CHAPTER- III
CHAPTER-III
CONCEPTUAL FRAMEWORK

This chapter provides a detailed conceptual framework based on which the study has been undertaken. The three variables, Communicative Competence (Dependent variable), Meta Cognition and Mediated Learning Experience (Independent variables) are dealt with in this chapter. Language learning is a highly cognitive task. Many factors contribute to the successful learning of a language. The recent research in language learning revealed that affective components also play vital role in language acquisition. The primary objective for learning a language is that it provides a means of communication. The goal of language instruction is shifted to building learners’ Communicative Competence. Communicative Competence is a highly complex ability, which includes both spoken and written aspects integrating the four language skills. Learning a second language and acquiring Communicative Competence in a foreign language needs the sophisticated use of cognitive skills.

Communication is at the heart of modern English language teaching. The communication is the goal of language teaching and an essential part of the learning process. As we communicate, we make our formally learnt language more automatically available. During meaningful communication we acquire language subconsciously. The communicative strand of ELT relate to conscious and subconscious learning and to accuracy as well as fluency and appropriacy.
3.1. COMPETENCE AND COMPETENCY

Competence is given a generic or holistic meaning and competency refers to specific capabilities. Competence refers to what a person knows and can do under ideal circumstances. It embraces the structure of knowledge and abilities. Short (1984) describes competence as “the command of pertinent knowledge and or skills”. The word command is used in the sense that the competent person not only possesses the requisite competencies but also uses them.

Gonzi et al (1993) used the word competence in a holistic sense, “performance is what is directly observable whereas competence is not directly observable rather it is inferred from performance”. Noam Chomsky first used the term competence as a technical term in 1965.

The competence of professionals derives from their possessing a set of relevant attributes such as knowledge, skills and attitudes. These attributes, which jointly underlie competence, are often referred to as competencies. So a ‘competency’ is a combination of attributes underlying some aspect of successful professional performance. But attributes of individuals do not in themselves constitute competence. Nor is competence the mere performance of a series of tasks. Rather the notion of competence integrates attributes with performance.
Competence is the most general term which refers to the capabilities of a person; competence is dependent upon (tacit) knowledge and (ability) use. The specification of ability for use as part of competence allows for the role of non-cognitive factors. In speaking of competence it is especially important not to separate cognitive from affective and volatile factors.

3.2. COMMUNICATIVE COMPETENCE

Dell Hymes (1966) introduces the concept of ‘communicative competence’ in the USA and supported by British Applied Linguists D.A. Wilkins, Christopher Candlin, Henry Widdowson, Christopher Brumfit, Keith Johnson and others. It was declared that ‘there are rules of use, without which rules of grammar would be useless, a distinction was made between grammatical rules of usage that enables users to construct correct sentences and the use of language to accomplish some kind of communicative purpose.

Communicative competence is the ability to use the language appropriately rather than the knowledge of grammatical rules implied in the academic style or the ‘habits’ of the audio-lingual. Communicative competence is far more than an aggregate of listening and speaking, reading and writing. It is the ability to use appropriately in a variety of contexts, all aspects of verbal and non-verbal language, as would a native speaker.
Communicative competence refers to a person’s knowledge of the social aspects of communication. (Rubin 1982, 1985, Spitzberg and Crepach 1989). It includes such knowledge as the role of the context plays in influencing the content and form of communication plays in influencing the content and form of communication messages— for example, the knowledge that one topic is appropriate in certain contexts and with certain listeners and other is not. Knowledge about the rules of non-verbal behavior like the appropriateness of touching, vocal volume and physical closeness is also part of communicative competence.

The development of a theory of communicative competence was an indirect result of the Chomskyan revolution in linguistics, which as Spolsky (1989) notes, had an indirect effect on theories of second language. The notion of communicative competence seemed particularly relevant to Savignon, Rivers and others interested in second language learning for it offered a theoretical foundation for the teaching of language for communication.

Communicative competence refers to the total communication system both verbal and non-verbal. Noam Chomsky used it to mean the unconscious knowledge that speaker have of the grammatical features of the language they speak. He saw this grammatical knowledge as independent of how to use grammar for communication and what happens when speakers actually engage their production and comprehension mechanisms on a moment-by-moment basis in real life situations to communicate. Chomsky
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often identified performance factors such as sentences that overload memory, other aspects of processing capability, hesitations, slips of the tongue, miss-hearings slurring of words, mask the competence that speaker possess.

According to Schiefelbusch and Picker (1984) communicative competence is the totality of knowledge and skill that enable a speaker to communicate effectively and appropriately in social contexts. Spolsky (1987) “the communicative teaching approach postulated that that second language learner must acquire not just control of the basic grammar of the sentences, but also all the communicative skills of a native speaker. It seemed only to call these skills as Communicative Competence”.

Meshane, Edward Arthur (1991) in his study identified six major themes of communicative competence. They are,

1. Use of inappropriate content,
2. Use of poor prosodic features
3. Use of inappropriate facial or physical expression
4. Poor turn taking skills
5. Impaired ability to perceive social cues

3.2.1. Dell Hymes’ Model Of Communicative Competence

The communicative competence for Hymes encompasses both aspects of knowledge and performance or ability to use. Two areas of abstract modeling are proposed, a socio linguistic model, broadly psychological model of language performance all subsumed under a single term communicative
competence. Hymes pointed out that all native speakers are not all equally communicatively competent. For example, two educated native speakers differ in telling the jokes is due to command of linguistic knowledge.

Speakers have systematic knowledge about how to use grammar to produce communications appropriate for a particular situation. Social status of the speaker and hearer, finely tailored by the situation, Hymes coined the term communicative competence in this broader aspect and argued that the performance factors by Chomsky to be included. His notion of communicative competence is of threefold.

1. What is systematically possible? This is what grammar construction allowed by the descriptive grammar of the language equated with Chomsky's original notion of competence.

2. Psycholinguistic feasible comprehension, production and performance factors.

3. What is appropriate? It includes speakers knowledge of how language is used appropriately.

The goal of broad theory of competence is to show the ways in which systematically possible, the feasible and appropriate are linked to produce and interpret actually occurring cultural behaviour.

3.2.2. Communicative Competence – Sandra Savignon

SANDRA SAVIGNON defined communicative competence as the ability to function in a truly communicative setting a dynamic exchange in which linguistic competence must adapt itself to the total information input, both linguistic and Para-linguistics of one or more interlocutors.
Sandra Savignon’s book “communicative competence: Theory and classroom practice”, states communicative competence requires four important components,

- Grammatical competence
- Socio-lingual competence
- Strategic competence
- Discourse competence

Savignon insists that language skills should be assessed in an act of communication. She criticizes traditional discrete point tests of language proficiency. The trend in recent years has been to rely heavily on evaluations of the elements of language pronunciation, syntax and lexicon made apart from an act of communication such tests may measure linguistic competence while actual use of language for communication requires communicative competence.

Savignon suggests four tests of communicative competence in her study,

1. Discussion with a native speaker
2. Seeking information from a native speaker
3. Talking on a topic
4. Description

’Socio-linguistic awareness’ is only weakly present in Savignon’s proposals. Evaluation of a person’s capacity to perform ‘an act of communication can be generalized from any act of communication. She defines “communicative competence as the ability to function in a truly communicative situation.
Competence must adapt itself to the total information input, both linguistic and paralinguistic of one or more inter-locuters.

3.2.3. Canale And Swain's Model Of Communicative Competence

CANALE AND SWAIN (1980) listed the four components of communicative competence.

1. Grammatical Competence
2. Socio linguistic competence
3. Discourse competence
4. Strategic competence

Canale and Swain's model of communicative competence consists of linguistic, social and general cognitive aspects. They deliberately exclude the ability for use from their model. They define communicative competence as the realization of the components of communicative competence and their interaction in the actual production and comprehension of utterances.

Canale distinguishes actual communication and the knowledge and skills. Both knowledge and skill underlie actual communication in a systematic and necessary way and are thus included in communicative competence. How well one can perform knowledge in actual situations requires a distinction between underlying capacities (competence) and their manifestation in concrete situations (actual communication). The actual demonstration of the knowledge in real second language situation and for authentic communication purposes.
CANALE AND SWAIN (1988) defined communicative competence as "The integrative theory of communicative competence may be regarded as one in which there is a synthesis of knowledge of basic grammatical principles, knowledge of how language is used in social contexts to perform communicative functions and knowledge of how utterances and communicative functions can be combined according to the principles of discourse".

The realization of the components of communicative competence and their interaction in the actual production and comprehension of utterances is the demonstration of this knowledge in real second language situations and for authentic communicative purposes.
Model Of Communicative Competence – Canale And Swain
3.2.4. Bachman And Palmer’s Model Of Communicative Competence

Bachman and Palmer made significant remodelling of their framework. In an explicit model, the role of the affective factors in language use and the role of non-cognitive factors underlying performance are explicitly explained. The changes are of three kinds.

- An affective component has been added.
- Strategic competence has been re-conceptualized as a set of Meta cognitive strategies.
- The former knowledge of structures is now topical knowledge.

The overall model has been given a new component called affective schemata, affective or emotional correlates of topical knowledge.

LANGUAGE COMPETENCE

Organizational competence  Pragmatic competence

Grammatical  Textual  Illocutionary  Sociolinguistic

Fig :5

Components of Communicative Competence - Bachman and Palmer
The model of Canale and Swain has been the basis for an elaboration by Bachmann and Palmer. Bachman proposes a model of communicative competence with three components.

1. Language competence
2. Strategic competence
3. Psycho-physiological mechanisms / skills

It is a refinement and elaboration and of Canale and Swain’s work.

Language competence has two main aspects organizational and pragmatic competence. Organizational competence includes the knowledge involved in creating or recognizing grammatically correct utterance and comprehending their prepositional content.

