Chapter- II

Theoretical Underpinnings of the study

2.0 Introduction

This study examines the role of multiple intelligences teaching approach result in promoting autonomous learning by inducing motivation among the learners. This chapter presents theoretical orientations to how this (MITA) approach enables autonomy in student language learning and also establishes the dire need of the fact that learner autonomy is necessary. Second Language Acquisition (SLA) and the area of second language writing are discussed in various sections. Theories of language and the individual learner, and the learner-centered approach are discussed. Research evidence on whether this approach resulted in better writing skills and a literature review of several studies in this area are presented. The theoretical orientation to the promotion of autonomy, effective use of the multiple intelligences in providing motivation mediated by teachers is explicated in detail.

2.1 Autonomy: The History of the Concept

The concept of autonomy is not new. It has been around for a long time. The original concept of autonomy can be traced back to ancient Greece and to a political context. It was concerned with the property of a state to be self-ruling or self-governing. Thinking and acting independently is a capacity that has been held in high regard for a long time either overtly or covertly in most societies around the world. It would be difficult to trace the development of the concept to any single source or
date of origin. It is deeply entwined with developments in various fields like; philosophy, political science, psychology, sociology, anthropology and so on. Now terms like autonomy, self-direction and self-access are being used more often in the context of education. It is now seen as an efficient alternative to traditional teaching. Various developments in human thinking down the ages resulted in numerous social upheavals and currents of thoughts which contributed to the emergence and spread of these ideas. Some important factors are explored here.

2.1.1 Minority Rights Movements

Minority groups from around the world; ethnic, women's issues, religious, linguistic, environmental and so on have always demanded autonomy. Unconventional and autonomous thinking were the causes to motivate these groups. Women's liberation movements, religious movements, certain linguistic movements altered the world irrevocably. The values of these movements influenced education in a major way. This was bound to happen, as education is a product of societal judgment.

2.1.2 Developments in the Field of Psychology

Reaction against Behaviorism brought about great interest in the meaning and value of personal experience. This translated into a kind of opposition to authority. Educationists, philosophers, linguists and others who worked outside the realm of Behaviourism developed alternative psychologies. Ideas of some of the major schools and important thinkers influenced the development of the concept of autonomy.
2.1.2.1 Behaviourism

The Behaviorists viewed learning as a sequence of stimulus and response actions in the learner. They reasoned that teachers could link together responses involving lower-level skills and create a learning "chain" to teach higher-level skills. The teacher would determine all the skills needed to lead up to the desired behaviour and make sure students learned them all in a systematic manner.

However, many educational psychologists found the behavioural approach unsatisfying. In the areas of problem solving and learning strategies they became more concerned with what was unobservable - what was going on inside the brain. Cognitivism and Humanism, the other two prominent forces in psychology, therefore influenced education in a major way in times to come.

2.1.2.2 Cognitivism

Cognitivism began to recognize the humane aspect in learning by ceasing to view learners as mere automatons - errors while learning were now seen as indispensable to learning; the learner was considered an active processor of learning and the teacher's role was to create opportunities for learning to occur. Humanism went a step ahead by emphasizing the role of human emotions, thoughts and feelings in shaping human learning. The focus now shifted to the development of the whole person rather than looking at particular aspects such as development and use of cognitive skills. The influence of the learner's inner world began to be considered vital to the learning process.
Theories based on the works of educational philosopher Dewey (1997), and educational psychologists Vygotsky (1962), Piaget (1972), Bruner (1974) and others began to gain ground. They proposed that children actively construct knowledge and this construction of knowledge happens in a social context. Some of the influential schools of thought which influenced the concept of autonomy are discussed below:

2.1.2.2.1 Constructivism

Constructivism has its roots in philosophy and has been applied to sociology and anthropology, as well as cognitive psychology and education. Kant presented the idea that human beings are not passive recipients of information: learners actively take knowledge, connect it to previously assimilated knowledge and make it theirs by constructing their own interpretation (Cheek, 1992).

The educational description of constructivism focuses on meaning being intimately connected with experience. It recognizes that learners come into a classroom with their own experiences and a cognitive structure based on those experiences. These preconceived structures are valid, invalid or incomplete. The learner will reformulate his/her existing structures only if new information or experiences are connected to knowledge already in memory. The student in order for the new idea to become an integrated, useful part of his/her memory must personally draw inferences, elaborations and relationships between old perceptions and new ideas. Memorized facts or information that has not been connected with the learner's prior experiences will be quickly forgotten. In short, the learner must actively construct new information onto his/her existing mental framework for meaningful learning to occur.
Vygotsky's (ibid.) proposition of Zone of Proximal Development and Bruner's (ibid.) concept of scaffolding fall within the paradigm of constructivism. Vygotsky (ibid.) proposed that all learning takes place in the 'zone of proximal development'. This 'zone' is the difference between what a child can do alone and what he/she can do with assistance. By building on the child's experiences and providing moderately challenging tasks teachers can provide the 'intellectual scaffolding' Bruner (1974) to help children learn and progress through the different stages of development. In Vygotsky's words, zone of proximal development

... is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.(1978: 86)

The methods of constructivism emphasize students' ability to solve real-life, practical problems. Students typically work in cooperative groups rather than individually; they tend to focus on projects that require solutions to problems rather than on instructional sequences that require learning of certain content skills. The job of the teacher in constructivist models is to arrange for required resources, act as a guide to students while they set their own goals, and 'teach themselves. These ideas contributed in a way to the concept of autonomous learning and the role of the teacher becoming that of a facilitator. In the present study, where we will be exploring the real life language requirements of the learners at some stage, it becomes relevant to review the ideas of constructivism. This concept enables us to analyse the relevance of a
learner-fronted class where chances for meaningful language use by the learner might be enhanced.

2.1.2.2 Discovery Learning

Discovery Learning is also based on Cognitive psychology. Discovery learning is described as:

... an approach to instruction through which students interact with their environment-by exploring and manipulating objects, wrestling with questions and controversies, or performing experiments

(Ormrod, 1995:442)

It is an inquiry-based learning method. The idea is that students are more likely to remember concepts they discover on their own. Discovery learning takes place most notably in problem solving situations where the learner draws on his own experience and prior knowledge to discover the truths that are to be learned. It is a personal, internal, constructivist learning environment.

2.1.2.3 Cooperative/Collaborative Learning

Cooperative (sometimes known as Collaborative) learning is a model of teaching with a set of common attributes and features. It is cognitive in nature. It also has several variations. The following are its essential features: students work in teams to master academic materials, teams are made up of high, average, and low
achievers, and are racially and sexually mixed; reward systems are group-oriented rather than individual-oriented.

2.1.2.3 Humanism

Humanists like Rogers (1990) and Maslow (1970) viewed the inner forces in an individual as indispensable in influencing his/her actions. Rogers' idea of education holds relevance in the context of the present study in that he identified some of the invisible traits which define teaching-learning. We cannot teach another person directly; we can only facilitate his learning. The structure and organization of the self appears to become more rigid under threat. The facilitation of significant learning rests upon certain attitudinal qualities that exist in the personal relationship between facilitator and learner. (Rogers, C, 1990:305)

Maslow too probed the needs which could propel a learner. Accordingly, humans have a hierarchy of needs which range from lower-level needs for survival and safety to higher-level needs for intellectual achievement and finally self-actualization. Self-actualization is Maslow's term for self-fulfillment, the realization of personal potential. He called the four lower-level needs - survival, safety, belonging, and self-esteem - deficiency needs. When these needs are satisfied, the motivation for fulfilling them decreases. He labeled the three higher-level needs - intellectual achievement, aesthetic appreciation and self-actualization - being needs. When they are met, a person's motivation does not cease; instead, it increases to seek further fulfillment. Unlike the deficiency needs, these being needs can never be completely
fulfilled. The motivation to achieve them is endlessly renewed. This prompts a person to often long for autonomy.

Maslow's theory gives us a way of looking at the whole person, whose physical, emotional and intellectual needs are all interrelated. This has important implications for education in general and the present study in particular. Learners whose feeling of safety and sense of belonging are threatened due to various reasons may exhibit little interest in the class. If the classroom is a fearful, unpredictable place and learners seldom know where they stand, they are likely to be more concerned with security and less with learning. Maslow's hierarchy can provide other insights into learners' behaviour. Learners' desires to fill lower-level needs may at times conflict with a teacher's desire to have them achieve higher-level goals. Belonging to a social group and maintaining self-esteem within that group, for example, are important to learners. If doing what the teacher says conflicts with group rules, learners may choose to ignore the teacher's wishes or even defy the teacher.

Self-actualization includes the concept of autonomy as it refers to the need to experience choice in what one does and how one does it. It is the desire to have one's own wishes, rather than external rewards or pressures, determine their actions. People strive to be in charge of their own behavior.

2.1.2.4 Implications for the Present Study

The developments in the field of Psychology brought the learner as an individual to focus. The various invisible cognitive and affective factors which determine the unique characteristics of an individual were recognized. Their influence on learning
humanized the concept of teaching-learning. The implication of the above review for the present study lies in the fact that the above developments justify the promotion of autonomy among learners. This translated as the teacher's role now transforming to one who would scaffold, provide chances for the learner to discover and most importantly see the learner as a unique human being with his/her needs and abilities.

2.2 Learner Autonomy

One of the most important outcomes of communicative language learning and teaching is the premium that is placed on the role of the learner in the learning process. This shift of responsibility from the teachers to the learners points to a more learner-centered approach. Learner autonomy is a perennial dynamic process rather than a static product or state. "In order to help learners to assume greater control over their learning it is important to help them become aware of and identify the strategies that they already use or could potentially use". (Holmes and Ramos, 1991). The autonomous learner takes an active role in the learning process, generating ideas and availing himself of learning opportunities. This line of reasoning is congruent with the theory of constructivism. Thus it is seen that the autonomous learner is an active agent in his own learning process. He causes things to happen and learning is seen as the result of his own self-initiated interaction with the world.
2.2.1 Societal Interest in Learner Autonomy

From the social point of view we value a society in which people are able to think and act independently, to exercise freedom of choice after rational reflection, and can conduct their own life without having their minds made up by others. Independent learning must therefore be viewed as part of a much broader social movement which respects paradoxically the values of both, individuality and community.

Cognitive development is driven by active problem-solving. Learning is not a straight forwardly cumulative process. It is rather to be seen as a process where the learner already knows by various processes of adjustment and revision. New knowledge in other words necessitates the reorganization of existing knowledge.

2.2.2 Metacognitive Strategies and Autonomous Learning

The goal of education is to cultivate learner autonomy and lifelong learning. Studies of metacognition suggest that the ideal way to cultivate autonomous learning is through metacognitive strategy training. Metacognition has always been one of the main focuses of educational research and a considerable number of studies have been conducted on metacognitive strategy training since the 70s. Flavell (1979) provides the definition of metacognition as a level of cognition which enables reflection on cognitive processes and conscious control and monitoring of those processes. Metacognitive strategy refers to making use of the knowledge in the cognitive process to regulate their language behavior through setting goals, planning and monitoring learning processes and evaluating learning results.
Malley Chamot (1990). Wenden 1985 suggests learners use metacognitive strategies to monitor, manage or self-regulate their own study.

Therefore goals setting and planning, monitoring, management and evaluation are the major functions of metacognitive strategies. McDevitt (1997) points out the end product of education is an independent learner and that cultivating learners' independence or autonomy should be regarded as the ultimate goal that teachers or educators try to pursue.

According to the above mentioned arguments, metacognitive strategies and autonomous learning ability are equally important to English learners. Metacognitive strategies are the bridge to good autonomous learning and are also the key to cultivate learner autonomy (Zhang, 2004). As such, college English teachers should concentrate on training students in developing metacognitive strategies and cultivating their autonomous learning ability.

2.2.3 Development of Autonomy

To compensate for the limits of classroom time and to counter the passivity that is an enemy of true learning, students need to develop their own learning strategies so that as far as possible they become autonomous learners, Holec (1981) defines autonomy as "the ability to take charge of one's learning" which means "to have and to hold the responsibility for all the decisions concerning all aspects of this learning". The transfer of responsibility for learning from the teacher to the learner has far-reaching implications not simply for the way in which education is organized, but for power relationships that are central to our social structure. At
present, the learner generates his own purposes for learning and in pursuit of these purposes he determines not only the way in which education and learning will take place but is also responsible for deciding how successful learning is, both as process and a goal achievement. Learner attitudes toward autonomous learning are positive although learning environments are still under the control of teachers (Ustunoglu, 2009).

