

Teaching foreign languages to adults: Can the theory of multiple intelligences help?

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Abstract

This research focuses on the theory of Multiple Intelligences and how it affects adult education. There are studies in which it is demonstrated that the implementation of the above theory brought significant changes in perception, response and success of the learning needs. However, little research has been conducted in the field of teaching English language in the context of adult education. The purpose of this research is to show that the theory of Multiple Intelligences can improve the teaching process of a foreign language for adult learners.

Keywords: Multiple Intelligences, Adults, Learning English

1. Introduction

Several English learning programs are created and offered to adults. However, the fact that preoccupied the organizers and the trainers/educators of such programs is that each student is bringing together the different learning experiences. Examples of such experiences are the different educational, social, personal and communicative frameworks and the degree of development of their academic skills. The challenge for the trainer is to develop approaches and techniques, suitable for a multidimensional class with different linguistic, social and cultural background.

Therefore, many efforts are made to ensure the right of every student to receive education tailored to his/her individual learning needs (Langa & Yost, 2007) [26]. The theory of Multiple Intelligences (Gardner, 1983) [18] of the American developmental psychologist Howard Gardner leads to this direction. Gardner (1983) [18] hypothesized that the person holds a consolidated mixture of nine types of intelligence. The intelligence types are recognizable within the brain, but in practice there is a combination of them. Therefore, each type does not work perfectly on its own, but the student learns, communicates or solves problems with potentially nine ways.

2. Adults within the context of foreign language teaching

The new technologies, the ever increasing speed of social, political and economic changes and the globalization are factors that influence the needs for improving the people's skills (Laal & Salamati, 2012) [25]. In Europe, this reality is recognized by the relevant decision-makers (Colardyn & Bjornavold, 2004) [13] and it triggered a series of learning activities in order to benefit the adults. These activities are incorporated within the general context of lifelong learning, which, according to Hake (1999) [20], includes all the learning activities of formal and non-formal education and it is aimed at improving the knowledge and skills of a person on a personal, social and professional level.

Nowadays, learning a foreign language, especially English, is particularly important for international communication, business, media and culture. The adult learners direct their learning in order to fulfill their needs and requirements.

Among these needs there are the improving of the curriculum, the developments in the professional life, the exploitation of job opportunities or, more simply, the successful use of a foreign language. The adults usually seek immediate use of language and learn best when, through the learning experience, they develop their own personal learning goals.

Adult learners in foreign language are considered more autonomous and self-directed in the learning process. Adults who are described as "active", "able to cope," "critically concerned," "confident" and "motivated" are a result of many research efforts concerning the above indicators (Little, 2009) [27]. Benson (2007) [4] concludes that adults are more able to take autonomous action than perhaps the teacher expects, even in cases where the autonomy develops gradually and not immediately.

The adult is in need of a safe and supportive environment, particularly within the learning environment. For this reason, the teacher should access or develop appropriate material, which is addressed to individual learners and meets their learning needs (Dornyei, 1998) [14].

3. The theory of multiple intelligences

Among the most mysterious objects of psychology, intelligence occupies a prominent position. The problem is found both in forming a definition, as there are conflicting views on its content, and in the very concept and whether it has real meaning or merely describes a collection of different functions that complement each other and operate in combination. Referring to the classical psychometric theory of intelligence which perceives intelligence as a one-dimensional factor, Gardner proposed a pluralistic vision of the human mind (Gardner, 1983) [18].

In order to formulate his theory and to substantiate it on a neurological, developmental and intercultural evidence (Kezar, 2001. Gardner, 1983) [18], Gardner based on criteria that allowed designating a separate capacity as intelligence. He originally described seven distinct intelligences and later added two more. The multiple intelligences are:

1. Verbal-linguistic,
2. Logical-mathematical,

3. Visual-spatial,
4. Bodily-kinesthetic,
5. Musical-rhythmic and harmonic,
6. Interpersonal,
7. Intrapersonal,
8. Naturalistic and
9. Existential.

Each of the above types of intelligence can operate independently of the others while every person possesses them at a different degree. This does not mean that some type of intelligence is considered greater than the others (Christison, 1999)^[10]. Gardner also argued that all people hold all types of intelligence to some degree. However, which of these intelligences will be more dominant depends on both genetic factors and social conditions (Christison, 1998)^[11].

