the educational policy of National curriculum, so it has prepared textbooks from standard 1st to 12th to implement *Right to Education* and *National Curriculum Framework-2005*. Maharashtra has formulated *State Curriculum Framework- 2010* based on *NCF-2005* to apply the education policy successfully at state level. Maharashtra Education Board introduced textbooks in seven regional languages, considering the needs of learners with similar themes.

English has been introduced from Class 1, with effect from June 2000, in all the Non-English medium schools in the state of Maharashtra. It is taught with fun
learning method. The policy was so effective that it was followed by other States also. There are also some reforms in the public examinations like X\textsuperscript{th} and XII\textsuperscript{th} as per the needs of learners and demands of society.

The main focus of the curriculum is on the life skills like problem-solving, decision making, creative thinking and critical thinking through the textbooks. Evaluation of learners is expected to be based on the overall personality development and other skills.

	extit{State Curriculum Framework (SCF)-2010} would relieve students from the rote memorisation and traditional learning by teaching them to use educational technology for conceptual understanding. All the principles and approaches were brought into the context of the state as envisaged in 	extit{NCF-2005}. The major thrust of the learning is on the constructivist theory.

While setting objectives for SCF-2010, present and future needs of learners and society have been considered and knowledge acquired from school is to be connected to the outside world of students. Every child constructs the meaning and understanding with the help of his/her experiences. It is the concept of Constructivism which helps teachers to provide educative experiences to his learners. Implementing constructivism is a great challenge before the schools, as they need to change the text-forms and evaluation process in the classrooms. Traditional classrooms should be changed into constructivist classrooms where there should be evaluation of learning process, and content based evaluation should be avoided.

3.25.1 Importance of Mother-Tongue and ICT in Education

Right to Education (RTE)- 2009 stated that mother tongue should be the medium of instructions in the schools, which would help learners to make their concepts clear. On the other hand majority of parents are attracted towards the English medium schools, where English is the medium of instructions. So, it is the need to give English importance along with the mother tongue of the learners.

Information and Communication Technology (ICT) was introduced in the school to provide opportunities to the students of secondary level to build their capacity in ICT skills. It helped them learning through educational technology. The ICT skills would motivate the teachers to use for creative teaching. It is also helpful for professional development and academic support of teachers in pre-service and in-service training. It is used to keep teachers in contact with other experts in the field to
improve their performance level. The Maharashtra government has arranged training programmes on demand of teachers through ICT technology based on the interest, requirement and recommendations of school supervisor.

There is a significant change in texts, kinds of resources and evaluation process which is based on NCF-2005 and RTE-2009. Teachers needed the training to understand the evaluation and learning process in the classrooms, so the training should be made available to all the teachers through teleconferencing, video conferencing and online training facilities.

3.25.2 The Goals of SCF-2010

Maharashtra State Curriculum Framework has set some goals to develop the ability and skills in learners. The goals mentioned in SCF-2010 are:

1. Follow and respect the guiding principles and values of Indian Constitution.
2. To acquire innovative ideas and knowledge and to develop the ability to manage it.
3. To create the awareness of global integration and sensitivity to others.
4. To create awareness of protecting National heritage, cultural heritage and public properties.
5. To improve the ability and skills to understand the modern age.
6. As an Indian citizen, improve the capability of accomplishing responsibilities.
7. To develop the ability to keep our personality persistently vibrant and creative.

(“State Curriculum Framework 2010: Draft” 24)

The goals of the curriculum focus on the exploring new ideas and create awareness in learners to respect the constitution, culture and heritage. As a good citizen of the country, one should behave as a responsible person. Awareness of global integration and sensitivity to others should be developed in learners.

