
Multiple-Intelligence-Based Strategies for Cognitive Development in Second Language Learning

Dr Raajitha Rachuri

Assistant Professor (Part-Time), Department of English, Veeranari Chakali Ilamma Women's University, Koti, Hyderabad, India.

Email: rachuriraajitha@gmail.com, ORCID ID: orcid.org/0009-0008-8443-6528

Article Received: 25/11/2025

Article Accepted: 29/12/2025

Published Online: 30/12/2025

DOI:10.47311/IJOES.2025.7.12.753

Abstract

The process of SL (Second Language) learning is still complex and is applied considering cognitive cultural diversity, affective aspects, learner preferences and individual differences between learners. In most traditional approaches for teaching languages, they consider the other students have the same learning method, and the same mode of presentation might not fit well in all students' cognitive capacity and learning requirements. The present article presents an integrated pedagogical model in the light of the Multiple Intelligences (MI) by Gardner to enhance thinking skills and thus promote the acquisition of the second language of learners. The MI process recognizes the intelligence of people that is larger than just the linguistic or logical and mathematical ones, and in the framework of MI, it is proposed that people have many other ways of thinking, feeling and acting that can be termed forms of intelligence: linguistic, logical-mathematical, spatial, bodily-kinaesthetic, musical, interpersonal, intrapersonal, naturalistic, and existential. It investigates how such incorporation of MI pedagogical approaches can enhance the students' engagement, creativeness, communicativeness, critical thinking and autonomous learning in the L2 classroom. Further it is specified how teaching activities, in the classroom and categories of activities connected to the various learning style profiles can help to build a learner centred classroom with respect to different types of abilities and build meaning from language. Based on the viewpoint of the author, who believes that using multiple intelligences in SL pedagogy helps teachers with holistic approach to deal with second language learner heterogeneity in the classroom as well as with the holistic approach to cognitive and affective aspects. The findings demonstrate that there is great potential for teaching in which the focus is placed on MI in order to establish a more inclusive, interactive and effective learning environment for language study.

Keywords: multiple intelligences, communication, learning methods, English language learners, cognitive skills, emotional reactions, affective aspects etc.

Introduction

It has always been intriguing for language teachers as to why some language learners are better than others. The learners go through the same learning cycle and they are provided with the same learning opportunities, although they differ greatly in the degree of competencies they achieve. Since all learners that proceed through a common developmental pattern can differ greatly in their eventual learning success, it has been assumed that individual differences among learners must be the cause, and thus that identifying these individual differences (IDs) can lead to more successful conclusions about the learner's contribution to the second language learning process. Teachers should therefore be aware that individual differences are very important in determining the speed of learning and the competency level that students will achieve.

Brown (2007) makes the case that cognitive factors cannot solely be used to understand human behaviour because they do not take into account the affective domain, that is, the emotional component of human behaviour. The affective dimension, involving feelings, emotions, attitudes, and values, is presumed to be key in the study of individual differences in language learning. While cognitive variables have been given considerable attention, including intelligence, aptitude, memory, and learning styles, affective variables are equally important as they determine learners' attitudes towards the learning process, their level of involvement, and their desire to communicate. Available studies have thus placed greater emphasis on affective issues such as motivation, anxiety, empathy, self-confidence, attitude towards the target language, and willingness to communicate. These aspects should be considered during second language acquisition as they can either promote or hinder successful learning.

Pedagogically, educators must understand that students are very dissimilar in their abilities, preferences, and styles of knowledge processing. The teaching style or method of instruction will not have the same positive impact on all learners; therefore, uniform expectations are unrealistic. Different students have different abilities and intelligences, which prescribe the modes of knowing, understanding, and dealing with the world. For this

reason, ESL teachers must adopt a variety of classroom activities that will satisfy the needs and strengths of various learners (McClellan & Conti, 2008).