Learning is not a straightforwardly cumulative process. Rather, learning is to be seen as a process where each increment must be accommodated to what the learner already knows by various processes of adjustment and revision. New knowledge in other words necessitates the reorganization of existing knowledge. According to both Piaget (1970) and Bruner (1966) cognitive development is driven by active problem solving. The promotion of independent learning is central to the whole enterprise of higher education because the intellectual powers which need to be fostered cannot be exercised except in an independent mode. Critical thinking, judgment, creativeness, initiative, interpretative skills, hypothesis formulation and problem-solving capacities can only be made manifest by someone who is operating independently. These powers of the mind can only be developed in learning environments which offer the learner freedom to practice these skills. This independence could be fostered in students by administering indirect feedback which awakens problem-solving capacities in more proficient learners.
2.3 Autonomy and Second Language Learning

In the context of language learning, which entails the learning of skills, autonomous learning is indispensable - in the sense that the learner has to learn the various skills involved in language learning all by oneself, the teacher or somebody else cannot learn it for the learner. Unconscious autonomy is a salient feature of first language acquisition. Children progress from one stage of linguistic development to the next when they are ready, and not when they are told to do so by their parents or some other external agency. Also, language acquisition proceeds, not only in order that children should be able to communicate with their parents, but as a result of their communicating with them. Language learning is not only a cognitive but also eminently a social process. Interaction and collaboration are now seen as crucial to the development of autonomy (Schwienhorst, 2008). Thus, acquisition proceeds on the initiative of the child as it gradually learns to meet the communicative needs generated by its interaction with the environment.

The autonomy thus exercised has two aspects; the first has to do with the (unconscious) agenda by which the linguistic development proceeds; the second has to do with the social freedom that the child enjoys to interact with parents, siblings, relations, caregivers and so on. This has implications for second language learning.

"Naturalistic" second language acquisition that is the learning of a second language without the benefit of instruction - proceeds in essentially the same way as first language development. Social interaction generates communicative needs and
provides the learner with input, and the learner's effort to meet his communicative needs by using the target language gradually produces learning. Research has revealed that second language learners in the classroom pass through the same development stages in language learning as first language learner, the order in which structures are internalized is same in almost all learners irrespective of individual factors as the learner's mother tongue, social background, or age.

This implies that the language classroom must provide learners with plenty of input and many opportunities for interaction with and through the target language. Learners must be allowed the social autonomy, which is necessary to successful "naturalistic" second language acquisition because it guarantees access to a wide variety of discourse roles. Thus as in first language learning, the second language learner is able to build an agenda (though consciously), which guide the linguistic development. Added to it if the teaching facilitates meaningful interaction then autonomy in building agenda and autonomy in interacting would engender language growth.

The principle goal of second language teaching is to enable learners to use the target language as a medium of communication.

... communicative efficiency in the target language community depends on learners having independence, self-reliance and self-confidence to fulfill the variety of social, psychological and discourse roles in which they are cast. It
depends on their achieving a substantial degree of autonomy as language users.

Little (1991:27)

In classrooms where expository teaching methods are used, the teacher is a figure of authority -this means that the learner receives a narrow range of input from a narrow range of communicative events. This could minimize the communicative repertoire of the learner and build a negative image of the target language.

Little (1991: 28) says human brain has a characteristic way of learning language, gradually analysing an internal grammar out of the input it receives. It would be surprising if language teaching in more or less formal educational contexts could circumvent these highly complex unconscious processes.

Little further emphasizes the role of the learners' personal construct in language learning. Accordingly, teaching should engage the personal construct of the learner. This calls for teaching in the hypothetical rather than the expository mode. Teaching in the expository mode restricts the learner to a narrow range of responding and enquiring roles. In the hypothetical mode, the learner is engaged in negotiation. This involves the exploration of the personal constructs of the learners. In a second language class, language should then simultaneously be medium and content.

The learner is allowed the freedom to build his personal construct only in a situation where the learner is involved in the learning process. In the expository mode
of teaching the learner is just a passive observer/recipient of knowledge hence second language learning becomes a difficult task.

2.4 Factors Influencing Autonomy

Autonomy refers to the responsibility the learners take for their own learning. Many factors influence the learner in taking responsibility for learning. Some of them are learner factors while others are teacher factors and yet others could be environmental factors.

2.4.1 Learner Factors

Learners are never a homogeneous lot. They vary in age - both mental age and physical age, background, readiness to learn, willingness to pursue and so on. Often these learner factors influence the goal of achieving learner autonomy. We will examine two of the major learner factors and their role in autonomy; motivation and individual differences.

2.4.1.2 Motivation

Knowles (1975: 14) best put the role of motivation in learning: There is convincing evidence that people who take the initiative in learning (proactive learners) learn more things and learn better than do people who sit at the feet of teachers, passively waiting to be taught (reactive learners). They enter into learning more purposefully and with greater motivation.
Dickinson (1995:168) claims that research into motivation in general education suggests that motivation to learn and learning effectiveness can be increased in learners who take responsibility for their own learning, who understand and accept that their learning success is a result of effort, and that failure can be overtaken with greater effort and better use of strategies.

Dickinson reviews the work of Deci and Ryan (1985) in intrinsic motivation. They distinguish between intrinsic and extrinsic motivation; people who are intrinsically motivated in doing an activity are doing it for its own sake rather than because of external pressure or promise of reward for doing it. Extrinsic motivation, on the other hand, refers to learning situations where the reason for doing a task is something other than an interest in the task itself. They claim that intrinsic motivation leads to more effective learning and that it is promoted in circumstances in which the learner has a measure of self-determination and where the locus of control is clearly with the learner. When conditions are created that facilitate intrinsic motivation, in particular those that are autonomy supporting, students' learning, especially conceptual learning and creative thinking, increases dramatically relative to that of students in settings that foster extrinsically oriented learning. 'Rewards' such as certification, grade, marks university entry etc. have links with extrinsic motivation.

Another theory which has implication for the concept of autonomy is the 'attribution theory'. According to Child (Dickinson, L. 1995: 171) pupils who attribute their failure to stable causes (such as ability or task difficulty) tend not to persist when they fail, but those who believe that their failure is due to unstable or internal causes - particularly effort, tend to persist in the face of failure. This view that failure
is the result of not trying hard enough tends to carry over to future tasks, and so these learners are seen as more highly motivated. In addition, they tend to achieve more than those who believe success or failure is outside their control. For those learners who accept responsibility for success, that is, who attribute their success to effort; learning success enhances their self-perception of competence.

2.4.1.2 Learner Beliefs

Learners possess beliefs about language, language learners, language use, and language learning that influence the way they set about learning an L2. The study of learner beliefs has a number of possible applications:

- developing self-awareness in learners could lead to learner autonomy
- identifying beliefs that relate to successful language learning and in turn to learner autonomy
- countering beliefs that have a negative impact on language learning and learner autonomy

Ellis (2001) however says "... to date; there has been little success in identifying which beliefs relate to successful and unsuccessful learning".

For the purpose of the present study, it is important for the researcher to be aware of learner beliefs as it could inform the ability and willingness of a learner to accept autonomy.
2.4.1.3 Other Individual Differences

According to Skehan (1989) all humans do not behave or think identically. The differences may be due to circumstances or due to inherent characteristics. The individual characteristics of learners may directly or indirectly influence autonomous learning capability. Apart from motivation, language aptitude, learning style, personality type, learner beliefs and learner strategies used are some of the individual differences which could influence autonomy.

2.4.2 Teacher Factors

...genuinely successful learners have always been autonomous ... the same is true of teacher autonomy. Genuinely successful teachers have always been autonomous in the sense of having a strong sense of personal responsibility for their teaching, exercising via continuous reflection and analysis the highest possible degree of affective and cognitive control of the teaching process, and exploiting the freedom that this confers.

(Little, 1995: 179)

The attitude of the teacher, the willingness to share power by relinquishing a teacher-fronted position is vital to the development of autonomy among learners. Little (1991: 44) talks of certain initiatives the teacher has to take to ascertain autonomy;

- The teacher has to negotiate a joint interpretation of the syllabus with
the learner.

• The teacher has to agree to the changes in the power structure of the classroom. The teacher must now move on to be the manager and counsellor of learning resources rather than be the purveyor of information.

• The teacher must let the learners grapple with the problems in a learning situation rather than intervene to provide readymade solutions. ...it is precisely the grappling - the grinding together of conflicting constructs — that leads to learning and much learner effort will be wasted if the teacher intervenes too quickly. (Little, 1991: 45)

• The teacher must learn to trust the learner and share the burden of learning.

Teacher's responsibility in developing learner autonomy is vital to the process. The teacher holds the key to autonomy in a way, If not for proper guidance and counseling repeatedly, the whole effort could collapse.

2.5 Theories of Second Language learning

While it is not clear whether different psychological processes are involved in first and second language learning, there are differences in the way children and adults learn and this has important implications. Theories of adult learning (e.g. Cross, Knowles, Rogers 1981) and literacy (e.g. Sticht, 1988) are more likely to provide an appropriate framework for second language learning compared to
Research on language acquisition/use can be divided into first and second language learning settings. The literature on first language learning is most relevant to child development while second language learning pertains primarily to adult learning, although most general theories of language learning apply to both. Linguistic-oriented theories of language learning tend to emphasize genetic mechanisms (so-called "universal grammars") in explaining language acquisition (e.g., Fodor, Bever & Garrett, 1974). Behavioral theories (e.g., Hull, 1951; Skinner, 1950 & Thorndike, 1932) argue that association, reinforcement, and imitation are the primary factors in the acquisition of language. Cognitive theories (e.g., Ausubel, Landa, Schank, 1978) suggest that schema, rule structures, and meaning are the distinctive characteristics of language learning. Memory processes have been singled out as the basis for language comprehension (e.g., Anderson, Craik & Lockhart, Paivio). Theories of discourse (e.g., Hatch, 1983) argue that interaction with other speakers is the critical dimension in learning language, i.e., syntactic structures develop from conversations. Indeed, Vygotsky (1978) argues that all cognitive processes, including those involved in language, arise from social interaction.

Research and theory on first language learning tends to be closely intertwined with the development of cognition (e.g., Brown, 1973; Carroll & Freedle, 1972; Hayes, 1970). Theoretical frameworks for second language learning present a number of different perspectives. For example, Brown (1980) argues that the analysis of errors made in language learning reveals the development of an
interlanguage: a set of rules made up by the learner, to map the new language onto their native language. According to Brown, correction of errors is important in helping the student understand the grammar of the new language.

The significance of learner variables in language learning has been studied extensively, including abilities, motivation, cognitive styles, and learning strategies. For example Gagne (1985) in his theory of the conditions of learning states that there are several different types or levels of learning. The significance of these classifications is that each different type requires a distinct kind of instruction. Gagne identifies five major categories of learning: verbal information, intellectual skills, cognitive strategies, motor skills and attitudes. Different internal and external conditions are necessary for each type of learning. For example, for cognitive strategies to be learned there must be a chance to practice developing new solutions to problems. To learn attitudes, the learner must be exposed to a credible role model or persuasive arguments.

Gagne suggests that learning tasks for intellectual skills can be organized in a hierarchy according to complexity: stimulus recognition, response generation, procedure following, use of terminology, discriminations, concept formation, rule application, and problem solving. The primary significance of the hierarchy is to identify prerequisites that should be completed to facilitate learning at each level. Prerequisites are identified by doing a task analysis of a learning/training task. Learning hierarchies provide a basis for the sequencing of instruction. In addition, the theory outlines nine instructional events and corresponding cognitive processes:
(1) gaining attention (reception)

(2) informing learners of the objective (expectancy)

(3) stimulating recall of prior learning (retrieval)

(4) presenting the stimulus (selective perception)

(5) providing learning guidance (semantic encoding)

(6) eliciting performance (responding)

(7) providing feedback (reinforcement)

(8) assessing performance (retrieval)

(9) enhancing retention and transfer (generalization)

These events should satisfy or provide the necessary conditions for learning and serve as the basis for designing instruction and selecting appropriate media (Gagne, Briggs & Wager, 1992). A lot of emphasis as per the list given above, is on providing scaffolding to learning which is of primary concern to the learning process. Especially the goals of Eliciting performance (responding) and providing feedback (reinforcement) involve the process of learning and re-learning under the teacher's guidance.

2.6 Learner-Centeredness

The concept of learner-centeredness has evolved as a contemporary counter to the traditional teacher-centered approach to education which is authoritative in nature. There is now a shift in focus to the learner, which in part has grown out of dissatisfaction with traditional approaches that are based on the notion of giving/
transmitting a predetermined body of knowledge to the learner who is treated as an object. This shift reflects a desire to explore ways of making teaching responsive to learner needs & interests and allowing learners to play a fuller, more active and participatory role in the day-to-day teaching/learning process. This inclination towards a more learner-centered approach to teaching/learning is not the outcome of a single structured school of thought. Educators and technical psychologists have focused on the learner and the learning processes from different perspectives. The learner-centered approach to teaching/learning can be said to be an outcome of an integration of overlapping and sometimes different perspectives on teaching/learning.

The learning paradigm is different from the instructional paradigm in that the former is much more interactive and integrative; it focuses not only on what is learned but also on how knowledge is acquired. It also enables learners and teacher to recognize what knowledge the learner brings to the learning process and keeps, to empower learners within the learning process preparing them to be lifelong learners. Learner-centered learning is an active and dynamic process through which learners develop deep understanding, taking responsibilities of their own learning. This will be as stimulating as it is diverse in its accessibility and flexibility. It will help to provide the learner with the best possible educational experiences in a flexible and stimulating environment. This will also enable him increasingly to have access to the resources that help him as an individual learner, develop skills and self-awareness of his own learning processes, develop increasing independence in his learning and reach his highest potential in the subject studied.
The separation of learning from teaching in the discourse of educational psychology has fore-grounded the learner as 'personified learner' in educational institutions (McWilliams, 1996). The learner-centered approach empowers learners to take control of their learning as they take control of their destiny (Muller, 1998). Learner-centered approach redefines learning as individual "discovery". Gibbs, (1992) offers a useful definition of learner-centered learning. He states that learner-centered learning gives learners greater autonomy and control over choice of subject matter, learning methods and pace of study.