3.25.3 The Objectives of SCF-2010

Following objectives are set for primary and secondary level in Maharashtra State Curriculum Framework (SCF)- 2010:

1. To develop all round personality of learners to be a good learner and citizen in the 21st century.
2. To explore the sources of learning knowledge...
3. To improve the life skills to get self-employment.
4. To encourage students to respect the values of Indian Constitution and its principles.
5. To develop ability in learners to solve differences and conflicts at home, society and school in a peaceful way.
6. To inculcate the habits regarding the problems of preserving and protecting the environment.
7. To develop the ability to live carefree and a life without stress.
8. To enable the learners to use information technology for learning new concepts.
9. To create an awareness in learners to acquaint with the financial and social problems of the country.
10. Quality education to all. (Ibid 24-25)

Life skills are given more importance to the learners, who left the school at secondary level. They are expected to be able to solve their day-to-day problems. Education must help them to boost their confidence and solve conflicts in the society. Like NCF-2005, SCF-2010 aims at learners to go beyond the text to understand the real world around them. SCF 2010 recommended students and community to participate in formulating curriculum so that they would be able to handle the problems of society.

It is stressed by SCF to use ICT skills in teaching all the subjects. The constructivist approach should be utilized in the class. Curriculum and texts should also be based on constructivism. Overall, SCF- 2010, followed most of the recommendations of NCF-2005.

3.26 National Curriculum Framework for Teacher Education (NCFTE)

NCFTE aims to improve the quality of teacher education and learning process. In learner-centred education, learners are given more importance, and NCF also expected teachers to play the role of facilitator, which helped students to construct their knowledge by using innovative techniques and conducting activities in the classrooms. It was stated in National Policy on Education 1986 that people cannot rise above the level of teachers. Dr Kothari asserted in his Report of The Education Commission (1964-66): Education and National Development “the destiny of India is now being shaped in her classrooms”. (1) This expression indicates the most significant role of teachers in moulding the future of learners.
The document highlighted the new approach to curricular areas of teacher education. The *National Curriculum Framework for Teacher Education (NCFTE)* stressed the need for competent teachers. In the introductory chapter, it described:

> The importance of competent teachers to the nation’s school system can in no way be overemphasized. It is well known that the quality and extent of learner achievement are determined primarily by teacher competence, sensitivity and teacher motivation. It is common knowledge too that the academic and professional standards of teachers constitute a critical component of the essential learning conditions for achieving the educational goals.

(“National Curriculum Framework for Teacher Education” 1)

The nation needs competent teachers to improve the quality and to achieve the goals of education at secondary level. For quality education, teachers should focus on their professional development which is also known as Continuing Professional Development (CPD). It helps teachers to acquire some skills and knowledge to deal with specific requirements like using textbooks with innovative and effective methods. They are expected to plan to develop the professional skills to achieve the educational goals.

Teachers should not equip only with his teaching skills, but also with ability to understand his learners properly. *RTE Act section 29(2)* emphasises the various aspects concerned with teachers in *NCFTE (National Curriculum Framework for Teacher Education)*:

- Conformity with the values enshrined in the Constitution.
- All round development of the child.
- Building up child’s knowledge, potentiality and talent.
- Development of physical and mental abilities to the fullest extent.
- Learning through activities, discovery and exploration in a child-friendly and child-centred manner.
- Medium of instruction shall, as far as ... be in child’s mother tongue.
- Making the child free of fear, trauma and anxiety and helping the child to express views freely.
- Comprehensive and continuous evaluation of child’s understanding of knowledge and his or her ability to apply the same.

(Ibid 3)

To accomplish these areas, teachers should focus on their professional
development at all the stages. The declining quality of state schools created many problems and forces to consider the basic learning needs of learners.

Quality of education is not related with good textbooks only, but it is the teachers, who can help students to construct knowledge and improve the quality of learning. The document pointed out that:

*Educationists are also of the view that the burden arises from treating knowledge as a ‘given’, as an external reality existing outside the learner and embedded in textbooks… Textbooks by themselves do not help in developing knowledge and understanding. Learning is not confined to the four walls of the classroom. For this to happen, there is a need to connect knowledge to life outside the school and enrich the curriculum by making it less text book-centred.*

(Ibid 4)

Above views on education indicate that teachers need to take fresh look at the preparation. As the students live in the society and get various experiences, the classroom knowledge should be connected to the life of outside school. Teachers will have to ensure that knowledge should not be treated as ‘given’, as it may create stress in learners.