3.3. MAJOR COMPONENTS OF COMMUNICATIVE COMPETENCE

3.3.1. Grammatical Competence

It is the part of the language learning which involves mastering the linguistic rules of the language and applying the rules perfectly to form words and sentences. Grammatical competence is organizing to form texts. (Textual competence). If learners can demonstrate that they ‘know’ the rules than they must surely possess grammatical competence. This kind of explicit knowledge about the language does not guarantee ability to use the language with grammatical accuracy.

3.3.2. Socio Linguistic Competence

It deals with social rules of language use. The meaning of the words is socially determined, whether an utterance is socially appropriate depends on
the context in which the utterance occurs. The appropriateness of one’s language involves knowing what to say in a situation as well how to say it.

Mastery of socio linguistic skills in a language entails mastery of speech act conventions, norms of stylistic appropriateness and the uses of language to establish and maintain social relations.

Rivers (1983) describes the learners’ need for linguistic competence and need to understand how language is used in relation to society and its patterns of inner and outer relationships, if they are to avoid clashes, misunderstandings etc. Students have difficulty in areas such as these and students themselves are typically quite interested in understanding the social dimension of language use in such areas.

Taking turns in conversations is an important aspect of socio linguistic competence. Studies by Smith (1986) confirm that it is different from lecture and narrative. In the course of conversation,

1. The Participants take turns, exchanging the roles of speaker and hearer.
2 The exchange is not automatic; participants do something to accomplish the change.
2. The order and length of turns is not predetermined.
3. The allocation of turns is the responsibility of all participants.

In short ‘socio linguistic competence’ involves the ability to produce and understand language, which is appropriate to specific social situations and conforms to polite conventions of those situations, e.g. Role play by the student (to apologize). Socio-linguists stress on the use of language according
to the occasion and context and language is the result of social interaction is an established truth. Socio linguistic competence is the knowledge of socio linguistic rules of appropriateness.

3.3.3. Strategic Competence

Situational factors like fatigue, distraction or inattention can also cause learners to backslide in performance and thus call for strategies to cope with important performance. Strategic competence is not a part of language competence. It involves ability in assessing and planning as part of determining and executing the most effective means of achieving a communicative goal. It is defined as, “a general, which enables an individual to make the most effective use of available abilities in carrying out a given task.”

‘Strategic competency’ involves the capacity to select effective means of transmitting information and that a range of expressions are likely to provide that means. The particular expression used by an individual speaker is limited by the linguistic resources of the speaker, the speaker’s knowledge of the world and his assessment of the listener’s knowledge of the language and the world.

A strategically competent learner will find ways to paraphrase a word she does not know or cannot recall. The wider the spectrum of one’s readily available strategies, the more leeway one has when channels of communication are blocked due to personal factors or situational factors.
Strategic competence consists of areas of meta-cognitive strategy use. Under meta-cognitive strategies, the following three components are recognized.

1. Goal setting
2. Assessment
3. Planning

Each of this strategy is seen as interacting with each of the components of the model. How the meta-cognitive strategy of assessment is seen as interacting with affective schemata is seen as interacting with affective schemata. Affective schemata are involved in determining the extent to which failure was due to inadequate effort, to the difficulty of the task or because they were random sources of interference.

Strategic competence is the ability to successfully transmit the information in the language. It is directly tied to the ability to use communication strategies to cope with difficulties, which arise in the course of getting one’s message across to particular listeners.

Ex: Giving direction to railway station.

Mastery of strategic skills entails the ability to transmit information to a listener and correctly interpret the information received.

Areas Of Strategic Competence

1. Over all skill of a learner in successfully transmitting information to a listener or interpreting information transmitted.
2. The use of communication strategies by a speaker or listener when problems arise in the process of transmitting information.
According to Bachman strategic competence is implicated in all communication, since it discharges a mediating role between communicating competence, meaning intentions, context of situation and something else.

KRASHEN (1982) States that subconscious acquisition of comprehensible input in a low anxiety context plays a pivotal role in developing language fluency.

3.3.4. Discourse Competence

The fourth component of communicative competence is not concerned with the interpretation of isolated sentences but with connections of a series of sentences or utterances to finally form a meaningful whole. The ability to recognize the theme of a paragraph or the gist of a conversation indicates one’s discourse competence.

HYMES defined discourse competence as the knowledge of the rules for understanding and producing both the referential and social meaning of language. Savignon (1978) - the discourse competence is the ability to function in a truly communicative setting in a spontaneous transaction involving one or more other persons.

Canale and Swain (1979) - the discourse competence is the ability to produce and recognize coherent and cohesive text.

N.S.Prabhu (1980) - the discourse competence is used when a foreign language user faced with a communicative problem improves his or her way to a solution. It is compensatory in nature, coming into play when the other
Fig: 6

BRAIN - PHOTOGRAPH OF THE RIGHT LATERAL VIEW

- Central sulcus
- Precentral gyrus
- Frontal lobe
- Lateral cerebral sulcus
- Temporal lobe
- Postcentral gyrus
- Parietal lobe
- Occipital lobe
- Cerebellum
competencies are lacking. In the case of a native language user, may be a word which may produce a problem, which needs to be circumvented. We are dealing here with strategic competence i.e., underlying knowledge system. The implication is that we are concerned with knowledge about how to solve communicative problems in general which may be exploited when actual problems occur and performance is required.

3.4. NONVERBAL ASPECTS OF COMMUNICATIVE COMPETENCE

Communicative competence refers to the communication system both verbal and non-verbal. Meta-communication is communication that refers to other communications. All behaviours, verbal and non-verbal can be meta-communicational. There are six ways of conveying the non-verbal messages.

1. Accenting, e.g. Bang on the desk to emphasize.
2. Complementing, e.g. Smiling when telling a story.
3. Contradicting, e.g. Crossing fingers and winking to indicate lying.
4. Regulating, e.g. Lean forward to indicate that you want to speak.
5. Repeating, e.g. raising eyebrow to ask 'Is it correct?'
6. Substituting, e.g. OK with hand gesture.

3.5. NEURO BIOLOGICAL PERSPECTIVES OF LANGUAGE ACQUISITION

Scholars have long been intrigued by language. Virtually every human being knows and uses a language. Some of us know and use several languages. Indeed to find a man without language, we need to seek out people in extraordinary circumstances like those who have grown up completely
isolated from other human beings or those with brain damage. Brain is the master control centre, which plays a vital role in speech production. It is the storehouse of thoughts and emotions. Knowledge of the biological functions in language acquisition is essential for a language teacher. A thorough understanding of the language sites in the Brain will help language teachers to perform their job in a better manner. (R. Ellis- 1985).

Research in the neural substrates has been greatly aided by the use of imaging techniques such as Positron Emission Tomography (PET), Magnetic Resonance Imaging (MRI). Biological specialization for language can be observed in the brains of all humans. Damage to certain brain sites causes disruption of language, indicating that these sites are crucial for language use. This claim is confirmed by brain imaging studies using PET or MRI techniques.

Language learning is a highly cognitive task. It involves so many aspects such as proper audition, discrimination and articulation of sounds, supra-segmental features of language like stress, intonation and rhythm, comprehension of words, sentences, etc. All these aspects are related with the proper functioning of the language areas in the Brain. Teachers often complain of problems like improper pronunciation, poor comprehension, lack of communicative skills and so on. All these problems are associated with the functioning of the Brain also. Hence a thorough understanding of the language sites in the Brain will help the language teachers to identify and improve their teaching-strategies. The knowledge of the Brain and its part in language
acquisition will provide adequate insights to language teachers and help the
teachers in solving their classroom problems. This will also help them to
approach the slow learners with more concern and sympathy. ("Language
acquisition"-Paul Fletcher, Michael Garman, 1996).

3.5.1. Brain Lateralisation

Brain has three major areas called Cerebrum, Cerebellum and Medulla
Oblangata. A large groove called the longitudinal fissure divides the cerebrum
into halves called the Left Cerebral hemisphere and right Cerebral
hemisphere. The hemispheres are connected by bundles of nerve fibres, the
largest of which is the Corpus Collosum.

The speech and motor areas are usually much more developed in one
cerebral hemisphere than in the other. This hemisphere is called the dominant
hemisphere. The language areas like Wernicke’s area and the Angular gyrus
are highly developed in the dominant hemisphere while the other hemisphere
is either incapable or less capable of performing the function.

3.5.2. Left Hemisphere

In ninety percent of the people the left hemisphere is dominant. Left
hemisphere is adept at detecting surprise and process information in a
relational manner i.e. involves at least two different representations. It is
demarcated by inferior Frontal Gyrus and Pre-central Gyrus.
LOBES AND FISSURES OF THE CEREBRUM
3.5.3. Right Hemisphere

This hemisphere processes information in a holistic manner and is responsible for appreciation of the pragmatics of language like preserving coherence, maintaining alternative meanings for a longer period of time and plays a superior role in intuitive and creative responses and in spatial perception.

3.5.4. Language In The Minor Hemisphere

The non-dominant hemisphere perceives non-linguistic environmental sounds, comprehends visually presented words, especially concrete nouns, matches objects to auditory or visual naming or description, spells auditory presented words, processes intonation patterns, mediates emotional responses, makes inferences, understands jokes and process discourse organization, performs general holistic cognitive skills.

3.5.5. Broca’s Area

This area is situated in the lower part of the frontal lobe, in the Left Hemisphere, near the motor cortex, partly in the prefrontal cortex and partly in the pre-motor area. This area is almost always dominant on the left side of the brain. This speech area causes the formation of words by exciting simultaneously the laryngeal muscles, respiratory muscles and muscles of the mouth.

This is the motor area, which controls articulation of speech and provides neural circuit for word formation. It is here that plans and motor
patterns for the expression of individual words and phrases are initiated and executed. It works in close association with Wernicke's area.

3.5.6. Wernicke's Area

It is in the temporal lobe near the ear of the left hemisphere and is called by different names, such as general interpretative area, gnostic area, the knowing area, the tertiary association area etc. This is larger in the dominant area than the non-dominant one. This is closely associated with both the primary hearing area and the secondary hearing areas of the temporal lobe. This close relation is probably due to the fact that the first introduction to language is by way of hearing.