Another important trend in the learner-centered approach has been the stress on learning strategies. Learning strategies are used by learners to develop different types of skills and reflect their attitudes and learning preferences. This is a very important area that actually took off from studies that tried to examine what strategies and tactics good learners use (Rubin, 1975). The stress on individualization emphasizes the need for production of materials that are flexible and responsive to learner needs and pace. The tasks are also more open-ended in that learners should be able to make sense of materials according to their own capabilities. Learners therefore, have to take more responsibility for their own learning through trial and error. This would mean less teacher mediation and interference and more self-directed learning leading to learner autonomy. However, there is a need for learners to be aware of gaps in their skills and knowledge, weaknesses and strengths and how they could be handled. This does not take away the overall responsibility of the teacher, nor minimize his role; in fact it
requires a negotiation of power and a mutual agreement between the learner and the teacher about the goals, content and methodology adopted for learning.

Learner-centeredness assumes that people learn and develop through experiences that involve the exercise of their autonomy, and develop their abilities to become autonomous learners through the very experiences of professing their autonomy. It gives learners a learning context where they can select an area of interest and then cater to the quantity and kind of resources for learning, to their own particular learning needs and motivation of study. The learner-centered approach is not necessarily intended to replace existing methodologies but provide a framework for a variety of teaching methods geared to enhance learning.

Constructivism: Basis for Learner-centeredness Learner-centeredness draws heavily upon constructivism with the assumption that deep learning occurs when the learner is actively engaged in the construction of knowledge for himself. Fardouly, (1998) considering the characteristics of constructivist approach to teaching and learning, emphasizes that the learner is both an individual and a social process. He decides what he needs to learn by setting personal learning goals and constructs for himself meaningful knowledge as a result of his own activities and interaction with others. Constructivism focuses on the development of learner's understanding through exposure to the same materials for different purposes at different times which facilitates the knowledge transfer process (Jonassen et. al, 1995). Unless new knowledge becomes integrated with the learner's prior knowledge and understanding, this new
knowledge remains isolated and does not transfer readily to the new situations. Hence, it cannot be used effectively in new tasks. Teachers can assist learners in acquiring and integrating knowledge by a number of strategies that have proved to be effective with learners of varying abilities. The goal of learner-centered education would be to produce lifelong learners having problem-solving abilities who would understand and be informed about their culture and society. In such a situation, the learners would be responsible for participating actively, positively and ethically within the learning and teaching environment. Teachers would be responsible for providing supportive structure for learner-centered learning and will be active in providing clear statements of curricula, assignment and assessment requirements, providing materials to support learning and in providing effective and timely feedback on learner progress and performance. While giving feedback, keeping in view the level of the learners, teachers could administer those types of feedback that enable learners to become more autonomous. Different activities must be managed to benefit from increased learner control, reducing anxiety while managing self-regulation (Wagner, 1994). The learner must adapt to this control by practicing time management.

2.6.1 Learner Centeredness as an Approach to Teaching

Piccinin (1997) makes a mention of three approaches to learning: content-centered, teacher-centered and learner-centered. While the first two approaches put content to be taught and teacher's authority at the focus, learner-centered learning moves away from them and concentrates on learner motivation towards
learning. The learner-centered approach to language teaching/learning is not a new one. It can be said that without the learner there is no school or teacher. Nevertheless, in many if not all traditional classrooms, the central focus in teaching/learning has been the teacher, and not the learner. However, in current thinking, there is a shift in focus to the learner which reflects a desire to explore ways of making language teaching responsive to learner needs and interest and of allowing learners to play a fuller, more active and participatory role in the day-to-day teaching/learning process. As such, learner-centeredness as an approach to education aims at developing in each learner a sense of responsibility for his or her own learning and managing all related processes as early as possible. This implies paying attention to the actual needs of the learners. At earlier stages of proficiency, a large amount of guidance and support may have to be provided. At later stages, the teacher may wish to point out problems that the learner has, and let the learner understand them and find solutions. Thus, the nature and shape of facilitation offered by a teacher, the kind of guidance and support may vary across learners and levels. In all cases, however, learner-needs stay at the centre of the entire teaching/learning process.

2.6.2 Second Language Learning Strategies

Second language (L2) learning strategies are specific actions, behaviors, steps, or techniques students use, often consciously, to improve their progress in apprehending, internalizing, and using the L2 (Oxford, 1990b). Strategies are the tools for active, self-directed involvement needed for developing L2 communicative ability (O'Malley & Chamot, 1990). Research has repeatedly shown that the
conscientious, tailored use of such strategies is related to language achievement and proficiency.

Self-Assessment by students is a good way to promote both ownership and responsibility which are two important aspects of literacy development. One way of promoting these strategies is by focusing on how to teach students to become more independent learners. The process of learning to self-evaluate and to set goals provides students with opportunities to take responsibility for making decisions regarding their work, which in turn enables them to become partners with their teachers in making the decisions that concern their day-to-day learning activities. In language learning, teachers can provide all the necessary circumstances and input but learning can only happen if learners are willing to contribute. Their passive presence will not suffice. In order for learners to be actively involved in the learning process they first need to realize and accept that success in learning depends as much on the student as on the teacher. They share responsibility for the outcome. In other words success in learning very much depends on learners having a responsible attitude. Some degree of autonomy is essential for successful language learning. No matter how much they learn through lessons there is always much more that they need to learn by practice on their own. Also the changing needs of learners will require them to go back to learning several times when they will need to be able to study on their own. The best way to prepare them is to help them to become more autonomous. Effective and worthwhile learning may actually depend on the extent to which learners achieve autonomy (Little, 1991).
2.6.3 Strategies used by Good Language Learners

One important trend in the learner centered approach has been the emphasis on language learning strategies. As mentioned, learning strategies are used by learners to develop skills in the target language. The stress on individualization emphasizes the need for production of materials that are flexible and responsive to learners' needs and pace. The tasks are more open-ended in that learners are able to make sense of materials according to their capabilities. Learners therefore have to take more responsibility for their own learning through trial and error. This would mean less teacher mediation and interference and more self-directed learning leading to learner independence or autonomy. This results in a redefining of teacher roles i.e., the teacher no more explains or gives meaning. Learners search for their own meanings so that learning is meaningful to the individual learner.

The teaching involves getting to know the learners, finding out what they know, their misunderstandings and creating a context of learning which encourages learners to actively engage with the subject matter. In other words, to intervene with the objective of changing them. Learners need more structure at the beginning of a course and will develop the habit of independent learning later on. This type of learning involves more than mastering the content, designing sound learning experiences, knowing instructional techniques.

Learning grammar should be based on exploration of language in use. For example when they have completed a piece of written work it can be useful for learners to consider the errors they have made and ask themselves why they made them.
Getting learners to correct and edit their work can be highly beneficial. Learners should be always encouraged to make use of all the knowledge at their disposal. Making them aware of the fact that they have made mistakes in their writing, for example by giving them feedback, could go a long way in enabling autonomy and independence in language learning.

While Gagne's theoretical framework covers all aspects of learning, the focus of the theory is on intellectual skills. There are various ways that language learners can be successful. Rubin, (1975) identified the following strategies used by good language learners:

- Making reasoned guesses when not sure
- Making an effort to communicate and to learn through communication
- Finding strategies for overcoming inhibitions in target language interaction
- Practicing the language whenever possible
- Monitoring their speech and that of others
- Attending to form (i.e., grammar)
- Paying attention to meaning

The important thing to realize about this list is that good language learners do not necessarily use the same language strategies. Even if they use the same strategies, they may not use them for the same purposes nor in the same way. For example, one learner focuses on form only while reading and writing, while another does so while listening and speaking as well. While the first learner focuses on form in a...
global way, the second learner is far more analytical and pays attention to minute
details associated with the forms and rules associated with their use. Research on
strategies for effective language learning has focused on:

1) The identification, description, and classification of strategies
   (O’Malley & Chamot, 1990; Wenden & Rubin, 1987).

2) Their frequency of use and the learner’s success at using them;

3) Differences in language proficiency level, age, gender, and cultural
   background that might affect their successful use of strategies;
   (Gardner, Guilford and Sternberg, 1987)

4) The impact of language strategy training on student performance in
   language learning and language use.

As can be seen from above, whether the strategies that a given learner selects
are successful depends on many factors, including:

• Nature of the language task (its structure, purpose, and demands)
• Characteristics of the learner such as learning-style preferences
• Language-learning aptitude
• Prior experience with learning other foreign languages
• Motivation to learn this language, cultural background, age, and personality
  characteristics
• Language being learned
• Learner’s level of language proficiency

No single set of strategies will be appropriate for all learners or for all tasks.
Students need to learn. As teachers help these students learn how to succeed with
languages, they are at the same time giving them the tools to become better
learners. This implies that teachers themselves develop strategies appropriate to
their teaching-learning contexts in order to adapt teaching styles that encourage learner autonomy. This envisions a change in the role of teacher in facilitating learning.

2.7 Undifferentiated Cognitive Functioning in Writing

Harris (2000: x-xi) outlined three stages of literacy in human history - crypto-literacy or writing as an esoteric secret knowledge; the present stage of utilitarian literacy or writing as a practical tool; and an idealistic future stage of full literacy, when writing will be recognised as a mode of operation of the human mind and the key to a new concept of language, in a dimension beyond oral speech. Giroux's (1988) Nietzschean interpretation of critical thinking sees that "writing is more than a subject, it is a process that can be used to teach students a subject by allowing them to assume the same role as the writer who authors the books and texts that are used as learning sources" (Giroux, 1988: 65). Strachota's existential concept of writing was similar to Giroux's:

"Unless we go through the complexities of struggle and invention, our knowledge is empty. If this is true, I cannot transfer my knowledge and experience to children whom I teach. Instead I have to find ways to help children take responsibility for inventing their own understanding of the world and how to live in it."

Strachota, 1996: 5 quoted in Tomlinson, 1999

Pontecorvo and Sterponi (2002) saw the acquisition of higher cognitive skills like writing occurring as a result of the cultural and historical processes of socialisation, i.e. through education, and not naturally. Cosmides and Tooby (2000) refuted this belief, arguing from a neurological perspective, that the
human mind is permeated with content and organisation that did not originate in the social world but was placed in the mind by the process of natural selection.

Kellogg (1994) considered writing and thinking as twin forms of mental life, with writing offering insights into how writers think in diverse ways - creative, argumentative, analytical, reflective, etc. The production of a text in any particular genre required the invention and communication of ideas in unique ways, thus broadening the scope of thinking (Cushing Weigle, 2002). Writing strategies were considered to be closely interlinked with thinking and Oxford (1990), O'Malley and Chamot (1990) and McDonough (1995) discussed this interaction of language and thought in bringing about learner autonomy.

To guide learners into this high order cognitive functioning, Meyer (2005) presented an analytical framework to identify aspects of learner writing which were in need of being developed, from a linguistic as well as a cognitive perspective, in keeping with Vygotsky’s (1962) finding that thinking developed through language. Vygotsky outlined the developmental relationship between thinking and language as a continual movement back and forth between thought and word, in which, thought came into existence through words.

Flower (1979: 20) asserted that writing was more than a simple act of self-expression or communication. She identified Writer-Based prose as a style of writing as well as of thought and pointed out its basic difference from Reader-Based prose in that the former reflected the writer’s process, whereas the latter reflected its purpose. Both, Writer-Based prose and egocentric/inner speech,
described by Piaget (1955) and Vygotsky (1962) tended to reveal the underlying logic of thinking.

Emig (1977: 125) saw writing as an integrative tool for thinking with both hemispheres of the brain, enabling learners to discover and articulate ideas in unique ways. Similarly, Lipman (2003) asserted the multidimensionality of critical, creative and caring thinking as pertinent to education. Strategic and reflective thinking always involved a high degree of conscious will and emotion as well as cognition (Eliot, 2000). The integrated framework of thinking of Moseley et al (2005) (2.1- Strategic and Reflective Thinking: Cognitive Skills) combined the cognitive components from Bloom's taxonomy with a self-regulatory or metacognitive system including affective aspects such as emotional intelligence (Goleman, 1997), interpersonal and intrapersonal intelligences (H. Gardner, 1983).

<table>
<thead>
<tr>
<th>Information – gathering</th>
<th>Building understanding</th>
<th>Productive thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiencing, recognizing and recalling, Comprehending messages and recorded information</td>
<td>Development of meaning (e.g. by elaborating, representing or sharing ideas) Working with patterns and rules Concept formation Organizing ideas</td>
<td>Reasoning Understanding causal relationships Systematic enquiry Problem-solving Creative thinking</td>
</tr>
</tbody>
</table>

Fig. 2.1 Integrated Model for Understanding Thinking and Learning, Moseley et al (2005:314)
Arapoff (1970, 1984), Flower and Hayes (1980), Emig (1982) and White and Arndt (1991) found that writing actively engaged the brain in an independent and complex process of constructing a visible form out of the images stored and organized in the mind. While engaged in writing, the brain continually compared the outcome with the plans that existed in the mind, trying to find a match between "the actual" and "the planned" (Peacock, 1986: 25). Through writing, "ideas are explored, clarified, and reformulated and, as this process continues, new ideas suggest themselves and become assimilated in to the developing pattern of thought" (Zamel, 1983: 166). Arapoff (1965: 200) also saw writing as "... a purposeful selection and organization of experience. This selection and organization requires active thought ... The process of learning to write is, therefore, largely a process of learning to think more clearly."