In 1983, Howard Gardner, a professor of education at Harvard, proposed the theory on Multiple Intelligences. Gardner offers a more comprehensive view of intelligence in his book, extending the narrow definition of intelligence as measured by IQ. He focuses on how intelligence is used, as opposed to how much a person is intelligent (Gardner 2006). Gardner's theory underlines the reality that students have different types of intelligence. This theory has important implications for English language learning because it suggests the need for multiple teaching methods in order to accommodate various learners' needs. Gardner describes several types of intelligence, such as linguistic, logical-mathematical, spatial, bodily-kinaesthetic, musical, interpersonal and intrapersonal intelligences (Solmundardottir 2006). This awareness can help both students and teachers to make learning and teaching more efficient. These approaches help students recognise their talents, and encourage teachers to tailor their lessons to the variety of abilities in their classrooms.

While some traditional teaching and learning environments overemphasized reading and writing, the Multiple Intelligences model encourages a more balanced approach that includes speaking and listening. It presents a more holistic approach by encouraging a variety of classroom activities and pedagogies. Through a range of tasks and interactive teaching strategies, classrooms can become more interesting to students (Armstrong, 2000). These activities will not only encourage the development of different intelligences but will also aid in language learning. Therefore, the onus falls on the teacher to take into account the differences between students, offering them opportunities to develop their individual intelligences (Nolan, 2003).

The multiple intelligences theory by Gardner (1983) proposes that intelligence is multidimensional and is composed of linguistic, logical-mathematical, spatial, bodily-kinaesthetic, musical, interpersonal, intrapersonal, and naturalistic intelligences. These intelligences can be stimulated in the ESL classroom by developing appropriate activities. For example, linguistic intelligence may be developed through work with stories, reading, and essay writing; logical-mathematical intelligence may be developed through problem-solving and pattern recognition tasks; spatial intelligence may be developed through visual representations, mind maps, drama, and role plays; musical intelligence may be developed through songs; interpersonal intelligence may be developed through collaborative learning; and naturalistic intelligence may be developed through themes of the environment. That is

why different language activities can be adopted so that teaching will be inclusive, motivating, and effective. Such an approach helps educators address student heterogeneity, make learners active, increase their engagement, and provide them with more opportunities to learn the language. Therefore, what is needed to effectively teach and facilitate ESL learning and development in a holistic manner is an understanding of individual differences.

Verbal-Linguistic Intelligence Learners

Linguistically intelligent students are capable of using, applying, and understanding spoken and written language in an intuitive and fluent way (Armstrong, 1993). Such students may become keen readers and have a specific interest in communicating with other people. They express themselves clearly and are proficient in both written and spoken language. Working with language and communication can be done in various forms and leads to better understanding and articulation of ideas. They develop the ability to express themselves effectively to entertain or inform others through reading, writing, and telling stories, whether through poetry, drama, jokes, and descriptions, or through news reporting. Moreover, other communication forms, including arguments, declarations, and impromptu speeches on current events or personal experiences, are also relevant in promoting speaking skills and persuading audiences.

People can share their thoughts in a wider audience, practice their critical thinking and collaborate by setting trends such as creating a journal, a magazine or a newsletter. Role plays, dramas, stories and mock interviews are elements of good practice in real-world communication that help students develop their creativity, empathy and sense of problem solving.

Puzzles, word games, and crosswords build flexibility in thinking so that people can enhance their language skills through an interaction and fun game. Planning and delivering topics help to improve speaking abilities and offer opportunities to communicate and share ideas accurately and effectively. Further, students can challenge themselves to make slogans, write case studies, websites, or any other work where they will have to express complex ideas in efficient messages. Reflective diary writing supports students in the process of discovery and development, and allows students to record their thoughts and learning processes. In the recent developments, learning through podcasts is a modern, convenient way to acquire knowledge about different topics, and foster lifelong learning in an exciting way. These exercises help build a comprehensive array of communication and critical thinking skills.