3.1 Types of Intelligence

Listed below are the different types of intelligence, as described by Gardner (1983, 1993)^[18, 17] and Chapman and Freeman (1996)^[7].

3.1.1 Verbal - Linguistic intelligence

Verbal or linguistic intelligence is characterized by the effective use of language and the ability to communicate effectively both in writing and orally (Gardner, 1983)^[18]. People in which this kind of intelligence is dominant usually have rich vocabulary. They interpret events and situations, they convince and form opinions, they memorize information, they love reading books and in most cases they are absorbed in them (Gardner, 1993; Chapman & Freeman, 1996)^[17, 7]. People with such preferences often choose jobs as language teachers, interpreters, editors, newsreaders in media, linguists, journalists and librarians.

Within the framework of a foreign language class, where the teacher wishes to develop the linguistic intelligence of learners, there must be certain types of activities. These may include for example the creation of a calendar, language games, memorizing poems or stories and reading a play involving the whole class (Stanford, 2003)^[33].

3.1.2 Logical - Mathematical intelligence

Logical or mathematical intelligence is characterized by the ability to perform mathematical operations, problem solving, situation analysis with the use of reason, understanding causal relationships between events, experimentation and pattern recognition (Gardner, 1983)^[18]. People who prefer to use the logical / mathematical intelligence tend to perform very well in comprehension tests and written language. They enjoy working with computers and do experiments, they make calculations from memory and they solve puzzles faster (Checkley, 1997)^[9]. Scientists, researchers, economists, analysts, programmers and philosophers have highly developed logical / mathematical intelligence.

The students who use logical / mathematical intelligence prefer to solve problems with numbers, projections and cause-effect relationships (Fogarty & Stoehr, 2008)^[15].

3.1.3 Visual - Spatial intelligence

The visual or spatial intelligence is characterized by the spatial perception and the processing of visual stimuli (Gardner, 1983)^[18]. People who prefer to use this kind of intelligence are of particular interest for designs, icons, photographs, maps

and puzzles and avoid resorting to the written word. They have excellent visual memory and they mentally handle an object, a form or idea. Visually intelligent people see details of an object or an idea that other people may be unaware of (Barrington, 2004)^[3]. They often choose to pursue careers in areas such as painting, architecture, photography, interior design, sculpture and graphic arts.

In the case of trainees, activities that could help the latter to develop the visual / spatial intelligence could include linguistic puzzles, picture galleries and creation of collages, commercials or creating stories through design sketches (Armstrong, 2009)^[2].

3.1.4 Bodily-kinesthetic intelligence

Kinesthetic intelligence is characterized by the ability to use the body at expressing emotions and ideas (Gardner, 1983)^[18]. The kinesthetic intelligent person is very good at the coordination of movements, the use of the body to understand the various concepts and performs well in sports and dance (Armstrong, 2009)^[2]. The kinesthetic intelligence is high in athletes, dancers, choreographers, sculptors and mimes.

Activities that could help learners to develop kinesthetic intelligence include participation in sports, creative visualization of the lyrics of a song with the help of body movements, participation in group theater, dance or pottery, the dramatization of a story (Schneider, 2010)^[31].

3.1.5 Musical-rhythmic and harmonic intelligence

Musical-rhythmic and harmonic intelligence is characterized by the recognition and the ability to use non-verbal sounds such as rhythm, timbre and tonality (Gardner, 1983)^[18]. People who have developed musical intelligence easily stand out tracks, using rhymes, rhythms and songs to memorize information while during a course is likely to rhythmically beat their hands or other objects. Waterhouse (2006)^[34] indicate that, in fact, these people "hear" music with their hands. Composers, musicians and singers have highly developed musical intelligence.

If the students want to develop their musical intelligence, they would probably make activities like listen to different kinds of songs, especially those that also contain lyrics, create a CD with their favorite songs, or turn new knowledge into a rhythm or song (Gardner, 1983)^[18].

3.1.6 Interpersonal intelligence

Interpersonal intelligence is characterized by the ability to understand the intentions and desires of others and effectively cooperate with them (Gardner, 1983)^[18]. People with predominant the above intelligence can easily understand the feelings, thoughts, motivation, mood and needs of people around them. Additionally, they use this ability to approach, to manipulate or persuade their surroundings. These people usually choose careers as lawyers, social workers, psychologists, politicians or religious leaders.