Kozulin et al (2003) noted that writing assignments that allowed the mediation of intrapersonal dialogue or the logic of question and answer by interpersonal experience, improved synthetic and analytic modes of thinking. This enables learners to identify different methods of thinking and apply them to writing in the form of formulating logical questions, drawing inferences, extrapolating from data, problem-solving and making associations, as outlined by Moseley et al (2005) in Fig. (2.2) below:
<table>
<thead>
<tr>
<th>Area of Thinking</th>
<th>Prompts and questions</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information-gathering</td>
<td>Think about what you know already.</td>
<td>Indentify the person you will see to review your process and where and when this will take place</td>
</tr>
<tr>
<td></td>
<td>Have you done anything like this before?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What information has been given to you?</td>
<td></td>
</tr>
<tr>
<td>Building understanding</td>
<td>Put the problem into your own words.</td>
<td>Make changes suggested by your supervisor</td>
</tr>
<tr>
<td></td>
<td>What do you have to do?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What will the final outcome look like?</td>
<td></td>
</tr>
<tr>
<td>Productive thinking</td>
<td>Think of ways to tackle the problem.</td>
<td>Seek and actively use feedback and support from relevant sources to help you to meet targets.</td>
</tr>
<tr>
<td></td>
<td>What can you work out?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What other approaches might work?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can you think of other possibilities</td>
<td></td>
</tr>
<tr>
<td>Strategic management of thinking</td>
<td>Is this approach going to get you there?</td>
<td>Adapt your strategy to overcome difficulties and produce the quality of outcomes required.</td>
</tr>
<tr>
<td></td>
<td>Have you overcome difficulties like this before?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How good an answer will this be?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What ideas of thinking might you be able to use in the future?</td>
<td></td>
</tr>
<tr>
<td>Reflective thinking</td>
<td>Keep track on what you are doing.</td>
<td>Monitor and critically reflect on what you are learning and how you are learning, noting the choices you make and judging their effectiveness.</td>
</tr>
<tr>
<td></td>
<td>How is it going?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Did guessing the answers help at all?</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 2.2 Problem Solving: adapted from Moseley et al (2005: 317-18)
2.7.1 Thinking in Rhetorical Structures

Prior to the derivation of the organic relationship between writing and the cognitive problem-solving skills discussed above, the principles underlying instruction in LI composition were derived from those of analysing canonical literary texts. This came to be known as the traditional paradigm (Hairston, 1982), or the product approach (Kroll, 1991 cited in Ferris and Hedgecock, 1998). Underlying the traditional paradigm was the assumption that no one could really teach anyone else how to write because writing was a mysterious creative activity that could not be analysed or categorised (Hairston, 1982). According to this theory, competent writers were aware of content before they began thinking/writing, having only to find an appropriate form for it (Charney et al., 1995). However, this product-centred paradigm broke down under attack from Shaughnessy (1977), Emig (1971) and others who found it quite inadequate in diagnosing or remedying the problems in LI writing.

After the emergence of Teaching of English as a Second Language (TESL) in the late 1950s, existing LI approaches based on audiolingualism, contrastive linguistics and behaviourism were extended to teaching L2 writing (Rivers, 1969; Ferris and Hedgecock, 1998; Tate et al., 2001). Gradually, however, writing came to be seen as a “problem of metacognition and metalinguistic awareness”. Lee (2002) and Harklau (2002) found that the explicit teaching of coherence-creating devices helped in directing L2 learner attention to the discourse level of academic texts during revision. McCormick (1994) feared that any definition of good writing
might encourage learners to imitate model sources, thus precluding originality. Others like Graff (1980) and McDevitt (1989) stressed the need to teach the skill.

Good writing i.e. progress in thinking, however, did not depend on syntactic complexity and grammatical accuracy alone (Hyland, 2003). McDonough (1981) suggested that students should be challenged with difficult assignments at each level of the prescribed flow from guided to free writing, in order to raise cognitive performance. Hyland (2003: 4) noted the role of sentence/paragraph-level teaching techniques in "building vocabulary, scaffolding writing development, and increasing the confidence of novice writers".

2.7.2 Intellectual Processes of Writing

Lauer (1982) highlighted the emerging contention between teaching writing as a basic literacy skill and teaching writing as an inquiry skill or the power to develop insight, to formulate and solve problems, and to go beyond the known. This form of epistemic writing began when learners raised meaningful questions about their own world (Flower and Hayes, 1977). Then, they derived motivation for writing, their writing became valuable to them, and thus worth sharing with readers. According to Grabe and Kaplan (1996), learners are creative hypothesis generators developing their cognitive processes through writing. Expressivists like Elbow (1973) viewed composing as a creative act in which fluency and "voice" (Elbow, 1981) were valued for their role in empowering the inner writer. Flower and Hayes (1981) cognitive process model, while refuting the earlier linear stage-process
model (pre-writing, writing and re-writing), still favored a generalized
cognitive model consisting of many sub-processes.

Throughout the writing process, the monitor functioned as a "writing strategist" (Flower and Hayes, 1981: 374) checking on current process and progress and determining movement between processes. Raimes (1987) urged the need to teach L2 learners a repertoire of strategies for revising and rewriting compositions rather than merely editing vocabulary and grammar at a surface level.

It was thus, that individual differences between ESL learners first began to be visible through the degree of learner interaction with the written text. Sasaki (2000) found that before writing, expert writers spent a longer time planning a detailed overall organization, whereas novices spent a shorter time making a less global plan. Once they completed the plan, experts did not pause to think as frequently as novice writers did, and they wrote a longer text with more complex development, at greater speed than novices did.

2.7.3 Writing as Social Thinking

The 1970s split between expressivism (the autonomous mind) and constructivism (mind as a product of social discourse) took place over whether to see writing as a product of the mind or as the product of an external discourse. Elbow (1973, 2000) demonstrated how to improve one's judgment and influence readers with words through frequent free writing in an entirely teacher-less writing class, "where there is learning but no teaching", the basic idea being that it is "possible to learn something and not be taught" (Elbow, 1973: ix). Mohan's (1979) content-based
approach to writing considered the making of personal meaning unsuitable for achieving communicative ends, because processes which involved solely "the cognitive relationship between the writer and the writer's internal world" (Swales, 1987: 63) could not sufficiently take reader expectations into account.

Rubin's (1975) insightful view was that any learning model that predicted language learning on the basis of inputs alone, without regard to the selective processing of these inputs by the learner, would not work. The ESL writing course was made an adjunct to various other disciplines to train learners in "the language of thinking processes and the structure or shape of content" (Mohan, 1986: 18). Writing across the curriculum (WATC) saw the emergence of subject- and language-integrative models throughout the curriculum (Herrington, 1981). WATC advocated exploratory writing as a means of thinking in diverse disciplines as well as of learning to communicate in the classroom, to prevent secondary school writing being reduced to the mere examination function (Wyse et al, 2001). Learning to write was thus, contrasted with writing to learn (Allison, 1986).

2.7.4 Mental Processes and Social Products

The product and process dichotomy essentially centred on the issue of what constituted "real" writing (Raimes, 1991: 414ff) - writing for learning (process focus) or writing for examinations (product focus). The strategies and purposes of each were distinct. But the question was not so much whether the discourse community was more important or the individual writer - but that both kinds of writing were necessary for ESL writers who had to write in many different
contexts. Flowerdew (2000) noted similarities between genre and product approaches, both regarding writing as predominantly linguistic. (Crick, 2003: 256) tried to resolve the expressivist/constructivist debate by seeing "the art of writing as the objective product of experience given form through a medium of communication". Dewey's (1934) philosophy (cited in Crick, 2003) rejected the idea of language as the reflection of a pre-given mind located in a specific time and place and suggested instead, that experience acquired form and meaning only through, ongoing practice of artistic expression, reflection, revision and communication in the act of writing. Dewey's pragmatic concept of mind, thus, integrated both individual experience and social communication.

Berkenkotter's (1981) studies showed that experienced writers were able to decentralise from their own perceptions of reality in order to consider the needs of the reader, whereas inexperienced writers lacked the procedural knowledge to do this. This was largely because they wrote for a single reader - the teacher. Hence, Berkenkotter (1981: 396) suggested presenting students with realistic writing problems that required them to develop strategies transforming unorganised data into a coherent network of ideas, meeting the informational needs of a specific audience in order to create a purposeful communication.

In Kumamoto's (2002) post-modernist perspective, inhabiting any discourse community, were an implied writer and implied reader within oneself, both retrieved from lived experiences and brought into being during one's act of writing. Bakhtin (1970) cited in Kumamoto (2002), evoked a similarly autonomous symbolic self in the writer, whose "creative understanding" (2002: 84-
of another culture and of oneself arose out of the capacity to be simultaneously located within and outside that culture, thus seeing it from a different perspective and redefining oneself against it. Dysthe (1996) pointed out that opinions, ideas and authentic questions arose, only if a great diversity of voices were heard during classroom interaction. Being validated as thinkers, helped learners to find a valid purpose for writing. Fulkerson (2005), however, found it problematic whether good writing should teach students to become successful insiders of the academic discourse community, or articulate and critical outsiders, or simply to know themselves.

The preceding discussion constructed thinking as a holistic process and an inner counterpart of writing. The types of thinking mentioned so far discovery, strategic, reflective, analytical, etc. only covered one dimension of the phenomenon. In other words, the concept of a generalized learner is an oversimplification. Hence, to force the learner to think in any one of the traditional models of thinking discussed so far might even inhibit writing, if it did not match with the individual's own thinking pattern. The subsequent discussion tries to explore individual differences in learners and how this affected language processing.

2.8 Individual Differences in L2 Learners

Ferris and Hedgecock (1998) did not believe in the existence of a generalised ESL student. Real student populations were heterogeneous in linguistic, cultural and ethnic backgrounds, language proficiency, literacy and cognitive development. They also varied in their aptitude, attitude, anxiety, age, academic goals,
motivation levels towards the target L2, cognitive and metacognitive use of strategies and language awareness. Research in individual differences contributed enormously in identifying, categorising and working with these multiple learner variables and measuring their effects on proficiency, achievement and progress rate of L2 learners. But such research concentrated mainly on the difference between L1 and L2 learners (Ferris and Hedgcock, 1998).

The recognition of the complexity of composing, of the cultural diversity of learner needs, of learner processes in writing, and finally, of the value of "a teacher's sense of plausibility about teaching" (Prabhu, 1990), were prominent features of the emergent trends of writing. Bolitho et al (2003) believed language awareness to be identical with cultural awareness, and that one could not exist without the other. Fulkerson (2005) expressed the focal concern that devaluing social culture could lead to writer's block in the marginal learner. Bax (2003) also voiced the need for a more eclectic and contextualised ESL approach with awareness and understanding of individual students and their learning needs, styles and strategies, and also of local conditions like the classroom, school and national culture.

Learner diversity continued to be seen as an essential component of any writing approach, and scholars Hesse (2005) believed that all writing was profoundly contextualised. Yet, cultural studies focussing on justice to marginal learners actually seemed to be confined to journals of criticism and had almost no existence in the composition classroom. In reality, bi-dialectical and bicultural
pedagogies were believed to limit the range of student performance in the writing classroom (Wible, 2006).

Wyatt-Smith and Murphy (2001) focused on the use of tasks that drew upon cultural heritage to develop individual writer voices. Grainger et al (2003) pointed out the importance of learners' voices expressing their need for autonomy and choice, in the absence of which, positive perceptions of writing could diminish with increasing difficulty levels. Holmes and Moulton (1995) outlined academic writing programmes where students set their own writing tasks, practiced framing questions in their content subject areas and answering them, which helped to build learner confidence and improved both quality and quantity of writing. Grainger (2005) advocated the framing of writing assignments taking learner-diversity into account, through the use of alternative reference materials and information sources.

Shaw and Liu's (1998) counts of register features revealed differences in writing proficiency of learners in both, surface features like vocabulary, and fundamental characteristics like acceptance of academic style, use of appropriate register and sensitivity to genre. Nunes (2004) stated that the use of portfolios and diaries (consisting of self-assessed work, revised and edited writing, student reflections and project-work) in the language classroom helped to diagnose individual learner skills, competencies, preferences, styles, dispositions and learning strategies and thus contributed towards learner autonomy.
2.8.1 Different Ways of Learning to Write

Murphy (2003) pointed out that the learner differences discussed in the previous section were taken into account in task-based learning, including the ways in which individual learners interacted with tasks in the classroom environment. Cameron (1997) saw tasks as a means of identifying the language-learning potential in core activities, while Willis and Willis (2007) suggested Task-Based Teaching (TBT) as a means of dealing with individual differences through mixed-ability group work on meaning-focused tasks, enabling learners to engage with the task within their own capabilities and also giving opportunities for peer learning. Brown (2002) agreed that task-based techniques provided the solution to learner differences and his post-methods criteria for TBT techniques represented intrinsic motivation in language learning.