The *National Knowledge Commission (NKC)* noticed that there is a severe shortage of qualified and motivated teachers in the country, so it recommended to arrange forums to allow and encourage teachers to share ideas and experiences to improve their professional skills. *Learning Without Burden* expressed the need for teachers to get involved in curriculum and textbook preparations. *NCFTE-2009* has suggested some urgent reforms in teacher education:

…There is need to bring greater convergence between professional preparation and continuing professional development of teachers at all stages of schooling in terms of level, duration and structure. Considering the complexity and significance of teaching as a professional practice, it is imperative that the entire enterprise of teacher education should be raised to university level and that the duration and rigour of programmes should be appropriately enhanced

(Ibid 8)

Continuing professional development is essential for teachers to update knowledge to prepare according to the time. Teacher education should be raised to university level by considering the complexity and importance. It is a time to enhance
the duration and rigours of the programme, as one year Teacher Education Programme (B.Ed.) has become weak in theory and practice due to privatisation and commercialisation. NCFTE states about B.Ed. Course duration that:

   It is desirable within a finite time frame that the existing one-year second Bachelor’s (B.Ed) degree programme is structurally transformed to a two-year one, with deeper and more protracted engagement with school-based experience and reflective and critical engagement with theory. (Ibid 11)

One year teacher education programme must be transformed into two years. School based experiences and critical theory should be added to the teacher education degree programme. It is also expected that school knowledge should be linked with community knowledge.

There are two ways to develop the skills of teachers. If they are teacher-students, rigorous training should be given, and if they are working as teachers, they should focus on Continue Professional Development. The document NCFTE has elaborated some concerns of education:

1. …Curriculum, syllabi and textbooks are never critically examined by the student teacher or regular teacher.
2. Language proficiency of the teacher needs to be enhanced, but existing programmes do not recognize the centrality of language in the curriculum.
3. Teacher education programmes provide little scope for student teachers to reflect on their experiences.
   …
4. Repeated ‘practice’ in the teaching of a specified number of isolated lessons is considered a sufficient condition for professional development.
   …
5. There is no opportunity for teachers to examine their own biases and beliefs and reflect on their own experiences as part of classroom discourse and enquiry.
6. Theory courses have no clear link with practical work and ground realities.
7. The evaluation system followed in teacher education programmes is too information-oriented, excessively quantitative and lacks comprehensiveness.
8. Apart from conceptual and pedagogical aspects, existing programmes need to develop certain attitudes, dispositions, habits and interests in a teacher. The present evaluation
protocol has no place for evaluating these aspects.

(Ibid 11-12)

These observations provide different aspects of teacher education, which is always criticised. It is also observed that the Bachelor degree (one year) programme is not able to produce teachers who are not preparing well to impart the quality education. It is a fact that teachers have to make adjustments with school related terms like infrastructure, teaching methods, curriculum and other classroom activities which are related with the needs of learners.

Objectives and the quality of pedagogical inputs depend on the professional competence of the teacher, but the document National Curriculum Framework for Teacher Education (NCFTE) observed that there is a shortage of competent and qualified teachers. It put it as:

The need and importance of professionally trained teacher educators has been underscored in statements on educational policy, time and again, but the situation on the ground remains a matter of concern; there is a considerable shortage of properly qualified and professionally trained teacher educators at all stages of education.

(Ibid 75)

The word ‘shortage’ referred to inadequacy of professional teachers and their mismatch of qualification with their job requirements.

3.26.1 Recommendations of NCFTE (National Curriculum for Teacher Education)

The document has recommended the following strategies to improve the quality of teacher education.