This is the sensory area for interpretation of language. When we read books we do not store the visual images of printed words, but instead store the conveyed thoughts in language forms. This is responsible for speech recognition and formulation for the meaning aspect of production and comprehension of written and spoken forms of knowledge. A major sensory experience is converted into its language equivalent before being stored in the memory areas of the brain. This area is responsible for the higher intellectual functions, which are language based. ("Psycholinguistics" – Paul Fletcher, Michael Garman)
3.5.7. Arcuate Fasciculus

This is the bundle of association fibres connecting from Wernicke's area to Broca's area because both areas are located distantly from each other.

This is responsible for simultaneous translation. Here auditory input is rapidly converted into speech output. Meaning formulation to speech output is via arcuate fasciculus.

3.5.8. Broadman's Area

Broadman's area lies between angular gyrus and the supra marginal gyrus. This area is involved in relating visual and auditory input to stored meaning representation. This area responsible is responsible for the movement of the articulators and specifically controls speech aspects of the oral track.

3.5.9. Thalamus

Thalamus is the sensory relay station through which all the responses are sent to and received by all parts of the body from the brain. It is the collection of sensory nuclei. Language functions are lateralised in the thalamus as in the cortex. It integrates frontal and parietal language areas. Thalamus is responsible for speech production, maintenance of focal attention to specific and specifically verbal aspects of the external environment. ("Psychology of Language" – David W. Carrol- 1994).
3.5.10. Primary Auditory Cortex

It is situated in the left hemisphere corresponding to the right hemisphere. Specialized in speech auditory functions.

Ear sensation → Primary auditory area → Wernickes area → Interpretation

3.5.11. Primary Visual Cortex

This is an area between angular gyrus and supra marginal gyrus. It relates visual and auditory input to stored meaningful representations. This area is responsible for Interconnect. Interconnect means sensory representation, how a word sounds, how it appears on the page, how it feels to articulate and to write as well as what its referent looks like, sounds like and so on. (Human Physiology, Gytan).

3.5.12. Occipital Lobe

Situated in Left Hemisphere, it is responsible for scalar perceptions of verbal material, and naming objects,

3.5.13. Temporal Lobe

It comprises of most lateral portions of the anterior occipital lobe and posterior temporal lobe. It is responsible for naming objects. Names are essential for language comprehension and intelligence.
3.5.14. Angular Gyrus

Situated in the occipital lobe. It is the visual association area that feeds the visual information conveyed by the words.

Visual perception \rightarrow \text{Angular gyrus} \rightarrow \text{Wernicke's area} \rightarrow \text{Interpretation}.

3.5.15. Pre-Frontal Area

This area is essential to carry out prolonged thought processes in the mind, and elaboration of thoughts.

A neuro-functional perspective on languages attempts to characterize the neurolinguistic information processing systems responsible for the development and use of languages based on the work of Lamendella, 1977, Selinker, Lamendella, 1997. There is a connection between language functions and neural anatomy. Hatch 1983, “there is no single ‘black box’ for the language in the brain. Better speak of the relative contribution of some areas more than other under certain conditions. Neuro functional accounts have also tended to focus on specific aspects of Second Language Acquisition such as age differences, formulaic speech, fossilization, pattern practice in classroom etc.

A basic knowledge of how language is acquired, and what are the regions in the brain responsible for speech formulation, comprehension etc. will pave the way for a clearer understanding the miseries and miracles of language learning.
3.6. STRATEGY TO ENHANCE COMMUNICATIVE COMPETENCE

Based on the theories and models of Communicative Competence by various linguists and exponents of language acquisition and language learning, a model of Communicative Competence was evolved incorporating the basic elements and strategies of language learning.

LANGUAGE INPUT

Language input is provided either by auditory means or visual means. If the learners are properly motivated, they will listen attentively and perceptive to auditory and visual information. *(Krashen, 1982)*

INTERPRETATION OF TEXT

The learners analyse the text and they try to understand the text presented to them. *(Belmont, 1989; Wigg & Semel 1984).* When a text is given to the learners, they read the text and try to comprehend the meaning. Once the meaning and ideas are understood, the learner moves on to the next stage, i.e. interpretation. The multiplicity of interpretation depends on the experience of the learners in reading and the perception of the implied meanings.

INFORMATION PROCESSING

The information is processed by various strategies like concept mapping, comparing, analyzing etc. *(Lahey, 1988; Belmont, 1989)*

COMPREHENSION

Understanding the meaning of the text is called comprehension.
PROCESS INVOLVED IN DEVELOPING COMMUNICATIVE COMPETENCE

LANGUAGE INPUT
  ↓
MOTIVATION
  ↓
ATTENTION
  ↓
LISTENING
  ↓
AUDITION

Ear → Sensory Nerve → Primary Auditory Area

Language Input
  ↓
VISUAL

Angular Gyrus → Primary Visual Area

PERCEPTION
  (Wernicke's area)

INTERPRETATION
  (Both Hemispheres)

INFORMATION PROCESSING
  (Left Hemisphere, Wernicke's Area)

COMPREHENSION
  (Wernicke's Area)
ASSOCIATION WITH PREVIOUS LEARNING
(Hippo campus, Cerebral Cortex)

REPETITION (Cerebral Cortex)

TRIAL AND ERROR (Basal ganglia)

IMITATION (Broca's area)

CONCEPTUALISATION (Occipital, Parietal, frontal lobe)

RULE LEARNING (Wernicke's area)

APPLICATION (Wernicke's, Broca's area)

FLUENCY (Right Hemisphere)

PERFORMANCE (Thalamus, Broca's, Broadman's area)

COMETENCE (All neuro-linguistic organs)
ASSOCIATION WITH PREVIOUS LEARNING

Understanding new ideas and concepts takes place on the basis of learning took place previously. Learners have to recall what they have learnt already.

REPETITION

Language learning occurs at the initial stages by imitation and repetition only. Imitation of the language input by many times leads to understanding of the language. (Piaget, Vygotsky, Skinner, 1957)

TRAIL AND ERROR

The learners try to make new utterances. Learners commit mistakes and try to correct themselves after many trials. Thus language production needs many attempts and self correction. (Skinner)

CONCEPTUALISATION

Learners have to understand many concepts like Grammar, syntax, vocabulary etc while they learn a language. They have to master new concepts in their day to day language learning activities. Hence conceptualization of new idea helps them to learn the language.

RULE LEARNING

Language learning is rule governed behaviour. The forms and rules of a language should be internalized the learners. Once they understand the rules behind the formation of sentences, language learning process will become easy. (McCormick & Schiefelbusch 1990)
APPLICATION

The rules learnt will be applied in new situation by the learners. (Wigg & Semel 1984)

FLUENCY

Fluency will be developed after prolonged imitation, repetition, and application. Before achieving fluency learners will commit many mistakes. (Messick, 1984)

APPROPRIACY

Appropriacy will take care of itself once fluency is developed. Language learning is a skill and practicing the skill helps to develop appropriacy. (Gillian Brown, 1996)

PERFORMANCE

The level of language learning depends upon how one performs in various occasions. Performance is the actual use of the language by the learners in a variety of situations. The degree of performance depends upon the mastery of language. (Gonzi, et.al 1993)

COMPETENCE

Competency is not directly observable, it is observable form Performance. Performance leads to competence, which is the final stage of the language learning. (Rivers, 1973)
META-COGNITION

Meta cognition is the latest buzzword in the field of educational psychology. There is much debate over exactly what Meta cognition is. There are several terms currently used to describe same phenomenon. It is defined as thinking about thinking. Meta cognition is a broadly defined concept incorporating any knowledge or cognitive process that refers to monitors or controls any aspect of cognition. It is now seen as a central contributor to many aspects of cognition including memory, attention, communication, problem solving and intelligence. It has important applications to areas like education, aging, neuropsychological and eyewitness testimony (Flavell, Miller and Miller 1993, Metcalfe, Hinamura 1994).

3.7. CONCEPT OF META-COGNITION

The term ‘meta cognition’ has been part of the vocabulary of educational psychologists for the last couple of decades. There is much debate over exactly what Meta cognition is. One reason for this confusion is that there are several terms currently used to describe the same phenomenon, as meta-memory, self-regulation, executive control etc., and the terms are often used interchangeably in the literature. However the concept of Meta cognition is simply defined as ‘thinking about thinking’.

3.7.1. Definitions

Thus Meta cognition is characterized as

1. An awareness of one’s own thinking
2. An awareness of the content of one’s conceptions
3. An active monitoring of one’s conceptions
4. An attempt to regulate one’s cognitive processes

One cognitive domain that is a crucial component in learning is Meta cognition. It will improve generalized promotions in learning. Thus Meta cognition is a domain general facet of cognition. The concept of Meta cognition is defined as,

"Conscious verification of one’s personal cognitive status."

"Combined monitoring and regulation of one’s own thinking."

"Cognitive ability to monitor and self-regulate one’s thinking."

"Students’ attempts to regulate their cognitive processes of maximize their learning and memory”.

"Well developed understanding and strategic use of one’s own cognitive process."

"An awareness of our own thinking as we perform specific tasks and using this awareness to control what we are doing."

"An inner process not an overt behavior an inner awareness of one’s own unobservable constructs."

"An attempt to regulate one’s cognitive process in relationship to further learning."

"The mental activity for which mental states or processes become the object of reflection."

"Knowledge of the states and process of one’s own mind and one’s ability to control or modify these states and processes."

Meta cognition is a domain-general facet of cognition. It simply refers to the learner’s ability to think about his own learning. It involves the
cognitive monitoring and consequent regulation and orchestration of various processes such as meta memory and meta-learning.