Visual-Spatial Intelligence Learners

The visual-spatial intelligence deals with the fact that a person has the capacity to visualize, perceive and retain spatial associations of the objects. Students that have this type of intelligence tend to think visually and have good spatial awareness and orientation skills. The intelligence can be applied in language learning because the language learner can count on visual images in order to create a way of remembering and comprehending. As an example, people who are highly visual-spatial intelligent will be able to replicate the spatial features of a location in their minds despite not being physically present, frequently picturing it in three-dimensional form. They can also be able to contemplate space and their connection to it.

Learning aids facilitate easier and more interactive learning. Mind maps, concept maps assist to organize complicated concepts and personal roadmap and visual aids assist in discussions and project planning. The power of information presented in a statistical form of graphs has helped in making the information easily comprehensible and multimedia projects use text, graphics and sound that might appeal to all of the senses of perception. Colour-highlighting in the form of grammar and tense demonstration makes it easy to learn the language and vocabulary and fast-thinking can be achieved through visual chess like Pictionary. Minecraft makes the virtual world more creative and problem-solving. Concrete learning and creativity development (practical work, using modelling clay, painting, collages) and storytelling and technical skills (photography, video, movie making) if encouraged can make learning activities more interactive.

Interpersonal Intelligence Learners

Interpersonal intelligence is closely related to group learning and interpersonal interaction. Students with high interpersonal intelligence can cooperate with others to successfully complete tasks. They enjoy interacting with others, establishing relationships, and building a broad social network. They also enhance their English-speaking capabilities through real-life communication and interaction with others in language learning situations.

Group learning activities, through group work, develop team learning and skills acquisition. Such activities foster a cooperative approach to sharing ideas within project teams, as well as peer support and mutual understanding when learning in pairs. Teamwork and problem-solving skills are nurtured in a fun environment through team-based competition. Role plays and dialogues provide opportunities to practice real-life situations,

enhancing communication and empathy. Peer instruction is also a valuable learning opportunity that allows students to teach one another, thereby strengthening their own knowledge and understanding. Academic clubs give students the opportunity to discuss common interests and work towards their academic aspirations. The concept of community care further strengthens teamwork and social responsibility. Learners also gain experience through immersive scenario-based simulations that encourage critical thinking and decision-making. Through such activities, a holistic and interactive learning environment is created.

Intrapersonal Intelligence Learners

Intrapersonal intelligence refers to the ability to look within oneself. The prefix "intra" means inside or within. It involves examining a single individual's mind, thoughts, feelings, desires, strengths, and weaknesses. Students who possess high levels of intrapersonal intelligence are very self-aware and able to analyse their own experiences. They tend to learn from their failures and prefer to work independently.

Writing assignments such as completing essays and maintaining diaries allow individuals to discover their beliefs and refine their writing to express them clearly. Confidently reflecting on the past increases self-awareness and communication skills, while documenting future aspirations helps people plan and take action to accomplish their goals. Engaging in self-expression, whether through writing, art, or other forms, promotes personal development and strengthens the connection to one's personal identity and values, all of which contribute to academic and personal growth.

Logical-Mathematical Intelligence Learners

Grammar analysis is usually part of this kind of learning. The biggest perception held by most teachers is that English language curricula are overly grammar-focused and consequently, this focus is not reflected in communicative ability. Mathematical-logical intelligence is important in understanding concepts, acquiring reasoning skills, and developing logical thinking. Students with this intelligence are proficient in mathematical reasoning and can recognize patterns, think logically, and analyse problems.

Using grammar-based tasks, the teachers can help students raise a correct view of the framing sentences by categorizing words and phrases. The grammar rules are to be taught in the inductive approach enabling the learners learn on their own. Error-correction technique and teacher feedback on student errors facilitates students to build their analytical skills and correct their errors. By allowing the students analyse their language errors and providing

error corrections, students' analytical skill can be developed. This could involve the creation of charts and maps such as mind maps and vocabulary charts for a language concept, which help in memorization and comprehension. The ability to follow a story sequence in stories helps with the building of a story and its coherence in writing. Patterns and structure through hands-on learning can be done with blocks and cubes. To make diagrams, students can be stimulated in their creative thinking and thinking in visualization by using Visual Outlines. Board games that require mathematical and logical reasoning enhance problem-solving skills. Puzzles and writing foster critical thinking, while tongue-twisters develop verbal dexterity and linguistic fluency. These activities create a combined and interactive mode of learning.