…
1. Teacher education programmes should ideally be of four-five years’ duration after the completion of 10+2 level of school education…
2. Appropriate structural mechanisms need to be evolved in universities and other institutions offering teacher education in order to promote the entry of talent in teacher education programmes.
3. The NCTE will constitute a working group of scholars in the field of teacher education… to develop syllabi and course outlines, based on the NCFTE, spelling out objectives, distribution of courses, weightages and other such aspects, to facilitate the implementation process of the provisions contained in the
Framework. (Ibid 90-91)

It has also suggested taking steps to evolve suitable mechanisms to promote the entry of genius and talent in the teacher education. The structure and duration of Teacher education programme (B.Ed.) should be changed. It would be the efforts of NCTE to focus on to develop the syllabi of teacher education to ensure quality education.

3.27 Needs Analysis Report

It is the report of the British Council to investigate the teaching and learning in 9th and 10th standards in Maharashtra. It has emphasised on the learning skills through various sources. The study aims to give training to English teachers to improve the quality of English teaching and learning. It is the learners who are motivated to learn English by its worldwide importance, and English Proficiency is also considered as the most essential skill. It is the language of instruction in the majority of the classrooms. Newly introduced textbooks are well-suited to develop the English of learners if is used appropriately by students and teachers. But, the report Needs Analysis Report, Maharashtra says:

However, the English levels of both teachers and students are typically much lower than they should be, so the textbook content is often too linguistically challenging. (“Needs Analysis Report: Maharashtra English Language Initiative for Secondary Schools (ELISS)” 6)

English proficiency has been tested for secondary level English teachers, and it is found that the skill level of teachers is very low. At the secondary level, rote learning method is the most effective methods for learners to pass the examination, so textbooks are not used as it is intended.

It is expected that priorities should be given to the needs of learners and facilitate their active involvement in the class. It is also observed that majority of teachers are tired of in-service teacher training. The NCFTE remarks that:

Overtraining, routinised and superficial training leads to cynicism and training fatigue. (“National Curriculum Framework for Teacher Education” 67)

To overcome these problems, Master trainers should be selected rigorously and properly so that training would not fatigue teachers. The complaints of teachers regarding the training programmes should be considered properly. It is observed that five days training are not sufficient to deal with the needs of trainee teachers.
It is the responsibility of the teachers to improve their professional development and to improve their learning skills.

3.27.1 Purpose of the Needs Analysis

The Needs Analysis Report has investigated the teaching and learning process at the secondary level by using questionnaires, interviews and focus groups. Students, teachers, headmasters and education officers were selected for this study. The aims of the study are described in Needs Analysis Report:

1. Assess the current levels, teaching practices and needs of teachers and learners in the 9th and 10th standard…

2. Identify any similarities and differences between different categories of schools.

3. Identify what is needed and why in order to bridge the gap between the existing situation and the proposed changes.

4. Enable the development of delivery models and training modules that will be relevant to the needs and requirements of the teachers and their teaching and socio-cultural contexts.

(“Needs Analysis Report: Maharashtra English Language Initiative for Secondary Schools (ELISS)” 13)

The study aims to overcome the challenges of teaching and to learn at the secondary level. It also emphasises on improving the training programmes related to the needs and requirements of the teachers. The main conclusions of the study are:

➢ …The syllabus requires students to acquire a broad range of speaking, listening, writing and reading skills.

➢ …most appreciate the importance of English to their future jobs, and the vast majority of students wish to go university after leaving school… for which English is often an important skill…

➢ …most students do not use English outside the classrooms. Even those who have replied affirmatively may only use isolated English words occasionally.

➢ … that many teachers are already aware of the benefits of using English in the classroom and have some ability to use English already.

➢ …However, our analysis of the textbooks suggests that their level is around B2, which means that a teachers’ level should be at least B2 in order to understand and teach the content effectively. (Ibid 17-19)

It is the observation of training consultant of British Council that majority of
teachers needs to develop all the aspects of English. Finally, the document has given some recommendations to improve the English of the learners.