Hyland (2003) stated that language tasks provided a learning environment that both, encouraged writing, and developed an understanding of how language was used for communicative purposes. He distinguished between "real-world tasks, based directly on a learner's communicative goals" and "pedagogic tasks, designed to develop their genre knowledge and composing skills" (Hyland, 2003: 113). Ellis (2003a: 64) however, defined a task as "a work plan that requires learners to process language pragmatically in order to achieve an outcome that can be evaluated in terms of content (rather than language)". He also thought it necessary to integrate a form focus into syllabus design, including focused and unfocused tasks.
Proponents of task methods from Prabhu (1987) to Willis (2007) stressed the need to motivate spontaneous task engagement by providing a reasonable challenge. Prabhu categorised tasks as reasoning-gap, information-gap and opinion-gap activities, involving the linguistic negotiation of meaning while working towards an overtly non-linguistic goal (1987: 46ff). Willis and Willis (2007) combined the form and meaning focuses in planning task outcomes. Littlewood (2004) cited a continuum of task definitions from focus on form and structured communication to focus on meaning and authentic communication, according to the degree of learner involvement elicited by the task activity.

Hyland (2003: 130) asserted the need for all writers, regardless of their proficiency in English, to develop strategies and skills for writing fluently and independently through skill-using tasks such as composing heuristics and extended writing. These tasks provided support in learning strategies for generating content, drafting, rewriting, editing and polishing texts, and held fluency as their target, following Nunan's (1989: 48) basic outline of writing task components:

- **Input**: a text, film, dialogue, graphic, lyrics, etc. provided by materials for students to work on

- **Goals**: learning objective of the task, the immediate payoff of the activity related to overall goals

- **Settings**: the classroom arrangements implied in the task

- **Roles**: the parts teachers and learners play in task execution and the relationships between them
Activities: what the learners do with the input to accomplish the task

Reid and Kroll's (1995) extensive guidelines helped to contextualize and authenticize task design for the classroom, engaging both teacher and learners. Task authenticity aimed at ensuring learner engagement, helping teachers to know their learners as individuals and in planning language activities accordingly. But materials formulated for task-based teaching of writing (Hyland, 2003; Ellis, 2003b) continued to be graded according to their progress from promoting guided writing to enabling free writing. As yet, tasks were not categorised according to the learner differences they catered to. Learner differences too, were only considered along a linear continuum of ability.

Hyland, in his discussion of authentic materials for teaching writing, mentioned stimulus materials in the shape of readings, audio, visual and electronic materials, and realia like lego bricks and kitform models, in order to "encourage divergent and original writing" (2003: 91); but he still stressed text readings for "stimulating interest in a writing topic or activating students" prior content-knowledge and experience as a basis for writing" (Hyland, 2003: 91-92). Jane Arnold (1999) discussed the visual, auditory, kinesthetic, etc. imagery involved in vocabulary, suggesting the diversification of classroom activity by supplementing the textbook with music and other stimuli to promote individual learner engagement.

Widdowson (1984) stressed the need for developing a spirit of enquiry among teachers in order to enable them to incorporate action research into their role, and
make them aware of how writing techniques related to theoretical principles. Whether the teacher had an objectivist conception of learning (teaching as telling) or a constructivist one (learners construct knowledge and meaning) would affect student thinking as well (Katznelson et al. 2001) noted that students in alternative writing courses like those discussed below, improved in coherence and content of their writing and developed in self confidence as well.

Performance studies or students' enactments of their own writing, embodying writing through voice, gesture, and movement in public-speaking, debate, drama, etc. helped learners to empathise with and write realistically in the guise of created personae (Fishman et al., 2005). Writing and enacting play-scripts enabled underachieves in school to discover a linguistic competence not displayed in other contexts (Mayer, 2007). Dyson (2003) traced the incorporation of popular music, cartoons, video games, football, etc. into the writing activity of children, where these enhanced literacy by contextualizing childhood culture in their writing. Poetry, song and drama came to be seen as valuable inputs in varying the medium of L2 teaching and encouraging creative use of language.

Elbow (2006) tried to solve the temporal problem of form or textual organisation by writers, in spatial terms. Jacobs recommended "quickwriting" (1986: 282) to help learners generate content without worrying about form. Liebman-Kleine (1987) found a strong correlation between learner personality-types and their invention preferences. Matsuda (1998) examined the relationship between probability thinking and writing, finding that when such writing moved to the higher generalising and relating levels, learners developed a more complementary
relationship between their writing symbols and their attendant mathematical symbols. Students who could not mentally relate verbal and visual information were unable to solve higher-level probability problems.

Peter Wilson (2001) considered the possibility of an interchange in mental representation between written and visual symbols in creative invention. Jacobs (2007) used comics as complex multimodal -texts, engaging students in multiple literacies of linguistic, audio, visual, gestural and spatial conventions and helping in the construction of meaning in the classroom and beyond.

Apart from helping the physically challenged, digital-text technology, text-to-speech technology, cognitive-organisational technology, electronic-reference technology, speech- or voice-recognition technology and alternative-writing technology assisted learners with the complex mechanical and organizational tasks of writing, and in building their confidence (Barbetta and Spears-Bunton, 2007). Piper (1987) also found that using word-processors motivated learners to write more and better and facilitated group work. Hyland (2003) pointed out the impact of Computer Assisted Language Learning (CALL) in writing instruction and feedback.

DeVoss et al (2005) introduced the visual rhetorics of multimedia writing, as writing with multiple sign systems became the mode within digital environments. Here, products had to be considered before processes. As soon as the software was launched and interface expanded, writers began considering the material and rhetorical realities through which their final products would be viewed. The task of
composing (thinking, imagining, creating) had to be consistent with existing standards and practices in non-linguistic semiotic resources like image, colour, animated movement, gesture, writing, sound-effect, speech, etc. (Jewitt, 2006).

George's "pedagogy of multiliteracies" (2002, 13) complemented the multimodal approach with the heuristic activity framework, intricately relating the linguistic to the audio-visual and gestural meanings in composition courses for young learners, and bringing into relief the multiple dimensions of multimodal communication. Against the divide assigning the visual to low culture and words to high, George stated, "For students who have grown up in a technology-saturated and an image-rich culture, questions of communication and composition absolutely will include the visual, not as attendant to the verbal but as complex communication intricately related to the world around them" (2002, 32). Donald and Christine McQuade (1999) felt that "Learning to see well helps students write well". In multimedia projects by Wyatt-Smith and Kimber (2005), students created multimedia programs such as Hyper Studio, Kid Pix, and Netscape Composer, becoming authors of multimedia content in the process of writing notes and creating pictures, video clips, recordings and other media raw material for their final product.

According to Hamel (2004) and Ferris and Hedgecock (1998), the advantages of computer-assisted writing instruction were that:

1. It increases learner motivation, the process of revision being much easier.

2. Writing becomes easier, more interesting and enjoyable at higher motivation levels.
3. The learner has greater consciousness of writing as a process.

4. Writing becomes less self-conscious with the intervention of the machine, hence quicker and much more fluent.

5. The quantity of writing increases due to the ease of the process.

6. The computer lab promotes more collaboration between learners and between teacher and learners.

Going beyond linear text to meet the requirements of this novel multi-dimensional interpretation of writing, called for smaller groups of writers working collaboratively or cooperatively. Working in groups also facilitated a more dynamic infrastructure for teacher and peer feedback to reconcile individual differences.

2.8.2 Integrating Differences

"In cooperative learning, all can succeed because each has something unique to contribute to the enterprise" (Rivers, 1983). Cooperative learning implied the participation of peer group and teacher in various combinations like small group activity, large group instruction, paired interaction, or even individual writing. Individual Differences (ID) in intelligence, aptitude, cognitive style, personality and behavioural strategies were reconciled according to the degree in which they affected group learning, when determining group composition and diagnosing functional problems (Dornyei, 2005). However, ID were seen as the result of external pressures from parents, school, etc. rather than innate tendencies.

Ferris (2003) traced the emergence of peer feedback, teacher-student conferencing and other collaborative approaches to the 1990s. The psychology
behind the group organization in a L2 writing class derived from basic group
dynamics that determined the attitudes, values and behaviours of the individual.
Hence, one of the critical functions of the group was to serve the emotional needs
of its members. Following this, group discussions in a learner-centred classroom,
conducted in a democratic atmosphere, usually facilitated the expression of
minority opinions. The need of the individual to conform to the group could be
harnessed by the teacher to reduce ID within the group (White, 1977). For instance,
group competition, unlike individual competition, promoted cooperation within
the group. Hence, in order to determine realistic goals, it was necessary for the
teacher to find out the strengths and weaknesses of individuals affecting group
functioning. If a group functioned well on a social level, it could then sustain
the integrative motivation to learn.

Teachers had to assign task relevant roles (leader, assistant, etc.) to each member
and also keep experimenting to find the optimal size of a functional group (Hall,
2002). Domyei and Murphey (2003) pointed out the importance of leadership
and individual group-member roles, the relationship between individual and group
goals, the development of group norms and other aspects of group dynamics for the
bonding of small groups into a functional equilibrium. Also, the difficulty level of
the task had to be challenging enough to make this cohesion effectively
productive. Group and collaborative writing destroyed the myth of solitary writers
and helped to overcome the problem of large classes (Durham, 2004).

Lipstein and Renninger (2007) stressed the importance of extensive teacher and peer
feedback to generate ideas about content and structure as well as in text-level
revision. Feedback is "what pushes the writer through the various drafts and onto the eventual end-product" (Keh, 1990: 294). Mitchell and Taylor (1979: 250) said that "Writing is a means of acting upon a receiver. Its success will be judged by the audience's reaction." Their audience-response model admitted the influence of individual cognitive styles and emotional complexities on the writing process. Porto (2001) also promoted negotiation between students through Cooperative writing-response groups and self-evaluation which brought in reader awareness and led to consciousness about the writing process. The students were directed to:

- Write down what they think is the main point.
- Answer the question: 'What does the author say that is important?'
- Comment on something they learnt from the piece of writing
- Write down one idea/view they like and tell the writer why they like it.
- Write down one idea/view they disagree with and offer the writer an alternative perspective.
- Ask the writer to reread the confusing parts, ask questions for clarification, give opinions and examples, make suggestions for improvement in content, etc.
- Tell the author the audience responses in turn, to be taken down.

(Porto, 2001:42)

Cooperative learning experiences stimulated learners to take increased responsibility for their progress by raising their own learning goals and writing
standards and promoted higher achievement than competitive or individualistic ones by encouraging positive goal interdependence, promotive interaction, low anxiety levels, higher order critical thinking skills, increased achievement incentive, epistemic curiosity, commitment, task persistence and continuing intrinsic motivation (Hansen and Liu, 2005).

For effective peer feedback, students needed to be trained in turn-taking behaviour, language form of feedback, etc. (McGarrell and Verbeem, 2007). Hyland (2003) suggested that group work needed to have clearly defined goals in order to promote negotiation of meaning, and peer teaching and feedback could only become effective motivators, provided that teacher guidelines were present to support these activities (Spratt and Leung, 2000). Van Keer (2004) proved the greater efficacy of peer tutoring than explicit teacher instruction in learning strategy. The written dialogue between learner and teacher in self-monitoring creates Reader-based prose, helping the teacher to understand, diagnose and monitor the learner's intentions, problems and progress. Qi and Lapkin (2001) stressed this importance of "noticing" as a cognitive process when learners compared their first drafts with reformulated and improved versions at later stages. Cresswell (2000) provided self-monitoring frameworks to raise learner awareness of process and product.

Error correction in L2 writing class helped students to improve their accuracy with students showing a heavier reliance on form feedback. Though, error feedback did not need to be explicit criticism, mitigated by praise, and the use of hedging devices often led to misdirection and miscommunication (Chandler, 2003). Student opinion was often the best guide to the form of feedback preferred (Hyland, 2003).
Teacher-student conferencing worked well with students with an auditory rather than a visual learning style, but culture-based differences also had to be taken into account. Ferris and Hedgcock (1998: 135) outlined four forms of teacher feedback:

1. Asking for further information

2. Giving directions, suggestions or requests for revision

3. Giving the student new information that will help him or her revise

4. Giving positive feedback about what the student has done well

Dillon (1993) defined collaborative authoring or writing as activities involving the production of a document by more than one author, establishing a goal of the collaboration effort, identifying writing tasks and dividing those tasks among group members, tracking individual idea generation, defining rules for document management, identifying roles for group members, communicating ideas, and managing time as well as conflict. Moore Howard (2001) categorised collaboration into two types: dialogic and hierarchic. Rimmershaw (1992) identified three coordination strategies for group writing: parallel, sequential, and reciprocal. The key issues in both methods were the division of the task into sub-tasks, their completion, and learner-coordination strategies.