Bodily-Kinesthetics' Intelligence Learners

The bodily-kinaesthetic intelligence is a type of intelligence which is characterized by having an awareness of how one's body moves and the use of body movements as expressions of one's thoughts and feelings, as means of action, and as generators of certain moods (Gardner, 1983). It is a blend of movement and language, therefore there is a strong emphasis on movement in the learning. Language related activities in the classroom such as games, acting, dancing, physical activities, crafts, pantomime, painting, and physical exercises etc can help develop this intelligence. The learner is given the opportunity to touch and probe into the items in open spaces in such environments. Students' involvement in physical games, sculpture, drama and dance can further enhance this intelligence and the role of the teacher is crucial.

Practical work and hands-on lessons enhance understanding by allowing students to physically engage with materials and concepts. Role plays and drama provide opportunities for students to practice real-life communication, develop empathy, and work through problem-solving scenarios. The use of pantomime not only expands students' vocabulary and language knowledge but also makes learning more engaging and helps develop non-verbal communication skills. Facial expression games develop students' emotional awareness, helping them understand their emotion with facial expression and understand and express emotion and ideas through face expression and body language when words cannot be used. Any encouragement to children to use sports facilities and involves them in physical health classes, results in physical health, teamwork, discipline and strategic thinking. These offer intellectual challenge, with engagement in effective action learning activities to support full and meaningful personal development and learning.

Naturalist Intelligence Learners

Naturalistic intelligence is the ability to recognize, observe, and learn about naturally occurring objects, such as plants, animals, and environment. Students who have this intelligence type tend to participate in learning activities that related learning with nature and surroundings. They grasp concepts better when being offered the chance of action and they experience the benefits of observing, recording, sorting and categorizing items in the natural world. Education experiences enable students to connect with the environment and nature are effective ways to contribute to this intelligence.

Actively engaging in English language activities using nature can help students learn the English language in a meaningful way by allowing them to have direct experiences of English in the process of enjoying nature. Actively participating with English language in nature activities serves as a means to get active learning experiences with English which directly serves to help students in learning English language in meaningful way and improving their fluency of language. Shopping and field trips are hands-on, authentic activities that teach language in real-life contexts, and help students apply them. Further, collecting plant specimens and identifying the pertinent terminology related to these plants helps bring the class outdoors and into touch with Nature, thus making the learning real and memorable. Both observing and naming plants not only extend students' vocabulary but also offer a hands-on, sensory experience that increases student involvement with the plant. These activities facilitate the deepening of language learning by the active involvement of students and practical implementation.

Musical Intelligence Learners

Musical Intelligence is the ability to learn and understand through music. Each student who is musically intelligent can listen, classify, create and play sounds and patterns within music. The ESL classroom can be beneficial for such students with the activities that link language, rhythm, and emotion. For instance, students can hear their favourite songs and comment on how they make them feel and what is being expressed in them, and then, listen to which one and explain what was being said and how it makes them feel, while emulating the same emotion and feeling with their oral responses. Such learners will also be likely to excel from the standpoint of composition and recognition of musical tones. Targeted activities to develop listening skills can make a significant contribution to the improvement of language learning.

Musical Intelligence Learners are those who have the capacity for understanding, processing, and memory rhythmically, with music and in musical patterns. In second language acquisition, music is easily adopted to boost the attention, coordination, imagination, vocabulary acquisition, pronunciation and knowledge of language. Learners can not only develop their own musical skills through music but can also develop their abilities such as paying attention, remembering and learning how to move their bodies in coordination with music. Interpretation of the lyrics of songs stimulates creativity, and increases vocabulary as well as grammatical structures and sentence patterns, and gives insight into the meanings of words in context.