1. …Students should therefore have increasing access to online and off-line resources that will help develop their English…
2. …The interactive training methodologies used in ELISS training will give teachers opportunities to develop their spoken fluency and confidence. Raising English levels requires intensive long-term training, teacher motivation and self-study skills…
3. Teachers should be encouraged to use classroom space more effectively…
4. Questioning is an important element in Constructivism, endorsed by NCF(2005). Teachers need to learn how to use questioning techniques to activate and elicit students’ prior knowledge and to give them opportunities to speak…
5. …During training, teachers will also participate in pair and group activities, and will reflect on the experiences, so that they are more aware of the benefits of collaborative approaches.
6. It is essential that teachers develop awareness of the rationale behind the activities and tasks given in the new textbooks, and the motivation, know-how and confidence to use them in the class…
7. Assessing students’ deep understanding, recognition and application of language should be the ultimate goal of the assessment and examinations policy…
8. Training methods must be interactive and practical, to ensure that teachers experience learner-centered training, with a focus on practice as well as theory. This is particularly crucial for commonly-covered topics such as “group/pair work” and … This is also essential as the Needs Analysis findings indicate that teachers are aware of theoretical principles, but they find it difficult to operationalize these in the classroom.
9. Block and cluster-level teacher clubs can bring teachers together to interact, discuss pedagogical innovations and challenges, and develop their English…
10. Increasing ICT literacy presents opportunities to use technology to support teachers’ CPD and contribute to their motivation and feeling of self-worth. Email, SMS and dedicated social media groups can be used to create communities of practice, for resource sharing and as a platform for self-assess learning…
11. Teachers should be informed of how to develop their own
English, using online and off-line resources…

(Ibid 8-11)

It is expected that all the teachers of English should follow these recommendations to improve their teaching and learning skills by using online and offline resources. There should be English clubs at Block and Cluster level to bring teachers together to discuss innovative methods and techniques to overcome the challenges and develop their English. They should activate Questioning technique in the constructivist classrooms that are emphasised by NCF-2005. ICT skills are also essential for them to support CPD. The focus of the teaching should be on the root understandings of concepts and application of language. Social media is needed to share resources and innovative ideas to improve English of learners. Teachers should ensure that learners get more talk time in the classroom.

3.28 Student-Centered Classroom

Students do not rely completely on their teachers for learning, understanding concepts and instructions. They respect the ideas of each other and help each other. The focus of the constructivist approach is on the pair, group work and working together. Teachers have to consider the needs of learners, as an individual, or as a group and pair in the student-centred classroom. Students are always encouraged to participate in the learning process. In the book Student-Centered Classroom, Leo Jones mentioned expectations of learners to –

- working alone, preparing ideas or making notes before a discussion, doing a listening task,…doing grammar or vocabulary exercises.
- working together in pairs or groups, comparing and discussing their answers…
- working together in discussions or in role-plays, sharing ideas, opinions and experiences.
- Interacting with the teacher and the whole class, asking questions or brainstorming ideas. (Jones 2)

In the classroom, teachers help learners to learn and manage their activities. It is observed by the writer that students do the following activities while working together in English classrooms.

- Talk more.
- Share their ideas.
- Learn from each other.
- Are more involved.
- Feel more secure and less anxious.
- Use English in a meaningful, realistic way.
- Enjoy using English to communicate. (Ibid 3)

Some of the learners are tongue-tied, nervous and make plenty of mistakes while speaking in English. They don’t enjoy working in pairs and groups. Teachers should encourage such students to participate in the classroom activities. More and more students should be involved and enjoy activities.

