

Benefits of multiple intelligences



As there is no standard definition of 'intelligence', it remains one of the most controversial subjects in psychology as well as education. While some researchers suggested that intelligence is a general ability; other believe that it is a combination of various ranges of skills and talents. Based on the theories of seeing intelligence as a general ability, IQ (Intelligence Quotient) tests which evaluate abilities as problem-solving, memory, learning, and pattern recognition have been widely popular in diagnosing learner's abilities and potential, especially among young learners. However, some indicated that the tests were disputable and limited, as non-cognitive factors such as emotions also play an important role in people's lives, which the IQ tests do not include. Also, the IQ tests were unable to reflect on how people learn and acquire knowledge. A successful language learner requires a wide variety of abilities which an IQ test is unable to diagnosis. (Lightbown & Spada, 2002) It was until the introduction of "Multiple Intelligences" (MI) by Howard Gardner in 1983 that emotional intelligences were formally acknowledged and intelligences were seen as a range of interconnected abilities and talents (Gardner, 1983). Gardner's theories revolutionize the intellectual world, brought new insights into education as MI theories seek to help students identify and develop their strengths; discovering more effective ways of teaching as well as learning. This article gives a brief introduction on the development of intelligence theories and MI theories. Then it focuses on the benefits of MI theories and how it could be accommodated with English language teaching methods.

2 Theories of Intelligence

According to the Merriam-Webster Dictionary, the word “intelligence” means: ‘the ability to learn or understand or to deal with new or trying situations’ or ‘the ability to apply knowledge to manipulate one’s environment or to think abstractly as measured by objective criteria’ (Retrieved May 18th, 2010, from <http://www.merriam-webster.com/dictionary/intelligence>). Historically, the first people who studied intelligence were neither psychologists nor educators but philosophers such as Plato who linked people’s intelligence to blocks of wax, differing in size and purity (Cianciolo & Sternberg, 2004). It was in the early twentieth century that Charles Spearman, a British psychologist proposed the theory of “general intelligence” (or “the g factor”) which brought light into modern theories of intelligence. Spearman compared a number of mental aptitude tests and found similarities in the results. Therefore, he concluded that intelligence is a general cognitive ability which could be measured and analyzed (Spearman, 1904). Later on, the French psychologist Alfred Binet invented the first intelligence test, known as today’s IQ (Intelligence Quotient) test (Cianciolo & Sternberg, 2004). However, as scholars began to realize that the general intelligence theory emphasized only on cognitive aspects such as problem-solving, the need for a new “intelligence” emerged.

In the 1920’s, Edward Thorndike described the term “social intelligence” as ‘the ability to manage and understand people and to act wisely in human relations’ (Matthews et al., 2004). Similarly, in 1940, David Wechsler argued that ‘conative non-intelligent factors’ which contribute strongly to ‘intelligent behavior’ are essential to success in life and that the intelligence

model would not be complete unless such factors are included (Boyatzis, 2007). In 1983, Gardner introduced the theory of “ Multiple Intelligence” which included both Interpersonal intelligence (the ability to understand the inner feelings of other people) and Intrapersonal intelligence (the ability to understand oneself) which deals with emotions (Gardner, 1983). Gardner believed that the general intelligence was unable to fully explain cognitive ability and performance outcomes, and that intelligence is too complicated to be restricted in one concept.

3 The theory of Multiple Intelligences

Originally, Gardner identified seven types of intelligence in 1983, which includes: Verbal/linguistic, Logical/mathematical, Musical, Bodily/kinesthetic, Spatial/visual, Interpersonal and Intrapersonal intelligence (Gardner, 1983). The first two have been highly valued in schools; the next three are often associated with arts; and the final two are what Gardner referred to as ‘ personal intelligences’, dealing with feelings and emotions. An eighth intelligence, naturalistic, was added later (Gardner, 1999).

In *Frames of Mind*, Gardner pointed out that the traditional intelligence which school systems normally emphasis on is mainly based on a narrow range of verbal/linguistic and logical/mathematical skills. As though such skills are important to an individual’s studies and future career; other types of intelligences, especially the ‘ personal intelligences’ are also essential to human development and almost impossible to live without (Gardner, 1983). Good interpersonal skills are of significant value to an enjoyable social life. For many children, the strongest skills lie in the other areas than verbal and

logical intelligence, which tend to be frequently neglected according to the traditional intelligence theory. MI theories provide students an opportunity to learn through their strengths, become more successful at learning all subjects and even improving the traditionally highly valued “ basic skills”.

According to Gardner, the eight intelligences are separate and independent. Each individual possess a basic set of intelligences which develop at different times to different degrees (Gardner, 1999). However, Gardner also stated that the intelligences are closely related to each other and rarely operate independently. They are used at the same time and tend to complement each other (Gardner, 1983). For example, a dancer requires musical skills to follow the rhythm, but also kinesthetic skills to move properly and interpersonal skills to attract the audience and intrapersonal skills to express her emotions. As the different intelligences are closely connected; when proficiency in one area develops, another area or even the whole constellation of intelligence may be enhanced (Gardner, 1983). Therefore, it is important to encourage students to explore and exercise all of their intelligences.

Gardner also emphasized that there is not one intelligence superior than the other; all the intelligences are equally important and essential to an individual's development (Gardner, 1983). Most people tend to neglect kinesthetic intelligence and limit it to athletes. However, many highly professional occupations require people with good kinesthetic skills, such as electronics, mechanics and surgeons. A surgeon must acquire the ability to control his muscles very finely.