### 3.7.2. Various Definitions Of Metacognition By Various Experts

<table>
<thead>
<tr>
<th>Year</th>
<th>Author</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>Brown</td>
<td>Knowing about knowing</td>
</tr>
<tr>
<td>1975</td>
<td>Bobrow</td>
<td>Knowledge about Cognition</td>
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<td>1976</td>
<td>Piaget</td>
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<td>Personal awareness of how we are Learning</td>
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### 3.7.3. Basic Elements Of Metacognition

1. Developing a plan of action
2. Maintaining / monitoring the plan
3. Evaluating the plan.

### 3.7.4. Main Aspects Of Metacognition

1. Knowledge and control of self.
2. Knowledge and control of process.
3.7.5. Metacognitive Knowledge

John Flavell, a developmental psychologist is considered as the father of the concept of Meta cognition. According to him what individuals learn about memory is Meta cognitive knowledge. It refers to personal perspective of one’s own learning abilities as well as others’. Meta cognitive knowledge refers to acquired knowledge about cognitive process. Flavell further divides Meta cognitive knowledge into three categories.

1. Knowledge of person variables

2. Knowledge of task variables

3. Knowledge of strategy variables

These would be part of the meta knowledge, which an individual acquires as a result of experience and development. Flavell believes that meta cognitive knowledge includes the recognition and differentiation by an individual that some cognitive tasks require playful and goal directed behaviour whereas others not.

3.7.6. Person Variables

Knowledge of person variables includes a general understanding of the human cognitive learning system and its limitations, capacities, idiosyncrasies, knowledge of one’s own temporary and enduring personal attributes and states as a thinking organism.

Awareness of what one has forgotten or tip-of the tongue awareness was found to increase with age. Younger children were found less able than
older children to assess or predict their readiness to retrieve from their memory. Recall ability was found to be poor in younger children but to increase with age.

3.7.7. Task Variables

Flavell states that meta cognitive knowledge of task variables was understanding the given task, what the task demands or what are the goals, which problem information is relevant, how the task could be most effectively and efficiently managed, which strategies would be most appropriate to use etc.,

3.7.8. Strategy Variables

Meta cognitive strategies are the tactics used for monitoring one’s progress towards goal attainment. Storage of both cognitive and meta cognitive strategies is a meta cognitive function and part of one’s repertoire of meta cognitive knowledge. Informed strategy training which explicitly explains the students why the strategy us needed, how the strategy works and what task-related rewards will be gained for using the strategy.

3.7.9. Executive Functioning

Brown and his colleagues (1977) emphasize the importance of executive control process for development of memory skills in retarded children. Sternberg (1984-1986) refers to these executive processes as ‘Meta components’ in his tri-archic theory of intelligence. Meta components are executive processes that control other components as well as receive feedback
from these components. These executive processes involve planning, evaluating and monitoring problem solving activities. Various exponents of Meta Cognition defined Executive Functioning as follows,

**Urie neisser (1967)** “executive process is a control mechanism used to organize cognition, to harness and orchestrate the various cognitive skills such as memory, the recall of visual or verbal patterns, the recognition of icons and verbal cues etc. It is a complex cognitive process involving ‘search and construction’.

**Dejong (1979)** discerned seven types of executive control process. They are 1.orientation 2.planning 3.monitoring 4.testing 5.preparing 6.evaluating 7.reflecting

**Simon (1979)** defined executive control as the control structure governing the behavior thinking.

**Belmont, Butterfield & Feretti (1982)** “the concept of executive control is not oriented towards actions but towards cognitive processes. Three general executive skills are such as anticipation, strategy planning and self-control.

**Mackinnon and Waller (1985)** “executive process direct our cognitive processes and lead to efficient use of cognitive strategies”.

The executive process is multifaceted that comprehensively monitors, evaluates and regulates the information flow of the information flow of the human cognitive system. It is the active monitoring and steering the ongoing
cognitive process. Teachers of Meta cognitive knowledge and executive control will empower their students to work autonomously and effectively with others in a variety of situations and to nurture Meta cognitive processes knowledgeably.

The executive control process (Sternberg) that might be used in problem solving by,

- Deciding on the nature of the problem
- Deciding on performance components relevant for solving tasks
- Deciding on how to combine performance components strategically
- Selecting a mental representation for information.

3.7.10. Self Regulation- A Metacognitive Strategy

Meta cognitive experiences involve the use of Meta cognitive strategies or Meta cognition regulation. It includes a variety of executive functions such as planning resource allocation, monitoring, checking, error detection and correction.

Nelson and Narens (1990) divide Meta cognitive regulation into monitoring and control processes, defined in terms of whether information is flowing to or from the ‘meta-level’. In monitoring the ‘meta-level’ receives information from ‘object level’ cognition. In control the meta-level modifies cognition.

The following self-regulatory skills are essential for successful learning.
Self-regulation requires a student to be meta cognitively, motivationally and behaviourally active in regulating his own thinking and learning. It involves one’s own thinking and learning. It also involves awareness of personal goals and of strengths, weaknesses, and interests, instructional goals, conditions of learning and performance.

A student’s ability to regulate his own learning demands the ultimate integration of neurodevelopment abilities. Self-regulated learners keep track of their understanding and their progress and reward themselves for their successes. They use problem-solving strategies and memory techniques appropriately. They learn to think critically about the demands of the task at hand and availability of time, resources etc. In short self-regulated learners are intentional active and reflective.

Self-regulation is largely based on a problem-solving approach giving rise to greater individualization of learning. Through self-regulated learning the learning programme can be shaped by perception and response of the individual child. Self-regulated learning is based on the premise that learners
will take up total responsibility for their own learning. The learner will ultimately decide on the parameters of his activities.

3.7.11. Metacognitive Strategies

Meta cognitive experiences involve the use of meta cognitive strategies or meta cognitive regulation (Brown). Meta cognitive strategies are sequential processes that one uses to control cognitive activities, and to ensure that a cognitive goal (understanding) has been met. These processes help to regulate and oversee learning and consist of planning and monitoring cognitive activities as well as checking the outcomes of those activities.

Eg: self-questioning—a Meta cognitive strategy used to ensure that the cognitive goal of comprehension is met.

Cognitive strategies are used to help an individual to achieve a particular goal, while Meta cognitive strategies are used to ensure that the goal has been reached. Cognitive and meta cognitive strategies are closely intertwined and dependent upon each other, any attempt to examine on without acknowledging the other would not provide and adequate picture.

Dirkes (1985) identified three basic meta cognitive strategies,

1. Connecting new information to former knowledge
2. Selecting thinking strategies deliberately
3. Planning, monitoring and evaluating thinking process

Borkowski (1990) instructional design provides attribution retraining in conjunction with highly explicit direct instruction of strategies and strategy
use. The method of strategy teaching can be described as making the implicit explicit. He conceptualizes Metacognition in terms of several interactive components, specific strategy knowledge, general strategy knowledge, relational strategy knowledge and meta-memory acquisition procedures.

Borkowski delineates three categories of specific strategies, goal-specific strategies, monitoring strategies and higher order sequencing strategies.

Michael Pressley is best known for his long and highly influential series of studies in the development and effectiveness of mnemonic strategies in children and adolescents.

He and his colleagues tirelessly pursued fuller understanding of how children develop and use specific mnemonic strategies, such as imagery and elaboration. He calls his model, the ‘Good Strategy User’ (GSU) possess substantial knowledge concerning when, why and how strategies can or should be used.

3.7.12. Teaching Of Metacognitive Strategies

The question of which Meta cognitive strategies to teach to which group of children is an important issue. This decision will vary according to the nature and demands of the content and the characteristics and needs of the learners. As students learn and practice Meta cognitive strategies they will gradually internalize these thereby allowing space for working memory for additional procedures and strategies. Thoughtful application of Meta
cognitive strategies is central to becoming a skillful thinker and accomplished learner.

O’malley & Chamot’s maximal list of strategies are the higher order executive skills that may entail planning, monitoring or evaluating the success of a learning activity. They are advanced organizers, directed attention, selective attention, self-management, advance preparation, self-monitoring, delayed production, self-evaluation, self-reinforcement, repetition, resourcing, directed physical response, translation, grouping, note-taking, deduction, recombination, imagery, auditory representation, key-word, conceptualization, elaboration, transfer, inference, question for clarification, co-operation.

3.7.13. Metacognitive Skills

Pupils with learning difficulties lack Meta cognitive skills (Borkoweki, Buchel, Buchel 1983). Therefore executive skills or Meta cognitive skills are important for efficient and effective learning because they assist in the performance of cognitive strategies. Meta cognitive skills include setting goals, planning a course of action, monitoring the results, reflecting their current understanding etc.. In short they have the ability to self – regulate. Meta cognitive skills significantly influence cognitive performance.

There are many Meta cognitive skills. Some are quite general such as “Work Carefully”, others are more specific such as “consider opposing points of view”. Meta cognitive skills allow learners to make up for deficits in domain knowledge or more quickly through the problem solving process.
When life presents situations that cannot be solved by learned responses, meta cognitive behavior is brought into play. Meta cognitive skills are needed when habitual responses are not successful.

3.7.14. Metacognitive Awareness And Monitoring

**Retrospective Monitoring:** Judgments about what was previously received from memory eg. Confidence judgements.

**Prospective Monitoring:** Predictive about information available or to be retrieved from memory, judgments about future responding.

**Types Of Prospective Monitoring Judgements**

1. **EOL (Ease Of Learning) judgments**, occur in advance of acquisition predictions about what information and strategies will be easiest to learn.

2. **JOL (Joy Of Learning)** occurring during and after acquisition predictions about future test performance on currently recallable items.

3. **FOK (Feeling Of Knowing)** occurring during or after acquisition judgements about a currently un-recallable items is known and or will be remembered on a later memory test, for correctly or non-recallable, FOK judgements are obtained by asking how likely students are to be able to identify the answer on a recognition test.
3.7.15. Metacognitive Beliefs

Meta cognitive beliefs are the broader general ideas and theories people have about their own or their cognitions. They are supposed to be closely connected to their affective, motivational and vocational convictions.