### 3.28.1 Conducting Activities in the Large Classes

Classes with more than 40 to 50 students are considered as large classes in our country. Teachers face difficulties in ensuring the participation of all learners because the majority of students sit passively in the groups. If it is not possible to reduce the class size and large classes are realities for you, then teachers should focus on finding ways to manage large classes. Class size is always defined with numbers of students in our country. It is necessary to have these as student-centred and teachers can allow his students to speak in a group activity. Teachers should ensure the following activities of the learners in the class:

- Keep track of which groups you listen to so no one gets left out.
- Rearrange groups to be near enough for you to overhear as you walk around.
- Seat students close together so they can talk softly and still hear one another.
- Encourage students and answer their questions as you move from group to group.
- Vary the way you pair your students – sometimes put weaker and stronger students together; sometimes group students with others of the same ability.
- Remind students that your class may be their only opportunity to speak English.
- Make sure students have adequate preparation for each task.
- Make sure all groups speak English. (Ibid 4-6)

In a large classroom, the teacher may not be able to reach all the students, but they should be arranged to sit close together, and teacher could overhear their discussion. He could observe carefully to see if all the learners participate actively. In fact, it is a challenge for teachers to conduct activities in the large classes due to loud noise, time management, different personalities of students and proper seating arrangement in the groups.
3.28.2 Pairs or Groups

When should learners be in groups or pairs? Teachers are always confused in forming pairs and groups in the classrooms. In a pair, there are always two students, and they can talk half the time with each other. This technique is used to build the confidence of learners, and they can form their ideas and later on share them in a group. Personal feelings and experiences are shared in a pair work.

In a group, there are five to six students, and they can get close to each other to discuss their ideas comfortably. More ideas, different opinions and more lively discussions are found in the group work. Some students don't participate in the groups due to lack of confidence, or they have nothing to say. Groups tend to be more conducive to discuss more friendly or oppose the ideas of each other. Teachers should conduct textual activities with the help of these effective techniques. It is also a great challenge for teachers to form groups in the large classes, where students don't have a proper seating arrangement.

3.28.3 Seating Arrangement of Learners

Swivel chairs are comfortable to change the position of students in a perfect classroom. They can turn around easily to form pairs or move into circles for group activity.

But in reality, furniture (desks and benches) are not movable, and learners are not able to turn around to make groups or pairs. Teachers have to spend most of the time in forming groups and pairs. In some classrooms, students sit in a row, unable to turn around or move to form pairs or groups and they feel uncomfortable and joyless while performing the activities. Real classrooms are always crowded where it is difficult for teachers to conduct activities.

To overcome these problems, teachers can change the seats of learners, so that they are observed and monitored. The focus should be on the pair or group activities rather than lecturing. The teacher should emphasise developing confidence and creating an active classroom to increase the involvement of students.

3.28.4 Fluency and Accuracy

Many people think that speaking fast without hesitation is fluency. But it is not true, as it is the ability of learners to express their views or ideas in such a way that keep others listening. Fluency is defined in The Student-Centered Classroom, as follows:
… Fluency means using simple words to express meaning, even though longer words might be more descriptive. Fluency means speaking slowly and clearly, not speaking fast and unclearly. Fluency depends on knowing more vocabulary and on confidence – and on not worrying about losing face by making mistakes. It also involves using hesitation expressions like uh, um, well, or you know to gain thinking time, and students may need to learn to use them. (Ibid 18)

The practice of pronunciation helps learners to be more fluent. They should be taught expressions to get thinking time. Fluency in communicative English enables students to connect with various people and participate in problem-solving activities.

Accuracy means not to make mistakes. Every teacher wanted his learners to be more fluent as well as more accurate. At the beginning stage, it is not expected from learners to be fluent without making any mistake. Teachers should encourage students that it is natural to make some mistakes while learning a language. They shouldn't be worried about it, as they do their best to communicate in English. If students want to improve their speaking skills, there is no other option than pair or group work.