As Gardner stated, the eight intelligences are amoral; which could be put to constructive or destructive use (Gardner, 1999). Therefore, it is important for teachers to understand MI theories and use it positively in their classes.

4 The benefits of MI theories

Though there are certain criticisms concerned on Gardner's theory of MI, it received positive response from many educators and has been widely applied to schooling. On first thought, the idea of teaching different intelligences sounds impossible for formal education; teaching one is hard enough already, let alone eight. Gardner responds to this by clarifying that psychology does not necessarily dictate education; it helps to understand its conditions instead (Gardner, 1999). Also, eight types of intelligence could be seen as eight ways of teaching instead of one; which could be more accessible to learners one way or another.

On a general basis, MI theories have three benefits:

Self-development and formation. MI theories can help students and teachers better understand their abilities. It helps students to build up confidence as it demonstrates how they can use their strengths to address their weaknesses. It motivates students to find where their interest and strength lies and push their abilities further.

A broader choice of schooling. All intelligences are required for an individual to live a full life. Therefore, teachers need to attend to all intelligences, not just the ones that the traditional intelligence focuses on. MI theories are suitable for differentiated and individualize learning; providing teachers the

potential to develop new and flexible programs which might better meet the learner's needs. Teachers could also redesign old courses to suit new requirements (Green & Tanner, 2005). A variety of activities could be included in the new curriculum, which would easily motivate and attract learners.

MI theories also look into morality. Gardner once considered adding a “moral intelligence” to the MI theories. But he later came to the conclusion that ‘Morality’ is a complex concept combined with numerous psychological aspects such as personality, will and character. Therefore it is not an intelligence in itself (Gardner, 1999). But he did not give up on the idea of “moral intelligence” and stated that ‘we must figure out how intelligence and morality can work together to create a world in which a great variety of people will want to live’ (Gardner, 1999).

Sometimes teachers unconsciously adapt MI theories into their teaching program such as using visual support or playing a song. When they fully understand MI theories and its benefits; it could be more beneficial to them in their teaching process. Therefore, it is essential to include MI theories in teacher education.

5 Accommodating MI theories in ELT

MI theories have the potential to be adapted into all teaching methods, although there are three main approaches which collaborate with MI theories constructively. They are the Communicative Language Teaching Approach (CLT), Task-based Learning (TBL) and the SAFER model.

- The Communicative Language Teaching Approach (CLT)

The definition of CLT differs among different people; a narrow interpretation of it is that it is a teaching approach used in second or foreign language education which sees communication as the method and the goal of learning a language. Activities in CLT typically involve student making conversations, role-play and simulation being popular ones (Harmer, 2007). CLT considers learners' needs and different requirements just as MI do, also being flexible in nature. CLT is a typical approach which combines different intelligences together. By making conversations, students have the opportunity to practice their verbal and logical skills. When talking to each other, they also practice their interpersonal skills. By asking students to make a conversation regarding a picture or one's own experience, visual and intrapersonal skills could also be developed. Students could also be asked to sing or dance along songs to practice their musical and kinesthetic skills.

- Task-based Learning (TBL)

TBL is a teaching approach of making meaningful tasks the focus of the learning process. It is formed on the assumption that students will naturally acquire the language focused on tasks instead of language forms (Harmer, 2007). Willis (1994) suggested that TBL usually contains three stages: Pre-task, the Task cycle and the Language focus (cited from Harmer, 2007). Like CLT, TBL also frees the students from limited language control. In all three stages students are encouraged to use their own language rather than practicing one pre-selected item. The language explored arises from the students' needs which are personalized and relevant to them. They will be exposed to a wide range of phrases, collocations as well as language forms.

A TBL class also gives the students plenty of opportunities to communicate, bringing a large variety of enjoyable and motivating activities which could be combined with MI theories into the classroom.

- The SAFER approach

Unlike the previous two, the SAFER approach is less popular and used by teachers. SAFER was proposed by Berman, indicating that this model is an alternative to the traditional ELT classroom pedagogy. Berman stated that the SAFER model incorporated former models such as PPP (Present Practice Produce) and TBL; combining educational kinesiology and Suggestopaedia techniques (Berman, 1998).

The steps in SAFER includes:

S: Setting the scene

A: Authenticity

F: Focusing on main features of each intelligence type

E: Error correction

R: Review

(Berman, 1998)

Berman believed that the SAFER method could help to create better learning conditions and enhance the learning process through revision. However, his approach is considered quite specified and not widely adapted. But Berman

has indeed made a great effort in applying contemporary pedagogical thought to ELT, bringing new insights to the application of MI theories.

6 Conclusions

Among the two main theories of intelligence: general and multiple intelligence; MI theories have been generally considered more scientific, including non-cognitive factors such as emotions. Gardner's MI theories brought new insights into education, helping students to identify and develop their strengths and discovering more effective teaching methods. Gardner stated that all the eight intelligences are equally important and essential to an individual's development. As though the intelligences are separate, they seldom operate independently. Therefore, development in one area often increases the development of another (Gardner, 1983). The intelligences could work positively and negatively, consequently, it is important for teachers to understand MI theories and how to apply it to their teaching methods. MI theories have the potential to be adapted to all teaching methods; although there are three main approaches which collaborate with MI theories constructively. Which are the Communicative Language Teaching Approach (CLT), Task-based Learning (TBL) and the SAFER model. MI theories are of wide adaptability and flexibility, to use MI theories effectively, teachers should always remain open-minded and creative, prepared to make changes in their teaching methodology.