They are of two types

1. Conceptions of intelligence
2. Conceptions of learning.

Dweck-1988 discussed two kinds of theory of intelligence, a) entity theory b) increment theory

**Entity Theory:** Intelligence is fixed, resistant to change through effort or mastering new skills.

**Incremental theory:** Intelligence is not a fixed capacity, something malleable increased through effort and learning dynamic growing quality.

A Meta cognitive environment encourages awareness of thinking. Planning shared between teachers, school library media specialists and students. Meta cognition represents individual’s knowledge of the states and processes of their own mind and their ability to control or modify these states and processes. Individuals who are Meta cognitively aware are a self-correcting system. One who has learned how to learn; Meta cognition enables students to benefit from instruction and influences the use and maintenance of cognitive strategies.
3.7.16. Models Of Meta Cognition

Meta cognition is the ability to select and manage strategies of cognition effectively. Most models of meta cognition speculate that it a highly specialized and involuted form of cognition that oversees, manages and orchestrates cognitive ability, especially when problem solving, effortful cognitive activity is required.

3.7.17. John Flavell’s Model Of Metacognition

John Flavell is considered as the Father of Meta cognition. He coined the term ‘Meta memory’ to describe an individual’s knowledge or awareness of anything pertinent to information storage. What individuals learn about memory Flavell referred as Meta cognitive knowledge.

He posited that cognitive performance is influenced by three factors. Person, task and potential strategies. Flavell and Well man (1977) referred to the development of a mnemonic self-concept Flavell (1979) offered a model of Meta cognition and cognitive monitoring in describing, the actions and interactions among four classes of phenomena,

1. Meta cognitive knowledge
2. Meta cognitive experience
3. Goals
4. Strategies or goals.

Meta cognitive knowledge refers to a personal perspective of one’s own learning abilities as well as other. Meta cognitive experience is the conscious consideration of intellectual experiences that accompany; any;
success or failure in learning. Goals or tasks of meta cognition are the actual objectives of a cognitive endeavor.

Eg: reading and understanding a passage for an upcoming quiz. Meta cognitive strategies refer to the utilization of specific techniques that assist in understanding.

3.7.18. Ann Brown's Model Of Metacognition

Brown's major theoretical contributions were the development of the concept that has been termed variously as executive control, meta cognitive monitoring or cognitive self-regulation. She emphasized the importance of executive control processes for development of memory skills in retarded children and youth. She emphasized the importance of executive control processes for development of memory skills in retarded children and youth. She referred to as self-regulation and monitoring processes or the ability to select, modify as needed during ongoing problem solving.

Ann Brown and her colleagues implicate the role of Meta cognition as important and practical instructional concept for classroom teacher (1986). The practicality of Meta cognitive study is dependent on its relation to general thinking assignments encountered by students during the course of actual learning in real setting. Brown was very much concerned with the unidirection of cognitive studies with most developmental studies that had only targeted a few simple mnemonic skills for deliberate remembering.
Brown believes that self-concept for learning is another critical factor influencing Meta cognitive development. As a consequence of perspective on how Meta cognition is acquired, Brown articulates three instructional implications that are responsible for learning disabled and other poor achieving youth.

a) Remedial training programs should be interactive and emphasize the social context of learning.

b) The child should be regarded as an active agent in gaining insight into his own meta cognitive processes and therefore kept informed of the purposes of the teaching interactions.

c) Meta cognitive training cannot necessarily be of a similar level across different academic domains for the same child.

3.7.19. John Borkowski’s Model Of Metacognition

Borkowski’s meta cognitive model (1990) conceptualized meta cognition in terms of several interactive components. They are

Specific strategy knowledge (SSK)
General strategy knowledge (GSK)
Meta memory acquisition procedures (MAP)

Specific strategy knowledge (SSK) is the core of the model. Specific strategy knowledge includes the individual’s understanding of,

- A strategy’s goal and objectives
- The task for which the strategy is most appropriate.
- The range of the strategy’s applicability.
- The learning gains expected from implementation of the strategy.
- The learning gains expected from implementation of the strategy.
- Amount of effort needed to use the strategy.

Thus without SSK an individual could not recognize when to apply a strategy. Not only does SSK direct use of strategies, but use of strategies can result in the growth of SSK. Borkowski delineated three categories of specific strategies,

- Good specific strategies
- Monitoring strategies
- Higher order sequencing strategies

General Strategy Knowledge: Borkowski, Carr, Reillinger and Pressley (1990) delineated a more complex relationship between motivation and meta cognition. GSK has 'energizing components’ that can motivate the child to confront different learning tasks because self-efficacy and expectations can be enhanced by knowing and experiencing the value of behaving strategically. The self-system includes a variety of psychological phenomena such as child's self-esteem, self-confidence, feelings of self-determination, attribution beliefs and affective responses that interacting dynamically with Meta cognitive development. An individual’s self-system underlies the development of mea cognition and helps to determine own the child will respond to academic experiences.

Meta cognitive Acquisition procedures (MAP) allow an individual to learn more information about new or underdeveloped strategies. Borkowski
postulates that MAP's are critical for school success because they help the learner fill in the gaps of instruction when teachers are not explicit or detailed in providing strategy instructions.

Borkoswki's model predicts that generalization failure in learning disabled individuals is due to deficits in one or more of these Meta cognitive components. His most recent instructional suggestion is to provide, attribution retraining in conjunction with highly explicit direct instruction of strategy and strategy use. He recommends the method of strategy teaching. The students should be informed about the existence and effectiveness of Meta cognitive knowledge in the subject.

3.7.20. Michael Pressley's Model Of Metacognition

Pressley's model of meta cognition has been called 'the Good Strategy User' (GSU). This is an abstracted learner and a problem solver with an idealized level of learning competence.

GSU possesses substantial factual knowledge in a number of academic domains a powerful array of Meta cognitive abilities, including selecting and scheduling appropriate strategies. Meta cognitive knowledge concerning when, why and how strategies can or should be used. Pressley believe that they are short-term and long-term goals that should be pursued in reaching the instructional potential of the GSU model. In short term, teachers should teach a few facilitating strategies like remembering strategies, comprehending strategies, problem solving strategies etc., in the long term teacher should aim to teach not only a very large set of strategies applicable specifically and
generally but also to facilitate autonomy of strategy selection, Monitoring and use. Pressely and et.al recognize that achieving this goal will require considerable effort, new knowledge improved research, teaching time etc.


Robert J. Sternberg's focus has been on the nature of human intelligence. His model consists of six meta components that commonly emerge as part of intellectual functioning under three headings.

- **Decision**
  - What problem needs to be solved?
  - What is needed, speed or accuracy?
- **Selection**
  - What lower order components (performance, acquisition, retention, transfer) should be used?
  - What representation or organization of information is needed?
  - What strategy to be followed.

3.7.22. The Role Of Meta Cognition In Language Learning

David Nunan, Clarice Lamb (1996) – speaks about effective classroom management in language learning which has three dimensions.

1. Planning and preparation
2. Classroom strategy coping with problems as they arise.
3. Whole-school strategy ensuring that the actions and intention of teacher are in harmony.

Nunan emphasizes the learner-centered curriculum in language learning and how they want to go about learning. In Planning learners are consulted on what they want to learn and how they want to proceed in
learning. They are involved in setting, monitoring and modifying the goals and objectives of the programs being designed for them.

During Implementation, learners are actively using and reflecting on the language inside and outside the classroom. Assessment and evaluation – learners monitor and assess their own progress. They are also actively involved in the evaluation and modification of teaching and learning during the course and after it has been completed. Awareness means learners are made aware of the pedagogical goals and content of the course. Involvement – learners are involved in selecting their own goals and objectives from a range of alternation of others.

Peter Tomlinson (1995) in his book ‘understanding mentoring’ stresses the importance of reflective teaching an essential component of Meta cognition. His teaching cycle consists of following functions. Planning the teaching on the basis of clear understanding of aims and contexts and appropriate selection of strategies. Monitoring the action and its effects. Providing Feedback form the monitoring into reflection and replacing of the teacher.

![Diagram of Teaching Cycle](image)

**Fig : 6**
Teaching Cycle By Peter Tomlinson

Gloria Appelt Slick (1995) speaks about goal directed teaching in language classrooms consist of four distinct stages. They are planning for action, monitoring during practice, reflection on practice, projecting ahead.

Bachman’s communicative model comprises of strategic competence, which is implicated in all communication. Strategic competence discharges a mediating role between communicative competence, meaning intentions, context of situations and something else.

Bachman and palmer speak of the roles of formulation of teaching assessment of resources; planning and execution as the processes to achieve communication. They characterize such processes as Meta cognitive abilities which underlie the way in which competence is related the performance. Pragmatic competence, one of the components of communicative competence according Bachman is central to all communication. He named the capabilities to determine communicative goals, assessing communicative resources, planning communication and the execution the plan as Meta -cognitive skills.

Ronal carter, Dravid Nunan- (2001) in his book ‘Teaching English to speakers of other languages’ states that Meta cognitive strategies help learners manage themselves as learners, the general varieties. One group of meta cognitive strategies relates to manage the learning process in general and includes identifying available resources, deciding which resources are
valuable for a given task, setting a study schedule, finding or creating a good place to study etc.

David Nunan, Clarice Lamb (1996) Learners will take a growing responsibility for the management of their own learning so that they learn how to learn a language.

Wong (1992) Reflective teachers are one who is capable of monitoring, criticizing and defending their actions in planning implementing and evaluating language program.

3.7.23. A STRATEGY TO DEVELOP META COGNITION

Based on the theories and models of Meta Cognition, review of related studies and after analyzing the various dimensions of Meta Cognition elaborately, a strategy to develop Meta Cognitive skills among the students was evolved by the researcher. The strategy evolved consists of the following principles of Meta Cognition.