Within the framework of a foreign language class, learners could develop interpersonal intelligence with activities such as participation in groups, observation of people and communicating with people who speak the language outside class (Hall-Haley, 2004)^[21].

3.1.7 Intrapersonal intelligence

Intrapersonal intelligence is characterized by the self-analysis

and reflection ability, understanding of self and self-knowledge and the reasoning ability and assessment of personal achievements (Gardner, 1983) ^[18]. Individuals who have developed intrapersonal intelligence often wonder who they are, what the purpose of life is or what the meaning of ambition is (Christison, 1996) ^[12]. Their purpose is to thoroughly understand their ego by managing their inner feelings. Healers, writers and religious leaders have usually developed the intrapersonal intelligence.

If learners want to develop their intrapersonal intelligence can engage in activities that increase their confidence, to reflect their goals and their hopes for the future or to record their thoughts and feelings in a personal calendar (Hall-Haley, 2004) ^[21].

3.1.8 Naturalistic intelligence

Naturalistic intelligence is characterized by the ability to recognize and rank animals and plants, the ability to create subsequent discrimination in the natural world and the creative use of the above capacities (Gardner, 1983) ^[18]. Individuals who use this type of intelligence often observe, categorize and understand aspects of the natural environment while also they try to understand a natural phenomenon (Gardner, 1995) ^[16]. Therefore, occupations attributable to naturalistic intelligence include those of the farmer, the botanist, the environmentalist and biologist.

Students with high naturalistic intelligence exhibit excellent perception of the environment around them, the weather changes and patterns and, therefore, wish to focus on such activities as creating observational notes about the changes in the local environment, outdoor activities or understanding concepts on the environment (Griswold *et al.*, 2002) ^[19].

3.1.9 Existential intelligence

The term existential intelligence is a recent entry in the theory of Multiple Intelligences. Introducing concepts of spirituality and philosophical reasoning, according to Gardner (1995) ^[16], the existential intelligence pushes people to deal with questions about human existence, the meaning of life, death and love. For this reason, it is common for these people to meditate and study various religions (Chapman, 1993; Gardner, 1995) ^[8, 16]. Although there is rich literature on the spiritual intelligence (Zohar & Marshall, 2000; Sisk & Torrance, 2001) ^[36, 32], Gardner himself considers that the ninth intelligence does not yet meet all his criteria.

3.2 Multiple Intelligence and Foreign Language Teaching

The question at this point is whether the theory of Multiple Intelligences would be able to find fertile ground in a foreign language learning environment. Therefore, efforts are made to determine whether and how feasible such an intervention is.

3.2.1 Multiple Intelligences and Performance

The foreign language material is traditionally focused on verbal–linguistic and logical–mathematical intelligence. The theory of Multiple Intelligences indicates that there is not only a single measure of mental activity, therefore, there is no single way of teaching. Gardner (1999) supported the formation of classes where the student will be emerging as a distinct personality through a multifaceted view of the intelligence. He hoped to contribute to the awareness of the individual needs of learners towards improving and achieving

the strongest intellectual performance (Gardner, 1999). The application of the theory makes it possible to address the different intelligences of learners through the creation of personalized learning environments and the particular emphasis on the content and the results (Gardner, 2000).

The case of the foreign language with adults is of particular interest because it represents the best the extensive diversity both in terms of social background and in terms of capabilities. Therefore, the likelihood of learners with weaknesses is more than possible. However, teachers develop and use methods which intentionally try multiple ways to push their students to get involved in the process. Therefore, knowing the kind of intelligence that a student possesses is important for effective teaching. The benefit is two-dimensional because both the teachers are able to design courses that are consistent with these intelligences while, the students realize their potential and improve their knowledge and skills accordingly.

3.2.2 Multiple Intelligences and Interest

The existence of interest is necessary and important in every spectrum of everyday life. In the case of trainees, it becomes imperative to be encouraged towards this direction as this may meet the demands of foreign language class. Interest and incentives are key parameters and are necessary in a foreign language as the students have to make an effort to learn effectively.

Viewed from the perspective of interest, the theory of Multiple Intelligences is able to provide more opportunities for designing creative teaching materials, which, in turn, is one of the main factors of successful development of incentives to learners. This is supported by Wigfield *et al.* (2006) ^[35] who said that the interest of trainees is large when the trainers provide activities with challenges that make the first able to become independent and the second to create a favorable cognitive and emotional environment. Since the theory offers not one but nine different types of intelligence, teachers have large opportunities to provide diverse material, increasing the interest of learners.