3.28.5 Pronunciation Practice

Pronunciation is always neglected from the beginning and students are unaware of pronunciation problems. It is found that all the students use the same accent and mispronunciation in the class. Good Pronunciation is a significant part of communication. Leo Jones recommended some methods as follows:

Teacher-led “Repeat after me” practice is valuable. Some students may feel that repeating in chorus is childish and beneath them, but it’s an effective way of helping them to get their tongues around new phrases and expressions so that they can say them easily and comfortably… Divide the class into two “teams” so that one team can listen to how the other team says a phrase and then try saying it themselves. (Ibid 23-24)

If it is followed in the classrooms, learners will be able to use some phrases appropriately in the real conversation. Teachers may use their effective methods to improve the pronunciation skills. At the secondary level, a majority of students are not able to pronounce the words properly, so learners should repeat some words, phrases and sentences after their teacher to improve this skill.
3.29 National Policy on Education- 2016

Education is considered as an essential vehicle for social, economic and political transformation. *National Policy on Education 2016* is formulated after almost thirty years. The focus of this policy is on improving the quality of education at all the levels. In education process, it aims to improve the quality of learning, teaching and evaluation and promote transparency in this sector. The objectives of the *National Policy on Education (NPE) - 2016* are:

❖ …to provide information, knowledge, skills and values; also to instil social attitudes which enable a student to become a good human being, a proud citizen and contribute to the development of the country. Besides imparting quality education, the policy seeks to emphasize the need to foster an interest in India's history, culture and traditions, a respect for all the religions and acceptance for the diversity that exists in India. Through education, the policy tries to create an understanding of the need to promote social cohesion and national integration which are essential for the country’s progress. In the new technology-driven environment ever more students will become conversant with the tools of modern communication and technology; The Policy recognises the immense opportunities for using these to promote education at every level. (Government of India 169)

The education is benefitted by the use of technology so it is expected that every school would be connected digitally in the next three years. ICT skills are also used as teaching aids in the classroom, but there are some challenges mentioned in the *New Education Policy 2016*:

❖ Absence of minimum standards in the provision of schooling facilities, processes and student outcomes, and equity in educational opportunities;
❖ Lack of professionalization in educational planning and management;
❖ Lack of competent and committed teachers, resulting in poor quality of education;
❖ Substandard quality of teacher education and training;
❖ A curriculum which encourages rote-based learning;
❖ Malpractices in the examination system;
❖ Neglect of skill and vocational education, overemphasis on acquiring dead-end qualifications which do not lead
to employment;
- Failure to make ICT as functionally integral to the man-
  - agement of pedagogy of education;
- Mushroom growth of private coaching classes and degree
  shops;
- Corruption and politicisation of education management
  at all levels;
- Mediocre status of a majority of higher education institutions;
  and
- The pursuit of degrees and qualifications at any cost.
  
  (Ibid 170-171)

All these challenges should be considered by the teachers to improve the
credibility and status of education. The policy has continued to emphasise on the three
language formula which recommended learning English as the third language at
secondary level. It has also stressed to teach learners through their mother tongue that
is the most effective way of learning.

3.30 Conclusion

In constructivist learning, learners are not considered as clean slates, which
were assumed in traditional classrooms. Constructivism is a theory of knowledge that
helped students to construct their knowledge and understandings with the help of their
previous knowledge. It also focuses on the learning of how learners create or
construct knowledge actively out of experiences. Constructivism transforms the
students from passive recipients of information to active participants in the learning
process. This theory is the best option to the traditional teaching-learning process, as
English teaching has changed from traditional to activity based learning. But, the need
is to reduce the load of curriculum and avoid rote-learning at the secondary level. The
focus of the education has to be on joyful learning, creative, participatory, stimulate
and encourage the learners to think.

State Boards of Education should maintain the quality and values of Xth and
XIIth class like Central Board of Education. The largest education system in India
regarding students, teachers and institutions, but insufficient focus and lack of
competent and devoted teachers has affected the quality of education system. Large
classes, seating arrangement, pair-work, group-work and rote-memorisation are some
of the challenges for teachers to conduct activities effectively. Teachers should know
innovative methods and techniques of the constructivist approach in developing the basic concepts of learners.

The next chapter gives a clear picture of constructivism in the classrooms through questionnaires from Students, Teachers, Headmasters, Master-trainers and Mentors.