PLANNING: Planning is the prerequisite of any activity (Dirkes 1985). The success of any endeavour depends upon proper planning. Planning as far as any learning activity is concerned consists of the following aspects. The learners should have self-awareness on these aspects. (Wenniert, 1987). They are,

Goal setting, Time Management, Analysing Strengths and Weaknesses, Analysis of Previous learning, Anticipation, Self Responsibility, Self Determination etc. (Khun, 1988; Schohenfeld; Borkoweski, 1983) awareness
JAHITHA’S STRATEGY TO DEVELOPE METACOGNITION

PLANNING

Self responsibility
Self Esteem
Self Determination
Analysing Strengths & weakness
Goal Setting
Time Management
Anticipation

FOCUSsing ATTENTION

Selective attention
Selective Comparison
Selective Decoding
Selective encoding

INFORMATION MANAGEMENT

Translation
Contextualisation
Combination
comparison
Elaboration
Analysis
Management of resources, Strategies selection, Self reporting, Self appreciation etc. (Sternberg, Spear, Swerling, 1996)

Nelson and Narens (1990) identified the following self regulatory skills are essential. They are Self Evaluation, Self Monitoring, Goal Setting, Strategic Planning and Self Control (Belmont, Butterfield, Ferethi 1982). Meta Cognitive experiences involve the use of Meta Cognitive strategies or Meta Cognitive regulation. These processes consists of planning and monitoring. Self Questioning a Meta Cognitive strategy used to ensure the cognitive goal of comprehension is met (Ann Brown, 1987). Meta Cognition involves the active monitoring and consequent regulation and orchestration of various processes such as Meta memory and Meta learning (Pesut, 1990).

EVALUATION: After the learning process, learner should evaluate themselves to find out whether they have reached the learning outcomes. It is termed as Self Evaluation. Self Evaluation helps the learner to check whether the objectives of learning are achieved or not. Some of the techniques are Self Checking, Error Detection, Self Correction, De Bugging, Self Review, Self Questioning, Self Judgement (Wong 1986, Wenniert, Kluwe 1987, Paris, Wasik 1988).

Strategic competence is central to all communication. (Bachman, 1990) it achieves this role of discharging a mediating a role between meaning intension, (the message which is to be conveyed) underlying competence (those that have just been briefly examined), background knowledge and context of situation. It carries out this role by determining communicative
goals, assessing communicative resources, planning communication and then executing the plan. Bachman considers these capacities to constitute Meta Cognitive skills. They are cognitive because of the nature of the operations that they involve and Meta Cognition since there can self awareness built into their operation.

**Bachman and Palmer** speak of the roles of formulation of meaning the processes which must be gone through to achieve such communication. They characterize such processes as Meta Cognitive abilities which underlie the way in which competence is related to performance. Communication being achieved by means of an information processing system in which there are limited alternate capacities. The language user hence has to cope with multiple demands on attention while communication is taking place.

These important principles are essential for any learning. These principles are explicitly explained and taught to the learner. Suitable tasks and questions are also applied to teach these strategies implicitly also. One model lesson incorporating all the techniques is explained in detail to the students. Each day during the teaching learning process time is allotted to employ the techniques. Thus along with teaching the Meta Cognitive principles were taught to the students.

**MEDIATED LEARNING EXPERIENCE**

In the later part of the 20th century, cognition was considered as a global phenomenon referring mental processes in a holistic way. Little attention was paid to the molecular components of its nature. Certain critical
aspects of human behavior, which relate to the microelements of human behavior on particular mental acts will also be considered to be important on the structure cognitive modifiability. This serves as a point of departure for a constructive approach as generally present or absent from the repertoire of the psychological and mental behavior of the individual.

**Piaget (1952, 1959)** in his study of holistic approach to the mental act, explained cognitive development in his ‘conservation’ studies such as conservation of matter, volume etc. He paid little attention to the fact that individual’s perceptual experience cannot be conceived without a consideration of certain specific conditions such as gathering of data, engaging in comparative behavior and the like.

Piaget expressed cognitive development and interpreted the results in the direction of stage related maturational determined changes in operational thinking. He paid little attention to the mediation interaction between the growing child and the representation of the culture that mediated the modalities of perceiving registering or acting upon the reality.

The end product ‘conservation’ requires a perceptual activity, which gathers the kind of information on the various dimensions. The mental act of comparison permits the learner to ‘conserve’ certain elements across the perceived changes in certain dimensions. Thus cognitive psychology ignored the molecular conditions of various mental operations. The end products are focused but the processes, which lead to these products, have been ignored.
3.8. THEORY OF STRUCTURAL COGNITIVE MODIFIABILITY

Modern cognitive psychology constructed tools, operational constructs. Research designs, methods of assessment and intervention, oriented toward the products of thinking and learning from theory. Psychometric practices ignored the processes responsible for the evolvement and evaluation of mental products.

Theory of Structural Cognitive Modifiability (SCM) and the theory of Mediated Learning Experience (MLE) frames cognitive psychology in a very different way. Change, the adaptive propensity of the organism, not only central to the definition of intelligence and its cognitive processes, but also brings intelligence and its modifiability in a constructive view.

The Russian researcher Lev Vygotsky, developed mediation as a way to assist learners in developing cognitive processes. Feuerstein extends this work to a broad cultural setting and considers what can be done to help people overcome common impediments to learning.

The theory of Structural Cognitive Modifiability places environment in a higher position. Environments must increase the experience of belonging to make the individual amenable to adaptation. The environment must constantly require new adaptations. The nature and types of interactions in the environment must be conducive to making and sustaining change. The environment must be heterogeneous, presenting a variety of models and difference in experience. The environment must pay attention to differences, to accept and prize diversity. The theory of Structural Cognitive Modifiability
has been the basis of many educational applications to promote higher level of thinking. It has given rises to educational applications in three main areas,

1. Assessment
2. Educational programs
3. Parent training programme

3.8.1. Instrumental Enrichment

Jewish psychologist and educator Reuven Feuerstein’s theory SCM incorporates most of the key elements in an impressive attempt to take into account the complexities of both the interpersonal and intra-personal aspects of cognitive development.

He got frustrated with the importance of the social context in which early learning in particular takes place. Feurstein like vygostsky came to place great emphasis upon the nature of the social interaction between ‘expert’ and ‘novices’.

The ways in which such experts shape up the learning experiences of their students enable them to become independent thinkers and learners he termed as mediation, while the activities and experiences that these people present to learners are known as MLE.

Feuerstein observed that the resulting deficiencies in cognitive development can be corrected off any time later by providing Mediated Learning Experience by well-trained teachers in combination with specially designed instruments emphasizing cognitive developments. Feuerstein refers
to as 'mediation—that is quality of teaching. He believes that the effect of the program lies in the combination of the materials.

**Instrumental enrichment** is based on theories, which hypothesize that thinking skills can be taught and learned and these skills are transferable and usable in all areas of life. It is one of the three applied systems of the theory of **Structural Cognitive Modifiability (SCM)** and **Mediated Learning Experience (MLE)**. It is a multidimensional intervention method with a theoretical foundation, an enriched repertoire of practical instruments and a set of analytical didactic tools.

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**Goals Of Instrumental Enrichment**

The main goal of instrumental enrichment is to enhance the cognitive modifiability and social adaptability of the individual, to increase the capacity of the learner to benefit from his direct exposure to environmental stimuli and life experience.
SUBGOALS

Correction of deficient cognitive functions: cognitive functions which are the pre-requisites of operational thinking, these cognitive functions failed to develop because of lack of mediated experiences or because of the learner's inability to benefit from mediated interactions. The mediator would help the learner develop adequate thinking strategies.

Acquisition of vocabulary: The learners need language and verbal tools for the analysis of internalized mental process that facilitate control and insight into their cognitive functioning. IE aims to equip the learner with an enriched and differentiated linguistic repertoire of Spacio-temporal concepts, accurate definitions and precise verbal labels representing different relationships, mental operations an cognitive functions that form the basis of any problem solving ability.

Production of intrinsic motivation through habit formation:

Eliciting an intrinsic motivation in the learner is considered as indispensable pre-requisite to any intervention aiming at the development of thinking skills and cognitive processes. IE aims at shaping and consolidating efficient cognitive functioning into a set of habits that tend to emerge spontaneously in the learner's behavior.

Creation of insight and reflective thinking: IE helps to develop and orientation in the learner towards his own self and his internal mental processes that are to be held responsible for adequate or inadequate behavior.
Creation of task intrinsic motivation: IE helps the mediator to motivate the learner and to become involved with tasks that are considered attractive and challenging.

Shift from role of passive recipient to active generator: IE concerns the need to change the self-image of the student, who often perceives himself as capable of passively registering and retrieving data provided from external sources, so that he may conceive of himself as an active thinker, capable of generating new information on the basis of adequately gathered and elaborated data.

Thus the program seeks to correct deficiencies in fundamental thinking skills and to provide students the concepts, skills, strategies, operations and techniques necessary to function as independent learners and also to diagnose and help students learn how to learn.

Feuerstein observed that the resulting deficiencies in cognitive development can be corrected later at any time by providing mediated learning experiences by well-trained teachers in combination with specially designed instruments emphasizing cognitive developments. Feuerstein refers to as ‘mediation’- that is quality of teaching. He believes that the program-essence lies in the combination of the materials.

3.8.2. MEDIATED LEARNING EXPERIENCE (MLE)

Brain is infinitely ‘plastic’ and it functions by ‘cognitive structures’ for any human being, some structures may be absent. By means of evaluation
instruments, it is possible to determine when certain cognitive functions are absent or ill developed. Also it is possible through planned mediated experiences by a well-trained person to correct these deficiencies. When the corrections have been made they are ‘permanent’.

The main instrument for Structural Cognitive Modification is the Mediated Learning Experience. Myron put up a model of thinking and learning.