Fine (1989: 1) described collaborative or paired writing as the "key to unlocking the silences of children" or a tool to activate children's multiple voices by targeting writing tasks within the zone of proximal development of both members of the
group. The method provided a structure to support interactive behaviours through all stages of the writing process (Sutherland and Topping, 1999) and helped to counterbalance the traditional focus on mechanics and the final product. The process was expected to lead to individual writing later on for both participants (Storch, 2005). However, one drawback noticed was that while some students preferred not to write in collaboration - some kinds of collaboration also failed to prepare learners for ultimate individual writing.

### 2.9 Emergence of Differentiated Cognitive Functioning

Throughout the nineteenth century, the findings of Alfred Binet, the French psychologist, dominated all ideas regarding human ability or intelligence and its measurement. Intelligence tests and their product, the construct of individual IQ, focused on measuring mental abilities such as vocabulary, comprehension, memory and problem-solving. Intelligence was supposed to be a genetically inherited ability, not modifiable, and covering numerical, logical, linguistic and spatial abilities under a generalized intelligence measure or *g*

The IQ test became a general indication of how a person would function in all cognitive spheres.

Gradually, however, 'g' came to be considered a wrong predictor of future and real life ability, as this test predicted general success or failure in all subjects. There was severe criticism of the limiting effects of 'g' on learner psychology and its inability to describe learner abilities and differences (Shorrocks, 1991). The requirement of a measure of aptitude that remained undetected by 'g' was strongly
felt. Guilford, Cronbach, Snow and Sternberg, as discussed below, argued that intelligence was better conceived of as a set of possibly independent factors.

Guilford's (1967) Structure of Intellect (SI) theory traced an individual's performance in intelligence tests to 180 different intellectual abilities organized along three dimensions - operations, contents and products. Sternberg (1977) tried to correct the narrow understanding of intelligence as seen in people who were 'school smart' or 'book smart' which excluded those who scored poorly in intelligence tests but were creative or 'street smart' and thereby had the ability to adapt to their environment. Steinberg (1977) saw creativity and adaptability as the two other parts of intelligence in his Triarchic Theory of Intelligence which included:

1. Analytical intelligence or the ability to complete well-defined academic and problem-solving tasks of the type presented in traditional intelligence tests, usually having only one correct answer.

2. Creative intelligence or the ability to successfully deal with new and unusual situations by drawing on existing knowledge and skills.

3. Practical intelligence or the ability to adapt to everyday life.

Cronbach's and Snow's research, however, set the stage for learning orientation research which tried to reveal the dominant power of emotions and intentions (no longer demoted to a secondary role) on guiding and managing cognitive processes. In the 1980s, research on individual differences in cognition looked for a 'whole-
person view of learning, where the joint functioning of cognitive, conative and affective processes were taken into account in the study of individual difference, the idea being to fit realistic aspects of mental life, such as mood, emotion, impulse, desire, volition and purposive striving into instructional models.

According to Cronbach (1975), treatments could be designed, not to fit the average learner, but to fit groups of students with particular aptitude patterns. He conclusively proved that learning outcomes were better when the instructor's presentation adapted to the student's cognitive aptitude and personality. Eventually, the new aptitudes discovered in such studies evolved into cognitive (learning) styles to represent the predominant modes of information processing or the preferred learning sets for the acquisition, retention, and retrieval of new knowledge.

2.9.1 Howard Gardner's Theory of Multiple Intelligences

Findings from fields as disparate as artificial intelligence, developmental psychology, and neurology (neuro-imaging and neuro-scanning) confirmed the belief that the mind consisted of several independent modules or "intelligences." Arising out of these, Gardner's (1983) Theory of Multiple Intelligences (MI) posited a pluralization of intelligences that entered into the human intellectual configuration. Gardner's MI theory ushered in a new perspective on intelligence not measured by traditional IQ tests. Gardner conceptualized intelligence as "a biophysical potential to process information that can be activated in a cultural
Intelligences did have a biological existence according to Gardner's (1983) analyses and reasoning, later borne out in a range of independent neurological and psychological studies recorded by Gazzaniga (2000). These results corroborated that during brain damage; one or more ability might be destroyed or spared, in isolation from other abilities, indicating a biological origin of each problem-solving skill. This was also proved by the existence of persons who were exceptionally talented in art, music, literature, mathematics or science, thus showing the tremendous development of intelligence. At the other end of the scale, there were idiot-savants who showed specialized development of an intelligence but sub normal abilities otherwise.

These findings had correspondingly wide implications in pedagogical psychology. Emerging out of Gardner's work on children and brain damaged adults were the conclusions that:

- people had a wide range of capabilities;
- strength in one area of performance did not predict any comparable strengths in other areas;
- weakness in one area of performance did not predict either success or failure in most other cognitive tasks;
- while some children were good at many things, others were good at very
few;

- but in most cases, strengths were distributed in a skewed fashion.

(Adapted from Gardner, 1999b: 28ff)

Out of a systematic five-year analysis (Project on Human Potential funded by the Bernard Van Leer Foundation in 1979) of studies in biology, anthropology, history, philosophy, psychology, neurobiology and genetics, Gardner (1983: 63ff, 1999b: 36ff) formulated eight parameters to determine what could count as an intelligence:

1. potential of isolation by brain damage

2. evolutionary history and plausibility

3. identifiable core set of operations

4. Susceptibility to encoding in a symbol system, e.g. oral and written language, numbers, drawings, musical notations, etc.

5. distinct development history and a definable set of expert end-state performances

6. existence of idiot-savants, prodigies and other exceptional people

7. support from experimental psychological tasks

8. support from psychometric findings
With the help of the above criteria, Gardner typified eight intelligences, each of them "an ability to solve problems and to fashion products" (Gardner, 1993a:7):

1. Verbal-linguistic - indicating the ability to enjoy and cope with the intricacies of anything dealing with vocabulary, grammar, literature and the other aspects of language.

2. Logical-mathematical - those possessing this in a greater degree enjoyed solving logical conundrums and mathematical puzzles and manipulating numbers.

3. Visual-spatial - indicating the presence of a strong sense of space, direction, shape, colour, etc.

4. Musical-rhythmic - singers, musicians, poets, etc. possessed this keen awareness of pitch, tone, rhythm and balance.

5. Physical-kinesthetic - an ability to manoeuvre the body or other things skilfully, with a great deal of precision, skill, stamina and balance.

6. Interpersonal - possessed by those who were sensitive to social nuances, the exigencies of a situation or the needs of fellow beings. They were able to adjust with different kinds of people and make friends easily.

7. Intrapersonal - indicating self-knowledge, self-discipline and an ability to find strength within oneself and make decisions alone.

8. Naturalistic - people with a strong awareness of nature, its flora and
fauna, ecological issues and the need to conserve natural resources were said to possess this intelligence.

9. Gardner (1999b, 2004a) wrote of the Existential Intelligence as typified by the need to explore metaphysical concepts and query into life, death, etc. But this intelligence has only been marginally included in this study, as being outside the normal scope of classroom language-learning activity.

Since the inception of MI theory, some scholars of cognitive psychology questioned its scientific status, but in practical application, it elicited tremendous and all round success. Gardner (1993a) did not base his theory on IQ testing and statistical analyses of the results. But the eight criteria used to identify the intelligences were derived from comprehensive and systematic review of empirical data from studies in biology, neuropsychology, developmental psychology, and cultural anthropology. Over twenty years of knowledge accumulation in brain science and genetics since its inception, has established MI theory today as multiple, human cognitive functioning in diverse real life situations (Gardner, 2003).

MI theory is also substantiated by the cognitive functions of special populations exhibiting differentiated profiles of specific abilities, including those with brain injury as well as prodigies and savants. Crucially, MI theory described the diverse abilities required to succeed in different professions and explained various learning profiles that teachers encountered on a daily basis (Eisner, 2004). Factors of MI theory significant for remediating instructional methods asserted that:

- Every human being possesses all the intelligences in varying
degrees of development

- Intelligences are not static: they may be developed or may wane with neglect.

- Intelligences seldom act alone - they often interact or act together in groups

- Intelligence is not a unitary phenomenon but may manifest itself in different ways - a person with high Musical-rhythmic Intelligence in singing, may not be able to play instruments equally well.

(Gardner, 1999b: 79ff)

Acknowledging that people had different cognitive strengths and contrasting cognitive styles, Gardner also introduced the concept of an individual-centered school of the future, under Harvard Project Zero, extending pragmatic measuring of intelligence into the framing of an MI curriculum (Gardner, 1993a). This would counter curricular aspects that acted as gate-keepers to exclude those who could not be predicted to do well in the system and instead, gradually adapt the curriculum to suit learner requirements. An MI curriculum would thus, replace the earlier intelligence-test dominated curriculum. It was reasonable to think of such human specialization because the total body of human knowledge accumulated till the present far surpasses the possibility of any individual's cognitively mastering the whole.

Gardner warned against forcing the development of intelligence at the cost of the others. An MI school would instead, enable an individual to consciously specialise
in a particular domain or elective, encouraging a "configuration" of individual
talents (Gardner, 1993a: 70ff). The MI curriculum would be differentiated into
subject areas based on intelligence domains, teaching through a plethora of modes
and inputs: "Now that we know something about teaching styles, learning
styles, and individual intelligences, it is simply inexcusable to insist that all
students learn the same thing in the same way" (Gardner, 1993a: 73).

2.9.2 MI Perspectives of Thinking and Learning

To discover how individuals differed in their thinking configurations, one had to
noted that neural networks underlying the different intelligence domains of MI
have been proved by neuro-imaging to overlap, so that each node in these
networks communicated with other nodes of the network and with other networks.
This enabled configurations of different intelligences as "... biophysical potential
that ... can be realized to a greater or lesser extent as a consequence of the
experiential, cultural, and motivational factors that affect a person" (Gardner,
1999b: 82). For example, a human being could use language to instruct oneself
to move attention to a new location, and when tasks required both language and
spatial attention, both networks were activated. Exact calculation of numerical
quantity brought in language networks as well. If a visual digit was spelled out,
making a word, then it activated left-occipital areas that were also activated by non-
numerical words.
Das et al (1996) also discussed this multimodal character of information processing (visual, auditory, tactile, etc.) or perception when attending to an event, when all the available information pertaining to the event was integrated by simultaneously stimulating different sensory systems. Thus, a combination of sensory and logical sequencing functions, including memory, language, attention and motivation "not only stimulates active consumption of classroom material but also enhances understanding of the material" (Gardner, 1999b: 169).

Gardner (1993c: 138ff, 1999a: 202ff) suggested the "pluralisation" of the inquiry paradigm into multiple representations of a core set of disciplinary ideas as well as multiple entry points to understanding: narrational, logical, quantitative, foundational/existential, aesthetic, experiential, hands-on and collaborative.

Carroll (1964) and Wertsch (1991) had found that thinking did not always occur in linguistic symbols, as many intellectual problems could be solved without linguistic codes and not all knowledge concepts were linguistically coded. Gardner (1980) traced the common graphic origins of writing and drawing in symbolic scribbles by toddlers, gradually evolving into the geometry and symmetry of form. By the age of three, a child increasingly integrated linguistic play and modal play with perceiving, feeling and making systems, thus enabling interaction with the world via the realm of symbols from drawing, language and music.

Gardner (1982: 57) explored the different psychological processes involved in dealing with symbol systems of varying degrees of "notationality" (i.e. satisfying different syntactic and semantic criteria) and the different cerebral regions processing notational (left brain), partially notational and non-notational (right
brain) symbol systems. All motor activity was usually accompanied by various stages of semi-linguistic and verbal prattle as feelings, percepts and action became manifest in symbolic vehicles (Gardner, 1994; Gardner et al, 1996). This supplementary verbal commentary served as a supportive framework for further action, as knowing proceeded from the sensorimotor into the symbolic level or from the mimetic into the transformative along multiple dimensions (Gardner, 1995).

Cognitive approaches following Piaget and Bruner had also focused on the intellectual significance of competent symbol-use as evidence of mental growth. Gardner's (1982: 117ff, 1989) complementary affective approach, following personality-psychology and psychoanalysis, looked at the role played by symbols in a learner's emotional life. He found tremendous difference in the intellectual and affective use of symbols made by individual learners in literature, music and the visual arts, categorising learners as verbalizers (dramatists), visualisers (patterners), self-starters, completers, person-centred or object-centred. Gardner (1982, 1989, 1995) thus, revealed the differences within a particular Piagetian level of development in thinking, as proved by the individual and multifaceted use of symbols. Individual differences in the stages of intellectual and affective growth of a child were located in four transformation milestones labelled decontextualization, object-substitution, self-other transformation and collective symbolization.

Whereas, for Piaget (1973), knowledge was a construct of the mind in interaction with its environment, Chomsky (1957, 1965) believed in intellectual faculties like language being inborn properties of the mind. Chomsky (1976: 2) asserted that
universal grammar was "an underlying biological matrix that provides a framework within which the growth of language proceeds". The semantic level of comprehension corresponded to the deep structure of language while the physical features of aurally or visually presented words corresponded to its surface structure.

Gardner (1982) critiqued this historic debate on the nature of thought and language, by pointing out that though Piaget's theory offered an exploratory description of human intelligence, this applied equivalently to all individuals and took no notice of the heights of creative thought; and that Chomsky's pre-existent blueprint of the creative genius of human language left little room for the creation of genuinely original ideas and concepts.