3.2.3 Multiple Intelligences and Self-confidence

It is at least reckless in a heterogeneous group of trainees, if the trainer underestimates the fear and lack of confidence of the learners. These feelings are expressed in many ways such as by the lack of faith in themselves, with assuming that they are not capable enough or that sooner or later they will fail. Horwitz (2008) ^[23] indicates that it is necessary for the trainer to know what the trainees feel about themselves and about learning a foreign language as sometimes the view changes at different stages of the learning process.

A student with low self-esteem believes that any successful effort is purely a result of chance or factors which he/she does not control (Pintrich & De Groot, 1990) ^[28]. On the other hand, students with high confidence understand that their success is determined to a large extent on their personal efforts and abilities. In a learning environment, where the theory of multiple intelligences is applicable, trainees have the opportunity to exploit and enhance their potential and to improve their weaknesses. This maximizes the likelihood of positive emotions in terms of successful performance and creates the conditions to address challenges in areas where difficulties emerge.

3.3 The Implementation of the Theory of Multiple Intelligences in Education

In the literature there is research conducted in the broader field of education regarding the theory of Multiple Intelligences. The purpose of the research had to do with various aspects of the class such as the curriculum design and evaluation while an attempt was made to formulate proposals for teachers and learners (Hoerr, 2000) [22].

Researchers and educators examined and analyzed the application of the theory in various educational environments. Brougher (1997) [5] focused on the benefits of the theory into graduates of higher education. The survey results showed an increase in levels of excitement and engagement in problem solving activities. Students worked the curriculum from different perspectives, they remained active participants in discussions and they took advantage of teamwork in a pleasant learning environment.

Kallenbach (1999) [24] examined the effects of the application of the theory in adult classes. The findings led to the conclusion that implementing the theory not only recognizes the uniqueness of each learner within the class but also provides knowledge about the learning preferences of stakeholders, which is particularly important as it leads to the creation of customized tasks that promote the learning process for each participant. The conclusions of Kallenbach are in line with those of Ferro (2004), who emphasized the practical significance of the theory regarding the creation of activities based on the various intelligences and the enhancement of the learning process.

Brualdi (1996) [6] focused on the positive effect of the application of and the role of the teacher in the classroom. He claimed that, contrary to the traditional educational system, all intelligences should be considered important and the educator must recognize the diversity of learners and teach accordingly. For this reason, he suggested that the curriculum should be organized in such a way as to include as many intelligences, which would improve the performance of learners. Similar findings and conclusions are hosted by Altan (2001) [1] and Kuzniewski *et al.* (1998), the investigations of which dealt with the positive, as discovered, influence of the application of the theory to the performance of the participants.

Shearer (2004) [29] and Shore (2004) [30] reviewed the implementation of multiple intelligences from the part of the evaluation and practical trainers. Their findings highlight the constructive role of the theory on the creation of reliable and valid assessment tools for learners and the conscious perception of the learning process on the part of trainers.

4. Conclusions

The theory of Multiple Intelligences is based on the idea that the human brain learns by using different kinds of intelligence. This means that the learning process varies from trainee to trainee as the capabilities and skills of each individual stem and is affected by the differences that exist in the social environment. The theory of Gardner fills this gap and ensures diversity and leads thus the trainer to apply more effective approaches to address the uniqueness of each student in the class.

In summary it could be said that the theory of multiple intelligences relies on a multifaceted learner-centered teaching mode through strategies that can be described as constructive. Such strategies invite learners to create their own concepts

through solving problems and developing their skills beyond verbal–linguistic and logical–mathematical intelligence. Therefore, some students are given the opportunity to meet their potential, which is a personal challenge and gives them more confidence. Acknowledging the learner's own value and the value of others, students are experiencing their role of and their contribution to the society. It is also understood that everyone has their own ability in a specific area and that other students can develop skills which the learner lacks. Teamwork stimulates the team spirit and everyone takes responsibility of the role that suits them best.

It has been proven that the person learns what really interests him/her. When students create themselves the subject of teaching and actively participate in the development process, it is natural to learn more effectively. Teachers should spend more time to help the learners to identify their natural tendencies and their gifts in order to grow further. After all, the main objectives of a trainer is to guide the students on how to learn. There are hundreds of ways to success, says Gardner (1983) [18] and many different skills that will help the students to reach it.

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