Stimuli (S) ——— Learner (L) ———— Resulting Experience (R)

In a Mediated Learning Experience, we seek to insert some human mediation between the resulting experience and the learner’s brain processing. The purpose of the mediation is to help the learners develop new cognitive structures.

The theory of Mediated Learning Experience describes a special quality of interaction between a learner and a person and also explains the role of mediator, who plays an important role in triggering the innate potential of the learner. ‘Learning how to learn’ is the aim of the Mediated Learning Experience and seems appropriate to everyone.

Mediated learning occurs whenever an individual deliberately places himself or herself between external or internal stimuli and the learner and transmits the stimuli in particular way to that learner. Neurological research stresses the importance of emotions, which are important factors in learning.
The theory of MLE doesn't just focus on the cognitive side, but looks at emotions too.

The theory of Mediated Learning Experience used as an intervention with 'Special' needs population. It is also a way of looking at all kinds of learning situations and seeing how human beings progress and develop not just as individuals but as whole societies in the world. Feuerstein who evolved this theory believed that both nature and nurture determine cognitive functioning, learning experiences particularly Mediated Learning Experience are the major determiner of cognitive functioning. Feuerstein provides great insight into specific aspects of mediated learning, which can be used to improve cognitive functioning.

3.8.3. Three Components Of A Mediated Interaction

The three components of a mediated interaction are learner, the stimulus, and the mediator. Instrumental enrichment is applied to a remarkably wide range of diverse populations, like culturally deprived and learning disabled individuals to gifted underachievers with brain damaged and psychiatric patients as well as in teacher training frameworks.

The program consists of 14 instruments which are characterized by their structural build-up, their instrumental nature and freedom of content. Each of them focuses on one or two main mental operations, such as, comparison, inferential thinking, analysis, categorization etc.
3.8.4. Characteristics Of Mediated Learning Experience

1. **Intention:** intention refers to the intent of the mediator, to focus the attention of the learner on some particular thing. The mediator concentrates on understanding and helping the learner to understand how the learner is using his or her brain.

2. **Reciprocity:** refers to the need for the learner and the mediator to see each other at the 'same level'. Intention is the effort to produce a state wherein reciprocity aspect is important to bring about a state of mutual trust and confidence.

3. **Transcendence:** It is the heart of mediation, which has to do with making connections between the specific and the general. Transcendence helps the person to rise above the immediate stimuli and get a different perspective. It can be very difficult for people to learn a skill and able to apply it in different situations. Transcendence refers to the goal of interaction. This becomes evident when the child generalized the learning to all other aspects of life. Transcendence means ‘bridging’ the experiences and lessons learned in the current situations to new situations, because human beings differ from the other species in the way they can transfer lessons learned from one experience and use in another situation.

4. **Meaning:** In mediation of meaning the mediator interprets the significance of what the learner has accomplished. The mediator also mediates the feelings of accomplishment. In various ways the mediator causes the learner to reflect not just on the solution of the problem but also how the solution was obtained.
and the generalizations, which flow from it. Here the mediator helps the learner to interpret the stimuli so that the experience has a special meaning. Imparting meaning provides a power that keeps a person involved in the interaction so that learner is much more interested in participating.

3.8.5. Building Blocks

The building blocks are the prerequisite skills upon which thought processes are based. In Mediated Learning Experience, the mediator evaluates the learner’s level of competency and uses these building blocks and helps the learners to develop those that are underdeveloped.

1. **Precision and Accuracy**: Being exact and correct in understanding, using words and ideas.

2. **Space and Time concepts**: Space refers to how things relate in size, shape and distant to one another.

3. **Thought integration**: Using multiple sources of information

4. **Selective Attention**: Choosing relevant pieces of information when considering thoughts or events.

5. **Making comparisons**: The relationship between events and ideas.

6. **Connecting events**: Associate one activity with another and use this association in a meaningful manner.

7. **Working memory**: Retrieving information and make connections among the information gathered.
8. **Getting the main idea:** Finding the fundamental element.

9. **Problem identification:** Experiencing and defining a given situation, which is causing a feeling of imbalance.

### 3.8.6. Parameters Of Mediated Learning

1. **Inner meaning:** Developing intrinsic motivation for learning and remembering.

2. **Self-Regulation:** Controlling the approaches of learning by using meta cognition and to determine factors like readiness and speed.

3. **Feeling of Competence:** Feeling confident to do a particular thing and motivated to learn. Absence of this tool results in laziness and other avoidance behaviour.

4. **Goal directed Behavior:** Taking initiative in setting, seeking and reaching, objectives on a consistent basis.

5. **Self-Development:** Being aware of your uniqueness as an individual and working towards becoming all you can be.

6. **Sharing Behavior:** Communicating to make the implicit as explicit.

7. **Feeling of challenge:** Being aware of the difficult tasks and to know how to deal with.

8. **Awareness of self-change:** knowing that you change throughout life and learning to expect, nurture and benefit from it.
According to Feuerstein (1974) "learning occurs either by direct exposure form the individual's encounter with random stimuli or by Mediated Learning Experience in which the child is exposed to information presented by an adult who interposes him or herself between the child and the world and intentionally mediates the information to the child. Mediated Learning Experience involves modification of the information in such a way that the individual who learns can register it meaningfully.

3.8.7. Metacognitive Elements In Mediated Learning Experience

**Inner meaning:** being aware of and developing significance inside that provides intrinsic motivation for learning and remembering.

**Self-regulation:** controlling the approaches of learning by using meta cognition to determine factors like readiness and speed.

**Feeling of competence:** knowing the ability to do a particular thing. Presence of it results in feeling confident and motivated to learn.

**Goal directed behaviour:** setting, seeking and reaching objectives.

**Feeling of challenge:** being aware of novel, complex and difficulty tasks, knowing how to deal with challenge.

3.8.8. Intervening Variables Of Mediated Learning Experience

**Emotions:** Emotions are important factors in learning and they profoundly affect each other. Mediated Learning Experience doesn't just focus on the cognitive side but looks at emotions too.
Intelligence: Feuerstein and Vygotsky agree that intelligence isn’t the issue, cognitive functioning determines the quality of learning experience. Vygotsky states that the development of cognitive function lags behind the learning experience. Feuerstein believes that both nature and nurture determine cognitive functions.

Ability: The ability to learn how to solve problems is not necessarily related to how much the students already know.

3.8.9. Mediated Learning Experience And Language Learning

Julian Edge-(1993) in his book “Essentials of English language teaching” stressed the importance of the learner’s motivation, attitude, confidence, security and willingness to take risks.

Positive emotional environment

The secure, motivated learner is prepared to make a personal investment in learning. Positive emotional involvement leads to effective learning. The motivated learner is prepared to make a personal investment in learning. The learners will talk about themselves and about things that matter to them. In this atmosphere they will also listen with respect to what others have to say, when language use is meaningful it is also memorable.

Neurological research stresses the importance of emotions which are very much a factor in learning. The theory MLE doesn’t focus on the cognitive side, but looks at emotions too. A positive learning environment, a positive attitude towards diversity, a positive belief in the worth of all
children, mutual appreciation and respect play an important role in language learning. Ronald carter, David Nunan (2001) in their book, 'Teaching English to speakers of other languages' stress the importance of affective strategies which includes identifying one's feelings, (anxiety, anger, contention). Negative attitudes and beliefs can reduce learner’s motivation and hamper language learning.

Vygotsky – it is through communicative processes, mostly mediated by speech, the adults establish social interactions with children, which play role in child’s cognitive development. Wong-(1992) – intrinsically motivated people do things for their own sake, rather than an external reward. Intrinsic motivation is an essential principle of Mediated learning experience. To enhance motivation involving learners in the decision making process about what to learn and how to learn and encouraging them to take responsibility for their own learning can be a major way of enhancing motivation.

Ann Brown et.al.(1993) in their cognitive apprentice program mention about the role of the mediator. Learning takes place in the context of complete, meaningful activities. Students learn by participating in these activities with the modeling and guidance of a master. Klippel(1984) – one way of helping students to enjoy their language activities and of building up their confidence is to explain them what they are doing in the class and why.

David Nunan speaks about 'Transcendence' an essential principle of mediated learning experience. When learners go beyond the classroom and make links between the content of the classroom and the world beyond the
classroom they are said to be in transcendence which plays an important part in language learning.

Clyde Fowlie (2000) in his model of ‘teacher training a web trust’ speaks about the necessity of mutual trust between the teachers and learners. It is essential to reduce or if possible, eliminate the face threatening potential of the course and to keep the teaching environment safe. The learners are to be supported in overcoming their own insecurities and made to feel more confident of them.

Kang Shumin (1997) – the affective side of the learners is one of the most important factor influencing on language learning success or failure. Oxford (1990) – the emotions such as self-esteem, empathy, anxiety, attitude and motivation play a considerable role in language proficiency.

3.8.10. A STRATEGY TO DEVELOP MEDIATED LEARNING EXPERIENCE

The role of mediator is very important in providing Mediated Learning Experience (Reuven Feuerstein 1980). The strategy to provide Mediated Learning Experience to the subjects incorporates the following principles of Mediated Learning Experience.

The role of Mediator (Teacher) is very important in providing Mediated Learning Experiences. (Reuven Feuerstein, 1982)

MOTIVATION BY THE MEDIATOR

The mediator motivates the learners with the help of model speech, rhymes, dialogues by the native speaker or language experts with the help of
Audio/Video presentation. Motivation is the pre-requisite of any learning. (Reuven Feuerstein, Lewis, 1998)

**MUTUAL TRUST**

The mediator induces trust among the students by asking the students to do simple tasks. The learners also begin to trust their teacher. (Reuven Feuerstein, Falik, 1998)

**RECIPROCITY**

The mediator pretends that he also a fellow explorer during the learning activity. (Reuven Feuerstein, Schur, 1997)

**INTRINSIC MOTIVATION**

The mediator motivates the learners intrinsically also by inducing self confidence. The learner gain self confidence by doing simple activities. Eliciting an intrinsic motivation in the learner is considered as indispensable pre requisite to any intervention aiming at the development of thinking skills and cognitive processes. (Reuven Feuerstein, 1997).