On the contrary, extraordinary knowledge and skills in varied professional genres like arts, sciences, journalism and genetics developed towards prototypes Gardner called Master (Mozart), Maker (Freud), Influencer (Mahatma Gandhi) and Introspector (Virginia Woolf), illustrating unique individualised patterns of perceiving, thinking, belief-making, imagining and feeling (Gardner, 1993b, 1994, 1997; Gardner et al., 2001). As a significant derivation from cognitive and affective functioning, Gardner (1993b: 359) found a convergence between extraordinary intellectual capacity and ethical concern, which he considered the crying need of modern civilization in the ongoing dialectic among talented individuals, domains of expertise (processes) and fields charged with judging the quality of their creations (products).

Eide and Eide (2004) also found that the brains of gifted thinkers were remarkably intense and diffuse metabolisers, requiring the coordination of diverse visual,
spatial, verbal, sensory and affective areas and showing great organization of multimodal information. The creating mind developed new ideas, concepts, stories, theories and skills, demonstrating that these were desirable and indispensable (Gardner, 2005). Each intelligence had a different developmental trajectory and different core processing operations (Gardner, 1993a, 1999b). To prevent students from engaging only in lower order thinking, the Revised Bloom's Taxonomy of educational objectives in the cognitive domain (RBT/MI) enabled higher order thinking and problem-solving in areas of intellectual strength at levels from simple to complex thinking (Anderson and Krathwohl, 2001 cited in Noble, 2004).

After this discussion on the breadth of his vision of MI and its scope, it becomes possible to understand Gardner's (1998) lack of sympathy with educational efforts that sought simply to "train" the intelligences in trivial ways. Instead, Gardner (2004b: 13-14) targeted disciplinary mastery as an educational goal, pointing out that understanding was the basis of MI curriculum. He clarified that 'disciplines' did not indicate subject matter (learning the names, facts, and concepts of a particular subject), but mastering the distinctive ways of thinking that characterised for instance, a scientist, a historian, a humanist, or an artist. By "understanding" he meant, going beyond the simple capacity to recall what one had read or heard about. An individual who understood a disciplinary topic could apply that understanding to new situations never encountered before.

MI Learning for Understanding was one approach incorporating MI theory across the curriculum that provided students with a variety of creative and imaginative learning options. Student and faculty reflections created a forum for the dialogue
of ideas, innovations and perceptions, providing invaluable insight into the crucial dynamics of change and evolution in learning and teaching. The following sections discuss the application of thinking and understanding to diversifying the traditional ways of motivating learning in general and writing in particular.

2.10 Motivation in language learning through MITA

Multiple Intelligences teaching approach (MITA) had far-reaching implications for language teaching. Its cooperative, task-based, multimodal MI approach supported independent thinking, understanding and communicative self-expression, which formed the bases of language learning. The real life uses of thinking, understanding and learning promoted language for higher cognitive functioning, or learning through language (Weber, 2005; Hall Hailey, 2007).

Armstrong (2000) critiqued contemporary education for not challenging learners to go beyond rigid misconceptions, stereotypes and simplifications, suggesting that learners confront the contradictions and disjunctions in their own thinking by using MI strategies in the classroom. Dual task paradigms studied mental representation underlying gestures accompanying speech and thinking, to show the demands made by gesturing on visual-spatial and verbal working memories. The meaning conveyed by gestures often reflected speakers' thoughts not expressed in their words. Such gesture-speech 'mismatches' occurred in learners on the verge of making progress on a task i.e. when they were ready to learn (Wagner Cook and Goldin-Meadow, 2006). MITA applications have evolved in various
language teaching approaches, based also on learning styles and brain-based education, and sharing this common factor that:

"Teaching with multiple intelligences is a way of taking differences among students seriously, sharing that knowledge with students, guiding them to take responsibility for their own learning, and presenting worthwhile materials that maximize learning and understanding." (Gahala and Lange, 1997 quoted in Hall Hailey, 2004).

MITA helped learners to tap into different natural talents, creating a state of flow, an intensified state of concentration, or high level of focused attention, when learners were highly centered, on-task, and could literally forget the passing of time. This self-motivating state of extremely concentrated mental engagement was normally induced if learners were involved in MI tasks requiring high levels of mental or physical focus and enjoyment.

MI principles also led to personalized and diversified instructional feedback experiences, empowering learners by extending and promoting cognitive bridging techniques, by fostering deep metacognitive understanding and by advancing suggestions for a broad array of diversified study-skill techniques (Owen Wilson, 1998). This promoted understanding at intrapersonal, interpersonal and cultural levels, tapped into students' intrinsic levels of motivation through their natural talents, constructed self-motivating educational experiences and promoted the concept of flow in the classroom.
Success stories of MI classroom practices in language teaching and across the curriculum abounded, especially in the case studies conducted by Forester and Reinhard (2001). The reason why so many schools adopted MITA across the curriculum were traced by Kornhabef's (2004: 69) Schools Using MI Theory (SUMIT) Project to the fact that MI allowed teachers "to work from heart and head together". MI validated teachers' everyday observation that students learnt in a variety of ways, aligning with constructivist and progressive philosophies stating that children learnt through activity, that it was important to educate the whole child, that all children had gifts, and that all children should experience success in at least one area. A Harvard psychologist's theory validating their experiences encouraged teachers to learn more about the theory and consider its implications for practice. Moreover, teachers were already using some practices that fitted with MI theory, including project-based curriculum, arts-integrated approaches, thematic units, learning centres and hands-on learning, each of which tended to draw on a range of intelligences. MI provided a framework for systematic reflection on and development of this intuitive yet large repertoire of teacher knowledge and practices.

A "one size fits all" language curriculum could be transformed into a multi-modal, multi-sensory set of teaching strategies and assessment tools only if language teachers acknowledged the differences among their students. Studies (Hall Haley, 2001, 2004) conducted to identify, document, and promote effective real-world applications of MI theory in foreign and second language classrooms and to include instructional strategies and alternative forms of assessment, identified
two important steps to follow in TESL/TEFL. The first step was to identify activities that were frequently used in classrooms and categorize them. The next step was to track what was being done with multiple intelligences:

1. Awakening the intelligence: Students solved riddles and puzzles as a preliminary warm up.

2. Amplifying the intelligence: Practicing with the awakened intelligence to improve it. Students practiced describing commonly known objects.

3. Teaching for/with the intelligence: Students participated in a large-group, subject-based discussion.

4. Transferring the intelligence: Helping students reflect on their learning in the previous stages and making the lesson content relevant to their lives outside the classroom.

The results of these studies indicated that teachers were profoundly affected by these approaches. Their teaching experienced a shift in paradigm to a more learner-centered classroom; they found renewed energy and enthusiasm for teaching and were also able to reach more students. Students demonstrated keen interest in MI concepts and showed positive motivational responses to the increased variety of instructional strategies used in their EFL/ESL classrooms. Providing opportunities for students to learn in ways in which they were most receptive maximized their motivation and their potential for success in the academic setting and in real life (Armstrong, 2000; Beckman, 1998).

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Increasing incidence of MITA in language teaching programmes combined with multimedia applications, offered learners realistic ways of language use that linked the visual, logical, and kinesthetic and several other dimensions of thinking (Green and Tanner, 2005). Hence, Gardner (2000: 33-34) suggested mobilizing computer technology for better instruction and multiple thinking, in hypermedia that enabled shifts between written, graphic and auditory contents, allowed their rearrangement at will and encouraged thinking in spatial, musical, linguistic and kinesthetic terms.

Individuals possessing eight different mental representations and intellectual languages differed from each other in the forms of these representations, their relative strengths, and the ways in and ease with which these representations could be changed. Hence individuals took in, retained and manipulated information and demonstrated their understandings in at least eight different ways. This meant that teachers "must mobilize the students' spared intelligences so that they can learn, and can demonstrate that learning in ways that make sense to them" (Gardner, 1999b: 152). New multimedia enabled learners to gain understanding through mediated presentation. This shift across perspectives stimulated the development of new mental representations that could also be used to acquire non-media skills and knowledge.

Teachers planning and organising instruction around the learning preferences of individual learners, emphasizing special strengths and shoring up underutilized talents, could unlock the full learning potential of their students (Hall Haley, 2004). Gardner was confident that "Given enough exposure to the materials of an
intelligence, nearly anyone who is not brain damaged can achieve quite significant results in that intellectual realm" (1993a: 47). Gardner (1983) cited the method developed by the Japanese master Suzuki for teaching music to very young children, where the master drew on skills corresponding with the core operations of various intelligences to further the development of the musical intelligence. Gardner believed that this could be done for other intelligences, but with the proviso that "... each intelligence may want its own specific educational theory" (1993a: 48).

2.10.1 MI Motivation of L2 Writing

A school education was meant to train students for competent entry into a literate world which made varied demands on the students' L2 writing abilities. It was a basic necessity for students to write in different styles, in order to fulfill various purposes. To this end, pre-primary students in Indian schools begin writing compositions as early as at 5 or 6 years. In school however, during teaching and learning writing, intrinsic motivation is substituted by an extrinsic one - that of delivering a product to satisfy externally set examination guidelines. Not only do form and word-limit specifications inhibit free writing from very early stages, but content guidelines often prove counter-productive by stifling creativity and discouraging experimentation.

Amabile (1990) found that individual differences in creative ability cannot be limited to intrinsic and extrinsic motivation alone and must include the components of domain-relevant and creativity-relevant skills (e.g. ambiguity-tolerance, ability
to break set-perceptions, concentration, etc.) as well. Creativity and task motivation were found to work in a feedback cycle. The lack of variety in writing inputs appealing to different learner-types was one reason for the lack of motivation in less proficient learners to write creatively without teacher guidance. Significantly, teacher correction and feedback did not always improve writing in weak learners. Lee (2005) revealed that writing apprehension, writer's block and attitudes towards writing instruction were prominent factors operant in writing motivation and performance.

Second language writing anxiety rested on factors like self-efficacy, outcome expectancies, evaluation anxiety, value given to writing, level of self-confidence, ease or discomfort in writing, and enjoyment and rewards of writing (Cheng, 2004). Cotterall (2000) saw skill-centered and task-based courses as appropriate for fostering learner autonomy. Vilches's (2003) Task-based Language Teaching (TBLT) programme tried to bridge the gap between 'knowing what* and 'knowing how' with task design stemming from MITA principles. But L2 writing with only verbal/visual task inputs, lacking motivational potential for a diversely populated L2 writing class, only served to convert the learner into a writing tool by inhibiting the spontaneous flow of the learner's thinking processes.

Walker Tileston (2004b: 23) suggested learner motivation by getting the brain's (metacognitive and cognitive) attention focussed on a task and by generating feelings of anticipation, hope, fun, acceptance, surprise, self-confidence, intrigue and task-importance in learners, thus, positively engaging learner emotion, and providing reassurance of learner efficacy as well as novelty. Cheung (2001)
urged the pedagogical efficacy of popular culture in reforming classroom L2 writing practices that were limited to a form-accuracy orientation and learner isolation, with only the textbook as stimulus. Instead, teacher-talk routines were replaced by the use of popular youth culture in real life situations as the key to effective MI teaching-learning strategies and materials.

Modern youth culture consisting of T.V., cartoon and special-effects films, highly stimulating music, magazines, comics, fashion, computer and video games and the Internet, was both accessible and acceptable to young learners who identified with it and found their role models within it. Popular culture had a significant impact on their lives and attitudes by providing them with relevant and concrete meanings and insight into life. Thus, teachable moments increased in class within a multimodal framework with various motives, activities, tools and environments that created, supported and complicated text production, wherein learners derived purposeful and meaningful activity towards a desirable goal in a convivial atmosphere (Brophy, 1985). Since only those who were good with language worked well with verbal-linguistic task frameworks, popular culture helped to vary the predominantly formal and verbal-linguistic nature of writing inputs, stimulating content-generation, planning and revising, in ways suited to the learners' individual styles of thinking (Shipka, 2005).

Vincent (1990) advocated looking beyond the immediate academic context into the world and the presence of a live audience, to motivate writing. It had been thought that using authentic materials motivated learners by enabling real life language use But Peacock (1997) found that while on-task behaviour,
concentration, task involvement and observed-motivation increased significantly when authentic materials were used, most learners did not find the authentic material more interesting than the artificial ones. For such learners, interest was not the main motivator, and this also proved that writing motivation from materials was not definitely located in their authenticity.

Csikszentmihalyi (1990) believed that in order to understand the concept of creativity, one must go beyond cognitive processes and personality traits and focus instead, on a systemic perspective including the social and cultural context in which the creative person operated. Gardner (1993a: 220) also argued that no intelligence could be measured independent of the context in which the individual operated, a trait he called contextualization. All intelligences were a function of genes and environment interacting in different ways and proportions for each individual.