But the concepts can be reinforced using the rhythm, for example with the use of vocabulary, phrases and grammar patterns, concepts can be assigned to melodies, and for memorisation the use of clapping provides a good rhythmic recurrence, which stimulates the retention and makes it more engaging. For listening, learners listen to the lessons, rhymes, alphabet exercises and language patterns with the purpose of recognising features in pronunciation and internalising language patterns. Exercises on stress, rhythm and intonation help learners to acquire more natural speech patterns and become more confident when they speak. Hence, using music, rhythm, and repetitions within the language learning process are creative, interactive, and effective to develop second language learners' capability both linguistically and cognitively.

Existential Intelligence Learners

Learners who are more existentially intelligent can reflect on the complex question of life, human experiences, values, and the meaning of life. Armstrong (2009) described existential intelligence as the form of intelligence that uses intuition, contemplation and social awareness to comprehend the environment, persons, and self. This intelligence is nurturing in the second language learning process persuades learners to think deeper, think critically, be creative, and to give his feelings in expressing his ideas or opinions in language.

For existentially intelligent learners, activities which encourage reflection, reasoning and meaningful communication are beneficial. Problem solving tasks and puzzle-type activities help to foster cognitive flexibility, logical thinking and analysis skills. The questions and answers are designed to stimulate thinking, quickness of mind and provide good communication practice for the giving of opinions. Learners interpret and describe pictures, stories and real-life situations in order to enrich their imagination, understanding and verbal ability. Connecting language learning to students' own life experiences and their

social concerns through writing activities such as reflective essays, opinions, and narrative writing takes into account the benefits of applying these skills and allows students to develop critical thinking and argumentation skills as well as further enhance their written communication skills. Discussing the themes or content that will appear in the book and prediction engage prior knowledge, enhance comprehension and foster curiosity.

In L2 classrooms, teachers can provide students with chances to reflect, interpret and express themselves in language, to think about the issues and initiate meaningful discussion through existential intelligence approaches. This strategy helps create an overall enriching and cognitively stimulating L2 setting.

Conclusion

To conclude, an effective ESL teacher should be aware that students are not all alike in their ability, emotions, and language understanding when they enter the classroom. An effective language class then should not follow the predictable course for every type of learner, but also must address learner differences. Teachers have a practice of involving themselves in diverse learning activities to accommodate learner differences, and the concept of multiple intelligences was found to be a useful approach. Teachers are used to offering a variety of learning activities to cater for the differences that learners have and the concept of multiple intelligences has been found to be a helpful approach to this. The more opportunities that are offered for the students to learn, the more likely it is that students will find something worthwhile in the way of language learning and feel confident in their ability to use English.

In addition, this method is not only relevant to the enhancement of educational outcomes but also in fostering a more compassionate and sensitive classroom atmosphere. Fact is that when learners' talents are honoured, if their emotions are respected and when their learning styles are offered the chance to be incorporated into the teaching process, they will become motivated. Teachers will need flexibilities, creativity, and the deliberate reflectivity in lesson planning and in class practice. If multiple intelligences are taken into account in the ESL classroom, it will become more inclusive, more balanced, and more learner-centred; language development will be served within the learners' broader personal and social development.

References

Armstrong, T. (1993). *7 kinds of smart: Identifying and developing your many intelligences*. New York, NY: Plume.

---. (2009). *Multiple intelligences in the classroom* (3rd ed.). Alexandria, VA: ASCD.

Brown, H. Douglas. (2007) *Principles of Language Learning and Teaching*. 5th ed., Pearson Education.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books.

McClellan, J. A., & Conti, G. J. (2008). Identifying the multiple intelligences of your students. *Journal of Adult Education*, 37(1), 13–32.

Nolan, James L. *Multiple Intelligences and the Classroom*. Routledge, 2003.

Solmundardottir, Berglind Rosa. *Multiple Intelligences Theory and the ESL Classroom*. University of Iceland, 2006.