**PROBLEM IDENTIFICATION** The mediator places a problem before the learner. Here the problem is learning a lesson or acquiring a language skill.

**FOCUSING ATTENTION**

The mediator chooses relevant pieces of information. The mediator focuses the attention of the learners by placing the information before the learners. Focusing the attention of the learners is the intention of the mediator. He uses a mediated approach and encourages the learner to think of a way to
**JAHITHA'S STRATEGY TO PROVIDE MEDIATED LEARNING EXPERIENCE**

- **Motivation by the Mediator**
  - (Creating Self-confidence in the learner)

- **Problem Identification**
  - (Experiencing of defining a situation which is causing a feeling of imbalance)

- **Focussing Attention**
  - (Intention of the Mediator)
  - (Choosing relevant pieces of information)

- **Registration of Information**
  - (Cognitive Mapping)

- **Interpretation of Stimuli**
  - (Cognitive Operation)

- **Working Memory**
  - (Retrieving information connections among gathered)
  - and making the information

- **Rule - Learning**
  - (Finding the funda mental elements)

- **Generalisation**
  - (Bridging the experiences learned in current situations to new)

- **Application**
  - (Transfer of Learning)

- **Awareness of Self - Change**
  - (Knowing that an individual change throughout life)

- **Making Comparisons**
  - (Knowing the things which are similar and dissimilar)

- **Classification**
  - (Classifying)

- **Self - Regulation**
  - (Using metacognitive elements)

- **Feeling of accomplishment**
  - (Being aware of difficulties faced and knowing how to deal with)

- **Self Development**
  - (Being aware of your uniqueness and working towards becoming all you can be)
make a task easier. The mediator leads the child to recognize the need to apply a rule or principle in order to solve the problem of the task before her (‘Learning to learn’, ‘Mediated Learning Experience’ and ‘Instrumental Enrichment’, Feuerstein, Hoffman M. Rand, Jencen, Tzuriel, Hoffman D, 1992)

THE BELIEF SYSTEM

The positive approach helps the mediator to continue to believe in the child’s capacity to change. Mediated Learning Experience places the role of the mediator as central to the child’s ability to change. (Reuven Feuerstein, Tzuriel, 1992)

HELP BY THE MEDIATOR

The mediator tries to shift the role of the learner from passive recipient to active generator. He helps the learner in all possible ways.

REGISTRATION OF INFORMATION

The learners analyses the information.

INTERPRETATION OF STIMULI

The mediator places himself between the learner and the stimuli. The learner involves in many cognitive operations. (Reuven Feuerstein, Hoffman, 1976)
WORKING MEMORY

The learners make use of their working memory by making comparisons, categorization and self regulation. (Reuven Feuerstein, Shalom, 1968)

RULE LEARNING

From the information provided by the mediator, the learner tries to find out the fundamental element. (Reuven Feuerstein, Richelle, 1991)

GENERALISATION

Based upon the experiences learned in current situation the learners try to bridge the experiences to new experiences. (Reuven Feuerstein, Rand, 1988)

APPLICATION

Transfer of learning takes place when the learner apply the rules that they learnt in one situation to new situations. (Reuven Feuerstein, Klein, 1991)

FEELING OF ACCOMPLISHMENT

When the learners aware of difficult tasks and know how to deal with them, they have a feeling of accomplishment. (Reuven Feuerstein, Feuerstein,S, 1991)

SELF DEVELOPMENT

When learners solve difficult problems, that leads to self development. (Reuven Feuerstein,Krailowsky, 1978)
WEARINGNESS OF SELF CHANGE

By solving difficult problems and facing difficult tasks, learners know that they can change throughout life. (Reuven Feuerstein, Noguez, 2002)

These are all the essential elements of Mediated Learning Experience which are the basic elements of the evolved strategy to provide Mediated Learning Experience.

3.9. A MODEL TO ENHANCE COMMUNICATIVE COMPETENCE

Based upon the three strategies of Meta Cognition, Mediated Learning Experience and Communicative Competence a final model was evolved to enhance the Communicative Competence. The application of the model consists of following steps to enhance Communicative Competence.

MOTIVATION

Any learning needs motivation on the part of the teachers and learners. A good example of model speech which contains the necessary input of the particular language skill is selected in the form of audio / video presentation. (Nunan, 1996)

CREATING INTEREST

To create interest among the learners at first simple and easy learning activities are selected. The completion of tasks successfully creates interest among the learners to take up the learning activity with interest. (Kang Shumin, 2000)
SELF CONFIDENCE

Self confidence is specially identified as an important aspect 'affective filter' in language learning that it enables the learner to encourage intake or useful point. (Krashen, 1981) Poor language learners lack self-confidence. (Naiman, 1978; Beebe, 1983; Brown 1977)

Two or three simple tasks are given to the learners so that they can feel confident to take up the learning process. (Nunan, Ronald Carter, 2001)

RIGHT ATTITUDE

Once the learners are motivated properly by creating interest and self confidence among the learners it will help them to have right attitude during the learning process. After solving some easy problems the learners are led to take up one or two difficult tasks. The difficulty level of the problem will make them to take up the learning activity with right attitude. (Oxford, L, 1990)

GOAL SETTING

A particular skill was selected and the learners are allowed to know the goals and objectives of learning that skill. The goals and objectives are explained explicitly. (Wenniert, 1987).

TIME MANAGEMENT

The learners are allowed to set their own time in learning the particular skill. This will help them to have self responsibility to complete the learning task within the time set by the learners. (Gloria Appellate Slick, 1995)
PRIOR KNOWLEDGE

The learners are allowed to recall what they know about the topic already. (Wong, 1992)

ANALYSING STRENGTHS AND WEAKNESSES

Recalling past experiences, retrieving the prior knowledge will help them to analyse strengths and weakness. (Nunan, Ronald Carter, 2001)

SELF INTEREST

The mediator motivates the learners and creates interest in the learners. All the above said activities will lead to creation of self interest among the learners. (Wong, 2001)

SELF RESPONSIBILITY

The mediator asks the learners to complete the learning activity within the stipulated time. This leads the learners to be responsible and take care of their own learning process. (Nunan, Clarice Lamb, 1992)

SELF DETERMINATION

The mediator asks the learners to determine them selves to complete the learning task successfully. The mediator sites the example of successful learners and induces confidence among the learners.

In all the three components are dealt with affective aspects of learning. The role of mediator is vial because these three components are related with the feelings and emotions of the learners.
SELECTIVE LISTENING

At this stage the learner presents the lesson and starts teaching the skill. More examples, the rules, ideas, concepts are presented. More language input is given to the learners. (Anderson, 1983)

SELECTIVE DECODING

The learners decode the meaning of the text that is presented aurally and visually. The learners understand the meaning of the text with the help of the mediator. (Nisbet, Schucksmith 1986)

SELECTIVE ENCODING

Like selective decoding, selective encoding also taking place when the learners practice the skill that they are learning. (Atkinson, Raugh, 1981)

INFORMATION PROCESSING

All the information presented regarding the skill / lesson is analysed by a number of strategies like association with previous learning, translation, analyzing and synthesizing and also by comparison. Information processing leads to comprehension of the language input. (Lewin, 1982)

SELF REGULATION

Self regulatory strategies are very essential for mastery learning. Successful learners employ a number of strategies to learn better. These strategies differ from person to person. These strategies differ from person to person. The learners are advised to employ some of the some of the self
monitoring techniques like self talking, self questioning, memory strategies, summarizing etc. (Sternberg, 1985)

EVALUATION

The third important principle of Meta Cognition is evaluation. The learners have check themselves how far they have learnt. They should know what the mistakes that they commit by self questioning are and they have to correct the mistakes by themselves or with the help of others, by self reviewing and also with the help of self criticism. (Palinscar, Brown 1984)

COMMUNICATIVE COMPETENCE

In language learning repetition, rule learning, application and generalization are the major processes that help the learners to acquire the language. According to Behaviouristic theory of language learning (Skinner, 1957) language is learned by imitation and repetition. Through imitation children rapidly pick up complex verbal behaviour such as whole phrases and sentences.

The cognitive theory of learning stresses that the learner of language possess some kind of ‘data processing mechanism’. The impact of the learner constitutes the ‘language data’ which the learner process. Thus in the process of language learning repetition, rule learning, application, and generalization plays a major role.
INFORMATION PROCESSING

The information is processed by various strategies like concept mapping, comparing, analyzing etc. (Lahey, 1988; Belmont, 1989)

REPETITION

Language learning occurs at the initial stages by imitation and repetition only. Imitation of the language input by many times leads to understanding of the language. (Skinner, 1957)

RULE LEARNING

Language learning is rule governed behaviour. The forms and rules of a language should be internalized by the learners. Once they understand the rules behind the formation of sentences, language learning process will become easy. (McCormick & Schiefelbusch 1990)

APPLICATION

The rules learnt will be applied in new situation by the learners. (Wigg & Semel 1984)

PERFORMANCE

The level of language learning depends upon how one performs in various occasions. Performance is the actual use of the language by the learners in a variety of situations. The degree of performance depends upon the mastery of language. (Gonzi, et al. 1993)
COMPETENCE

Performance leads to competence, which is the final stage of the language learning. (Rivers, 1973)

Thus the model evolved for enhancing Communicative Competence of the DIET students consists of all the important principles of language learning, Meta Cognition and Mediated Learning Experience. The guiding principles of language learning such as positive learning environment as well as the emotional environment, a positive attitude towards diversity, a positive belief in the worth of all children, a sense of belonging, identity, purpose, security, fairness and respect, appreciation, competence, accomplishment, mutual appreciation and respect which can build a positive worthwhile individuals are taken care of in this model.

The next chapter explains in detail the methodology adopted in implementation of the model, sample selection, tool etc.