Gardner (1993a: 220) also saw Intelligence as distributed in the human and non-living contexts that nurtured each of the intelligences. The evaluation of any assignment or project involved cooperative ways of participation in it, i.e. the human and non-human resources involved in its preparation, the help given by others in its presentation, and the responses of peers as well as experts to the final project. The inclusion of these "extra-individual" elements highlighted the importance of "distributed aspects of intelligence." undercutting the common belief that all skill and learning must exist within a single brain, whether at home, at school, or in the work place.
Armstrong (2003) cited research in the brain sciences, developmental psychology, evolutionary studies, biographies of creative individuals and cognitive psychology to connect Gardner's multiple intelligences to the teaching of reading and writing skills. Contemporary neurological research asserted that the ability to internally operate on words and syntax as mental thought, might have emerged from our capacity to manipulate physical objects. For instance, a specific gene tied to a particular set of language disorders was also involved in the development of the basal ganglia, a set of brain structures crucial for regulating motor movements.

For the psychologist, art, words and perception, as forms of expression, arose out of cognition. Inspiration was the sudden appearance of an entire concept or idea, while composition necessitated the revival of this artistic conception and its completion through the evoking of a special frame of mind. Brown (1977: 164ff) described instances of how this mood was created and composition followed: Schiller was able to write only in the pervasive smell of decaying apples; Dr. Johnson required a purring cat, orange peel and plenty of tea; Descartes worked in bed and Buff on in full dress. These apparently eccentric factors actually enabled a preliminary level in cognition to come to the fore and re-enter the level of the original concept. This earlier level existed in the suspension of verbalization.

Hillocks (1987: 73) described the formation of ideas in pre-verbal gist shapes which only became recognizable as writers found lexis and syntax to formulate them in language. Flower and Hayes in almost identical terms, described the process of translating, essentially as putting ideas into visible language:
"The information generated in planning may be represented in a variety of symbol systems other than language, such as imagery or kinetic sensations. Trying to capture the movement of a deer on ice in language is clearly a kind of translation. Even when the planning process represents one's thought in words, that representation is unlikely to be in the elaborate syntax of written English. So the writer's task is to translate a meaning, which may be embodied in key words ... and organized in a complex network of relationships, into a linear piece of written English" (1981: 373).

Writers often used logical graphic organizers such as venn diagrams, timelines, chains, clusters, webs, maps, wheels, pyramids, charts, boards and pictorial inputs which helped categorize, sequence and organize in hierarchies, assisting in the process of thinking through the writing content (Teele, 2004). Armstrong (1993: 213) also suggested that key words from a specific intelligence domain could become effective motivators by attracting the attention of learners strong in that intelligence.

Pulitzer prize-winning poet Gary Snyder contrasted good writing and extraordinary writing by using the metaphor of a garden:

"Ordinary Good Writing is like a garden that is producing exactly what you want, by virtue of lots of weeding and cultivating. What you get is what you plant, like a row of beans. But really good writing is both inside and outside the garden fence. It can be a few beans, but also some wild
poppies, vetches, mariposa lilies, ceanothus, and some juncos and yellow jackets thrown in. It is more diverse, more interesting, and more unpredictable.

(Snyder, 2000: 3 quoted in Armstrong, 2003).

Abott's (2000) case studies of two fifth grade boys describing their flow experience in writing, showed the boys comparing this experience to holding conversations with inner voices, to deep-sleep experience or "blinking out" (Abott, 2000: 75-76), and again to "having the touch" or experiencing scoring a soccer goal, or the "pencil's just dragging your hand along that paper" (Abott, 2000: 83-84), all of which showed that individual experience of writing could be non linguistic-in nature - here, specifically interpersonal, intrapersonal and kinesthetic. Maude (1998) and Piddington (2006) described the Creative Systems Personality Typology (CSPT) in creativity axes that correlated the temperament of individual learners to stages within the creative writing process. McDonough (2006) listed MI features that are essential for motivating successful writing outcomes as:

- writing for real purposes to specific audiences
- choice of topic to increase interest and commitment and access prior knowledge
- experimenting with and exploring topics to build confidence and fluency
- focused instruction to provide supportive structure for organized thinking and writing
- a community of collaboration between students and teachers
- modeling decision-making strategies while writing
- feedback about writing on strategies used by other writers
- structured and adequate time to engage in the creative process in-between, periods of active writing
- portfolios to chart improvement and growth in writing ability

Puchta and Rinvolucri (2005) suggested MITA principles to develop core thinking skills like critical reasoning and analysis, verbalising mental pictures, visualising text and internalising affective management skills for learning writing and learning through writing. Gardner asserted that"... some of the most powerful human systems - like written language - came about not directly through evolution but through the yoking of visual-spatial and linguistic capacities that had evolved for different purposes" (1999b: 95). Thus it should be possible to stimulate L2 writing through tasks based on multiple intelligences and vice versa. "If we can mobilize the spectrum of human abilities, not only will people feel better about themselves and more competent; it is even possible that they will also feel more engaged and better able to join the rest of the world community ..." (Gardner, 1993a: 12). Moreover, though Gardner (1993c: 73) was quite positive that "savings" or "transfer" of intelligences across domains could not be proved conclusively, he admitted that: "... all over the world, teachers of foreign languages (including English as a second language) tell me that foreign language instruction is enhanced by MI theory. To mention just a few ways: linguistic structures ... can be conveyed in several ways, drawing on several intelligences; vocabulary and appropriate syntax is most readily learned when
students are engaged in activities (like dancing or drawing or debating) that draw on their favored intelligences; students learn best when they converse about topics about which they are knowledgeable, and those topics often are ones that use a characteristic blend of intelligences. Even drill-and-practice can be more effective if the various intelligences are drawn upon (e.g. in singing, dancing, creating different kinds of lists, etc.)." (Gardner 1993c: 86)

Anderson and Lightfoot (2002) found that in the localisation of language functions in the human brain, there was no real segregation between language related and non-language related brain tissue. Hence, writing, too, could be learned as a means to other ends within a task framework by "drawing on several intelligences", when engaged in activities that included "a characteristic blend of intelligences". Gardner agreed that "...there may be habits of thought that are useful across domains" (1993c: 78), thereby lending ground to the possibility that productive thinking habits and processes in a (non-linguistic) domain could be repeated in another (linguistic) domain, leading to productive output in the latter.

However, in significant contrast to the evidence of multiple intelligences operating in thinking/writing processes that has been discussed in detail so far, most post-MI studies on writing techniques and strategies (Chenowith and Hayes, 2001; Dunsmuir and Blatchford, 2004) do not consider MI as one of the causal factors behind competence, or as a possible factor underlying motivation. Instead, parental background, linguistic experience, and other external or personality variables are seen as primarily significant in writing pedagogy. Yet, following Chomsky's (2000, 2002) logical declaration of the creative aspect of language being independent of
external stimulus control, and Cattell's (2006) assertion of the impossibility of
consciousness is explicable by physical phenomena, these variables recede in
importance.

Motivation in L2 writing has also been correlated with perceived learner
autonomy and competence (Noels, 2003), sex, age, WTC, anxiety, (Dornyei and
Clement, 2001; Macintyre et al, 2003) and attitudinal variables (Masgoret and
Gardner, 2003). Like others mentioned earlier, Dornyei (2003: 21) deprecated
the fact that due to a dichotomy between linguistics and social psychology,
motivation research, in spite of being one of the most developed areas within
second language acquisition studies, has "failed to develop any enduring links
with other research traditions in second language acquisition, resulting in an
almost total lack of integration into the traditional domain of applied linguistics".
This is mainly because SLA research has focused on the development of
knowledge and skills, analysing language processes from a micro perspective
(Harley et al, 1990). Dornyei (2003) further stated that though the process­
oriented approach to motivation research has paved the way to such integration to
some extent, for real integration to take place, L2 motivation research needs to
"focus on specific language behaviours rather than on general learning outcomes
as the criterion measure" (Dornyei, 2003: 22), i.e. researchers should look at how
motivational features affect various learning behaviours during a course, e.g.
increased WTC in L2, engagement in learning tasks or use of learning strategies.
But the idea of a possible correlation between individual intelligence types (H.
Gardner, 1983), differences in motivation levels and language learning aptitudes has not been explored in the domain of L2 and motivational research.

The present study hence, situates itself within this field hiatus, with the two research questions of whether, firstly, L2 learners can be motivated to write with the help of tasks with MI inputs based on Howard Gardner's (1983) theory; and secondly, how such motivation would affect performance output in enabling the learners become autonomous in their writing tasks. Albeit Gardner (1983: 286) pointing out that his MI theory does not specifically focus on motivation and attention, he claimed it as evident that high degrees of both attention and motivation would accompany a commitment to any one intelligence without necessarily becoming manifest in any other intelligence. Gardner (1993c: 86) also admitted (as quoted earlier) that ELT is one sphere where various other intelligences have been reportedly used to stimulate the verbal-linguistic intelligence.

Motivation in writing thus, may hypothetically be correlated to motivation of all or some of the intelligences listed by Gardner. This has practically been observed in MITA classrooms as an inadvertent by-product of learning or as an additional effect of achieving multiple points of entry into an academic subject, by Armstrong (1993, 2003), Christison (2005), Weber (2005), Hall Hailey (2007) and many others. Explicit research into a three-way relationship between motivation, L2 writing and MI is yet to be attempted in any of these three fields.

The present study aims to focus on the increase learner engagement in L2 writing tasks, as suggested by Dornyei (2003) as an opening endeavour in the field. The
need for such a study is strengthened by its dual intention of focusing on L2 writing outcomes and examining how motivation to write is induced by MI and that can lead to learner autonomy.

2.11 Review of Unpublished Theses

Till now we have discussed the published work related to the present study from various journals, books and published papers. The following section deals with the review of two unpublished theses related to learner autonomy, the former being an international study and the latter deals with Indian context.

a) CALL and the development of learner autonomy: an activity theoretical study.

Francoise Blin, Ph.D (2005)

The renewed interest of the last twenty years in learner autonomy among language professionals has been linked to technological developments in education. Yet, while the concepts and principles associated with learner autonomy underpin a broad range of Computer Assisted Language Learning (CALL) applications and research projects, current research paradigms in CALL do not provide adequate tools and models to investigate in depth the development and exercise of learner autonomy in technology-rich language learning environments.

The study addresses the following research questions:

1) What factors contribute to or prevent the development and exercise of learner autonomy in technology-rich language learning environments?

2) What do learners “do” when in the process of becoming autonomous?
language learners? Is it possible to give a description of this process?

3) Can we formulate principles and criteria for the design, implementation and evaluation of technology-rich language learning environment promotion the development and exercise of learner autonomy?

This thesis proposes a conceptual framework, rooted in activity theory and substantiated by empirical evidence, for describing and analysing the development and exercise of learner autonomy in technology-rich language learning environments. Through a particular focus on systemic tensions occurring as the activity unfolds, the dynamics between collective activity and individual actions are explored in the case of two real-life language courses. Bringing together the activity theoretical arguments and the empirical findings, it is proposed that:

1) The language curriculum promoting learner autonomy is *object-centred*.

2) Emerging systemic tensions are key factors potentially promoting or preventing the development and exercise of learner autonomy in language learning activities. The most important systemic tensions for the development of learner autonomy in technology-rich language learning environments reside in the *tool-object* characteristics of language and technology and within the organization of the division of labour;

3) The capacity to resolve contradictions is an observable attribute of learner autonomy. The potential for the development and exercise of learner autonomy is enhanced by the activity system capacity to resolve its systemic
tensions in expansive ways, i.e. through the creation and adoption of new tools and procedures by the participants.

b) Enabling Learner Autonomy In Writing Through Indirect Feedback. Meenakshi Barad Sirigiri, M.Phil.(2008)

This study presents an experiment on feedback developed to encourage engineering college students to improve their writing and to consider error correction as an active source of learning. While writing their essays, students were encouraged to examine teacher feedback, done by underlining, in order to self-correct errors, incorporate this feedback in the redrafting of their texts and reflect on their use of linguistic forms and structures. This strategy of indirect feedback, as used in this study, can play a crucial role in assisting students to take responsibility for their own learning.

The study explored an autonomous approach to error correction which consisted of indirect feedback and aimed to foster independence from teacher intervention and promote autonomy in writing. This addresses the following research questions:

1) What is the effect of ‘indirect feedback’ on improvement of linguistic accuracy?

2) How does improvement in accuracy result in communicative effectiveness in writing?

3) Will indirect feedback result in learner autonomy?

The findings of the study indicate that there is a strong relationship between teachers marking errors and the revisions made by students' subsequent drafts of their own
essays. Students appeared to address the vast majority of their teacher's error markings. It was also found that the number of errors made by students reduced all 11 categories studied between the first and the last essay. The fact that the feedback was indirect meant that students had to think about what they had written and how it could be improved. The improvement was therefore not only in the removal of errors but also in better writing. This meant that 'underlining errors' also resulted in communicative effectiveness. Thus one could conclude that indirect feedback helps students to revise their essays, correct their errors, think about their own writing, and all this would eventually lead to learner autonomy.

2.11.1 Conclusion

We see in this chapter that though thinking during the process of writing can take many forms, the actual cognitive processing in the brain can be even more variegated, depending on the MI profile of the individual writer. Whereas, earlier, it was considered necessary to integrate learner differences along personality and aptitude dimensions only, MITA applications to language learning later showed that differences in cognitive functioning needed to be differentially exploited to cater to individual ways of language learning. Thus, there could be eight different entry points to learning and motivating writing, correlating to the multiple intelligences outlined by Howard Gardner. The next chapter details about the data collection.