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The Application of Multiple Intelligences Theory in Task-based Language Teaching

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***Abstract*—The learning of a foreign language involves the interplay of many factors concerning human intelligences. Therefore, an analysis of learners' intelligences is of vital importance in EFL teaching and learning. This article tries to explore the feasibility of combing the basic concepts of Howard Gardner's MI theory with the practice of college English teaching in order to develop the multiple intelligences on the part of learners and improve the quality of teaching as well as the comprehensive qualities of students.**

***Index Terms*—multiple intelligences, task-based language teaching, EFL teaching & learning, assessment**

I. Introduction

With a view to keeping up with the new development of higher education in China, deepening teaching reform, improving teaching quality, and meeting the needs of the country and society for qualified personnel in the new era, in 2007, China's Ministry of Education drew up College English Curriculum Requirements (Requirements hereafter) to provide colleges and universities with the guidelines for English instruction to non-English major students. According to the Requirements, College English has as its main components knowledge and practical skills of the English language, learning strategies and intercultural communication. It is a systematic whole, incorporating different teaching models and approaches. In view of the marked increase in student enrolments and the relatively limited resources, the Requirements propose that English teachers in colleges and universities in China should remold the existing unitary teacher-centered pattern of language teaching by introducing a variety of new teaching models. The new models should combine the principles of practicality, knowledge and interest, facilitate mobilizing the initiative of both teachers and students, and attach particular importance to the current position of students and the leading role of teachers. The models also should incorporate into the strengths of the current models and give play to the advantages of traditional classroom teaching while fully employing modern teaching and learning theory.

II. The Framework & Characteristic of MI Theory

For a long time, intelligence was regarded as a fixed, static entity at birth and defined as the ability to answer items on IQ tests. Based on brain research, previous research work with young children and experiments with animals, psychological testing psychological testing.

Use of tests to measure skill, knowledge, intelligence, capacities, or aptitudes and to make predictions about performance. Best known is the IQ test; other tests include achievement tests—designed to evaluate a student's grade or performance, cross-cultural studies. Cross-cultural comparisons take several forms. One is comparison of case studies, another is controlled comparison among variants of a common derivation, and a third is comparison within a sample of cases.

Gardner (1983) put forward a radically different view of intelligence (the Theory of Multiple Intelligences) that claims:

a. We all possess multiple intelligences that we combine and use in our own unique ways.
b. IQ tests only measure a small range of these intelligences
c. Each intelligence type is comprised of numerous sub-intelligences
d. Each intelligence develops at its own rate.
e. Rather than focusing on an IQ score, we should focus instead on establishing a cognitive profile.

Gardner believes every individual has at least eight intelligences which are in their basic form, present to some extent in everyone, although a person will generally be more talented in some than in others. The eight multiple intelligences are listed as follows:

1) Verbal/Linguistic Intelligence. It is the ability to use language effectively and creatively both orally and in writing. This intelligence relates to the meaning, rhythms and sounds of words.

2) Logical/Mathematical Intelligence. It is the ability to use numbers effectively, to recognize abstract patterns, to discern relationships and to reason well. The people with logical/mathematical and verbal/linguistic intelligences enjoy solving problems, finding patterns, outlining and calculating. It forms the basis for most systems of education, as well as for all forms of currently existing standardized testing programs.

3) Visual/Spatial Intelligence. It involves the ability to sense form, space, color, line, and shape including the ability to graphically represent visual or spatial ideas. People with this intelligence like to design, invent, imagine and create.

4) Bodily/Kinesthetic Intelligence. It is the ability to use one's body to learn and solve problems through physical experiences such as mimicking and touching.

5) Musical/Rhythmic Intelligence. It is the ability to recognize tonal patterns and a sensibility to rhythm, pitch, melody, etc. This intelligence can be seen in advertising professionals, musicians, dance bands and composers.

6) Interpersonal Intelligence. It is the ability to understand people's moods, feelings and intentions, including the ability to work cooperatively with others in a group and to communicate verbally or nonverbally with other people. This intelligence can usually be found in such people as counselors, teachers, therapists, politicians, and religions leaders.

7) Intrapersonal Intelligence. It involves the ability to understand one's own emotions, motivations and moods.

8) Naturalist Intelligence. It involves the ability to recognize and classify plants, minerals, and animals, rocks, grass, and all variety of flora and fauna. It also includes the ability to recognize cultural artifacts like cars, sneakers, etc.

In Gardner's view, it is of vital importance to recognize and develop all of these varied human intelligences, and all of the combination of intelligences. These intelligences are of neutral value; none of them is considered superior to the others and they manifest a full display of learners' individual differences; they are understood as tools that every learner possesses to make sense out of new information which can be stored for later use. In addition, each of these frames is autonomous, changeable and trainable (Armstrong, 1999) and they interact to facilitate the solution of daily problems.

III. The Application of MI Theory in Task-based Language Teaching

Nowadays an increasingly number of college English teachers in China has adopted the task-based language teaching approach (TBLT) as their main teaching approach. This approach, as the one recommended by the Requirements, focuses on the use of authentic language and involves getting the students to do meaningful tasks using the target language (English). In practice this approach is recognized as an effective means of developing students' language output by applying a variety of meaningful tasks ranging from participating, experiencing, interacting and corporative learning. The specific tasks are goal-oriented activities such as filling a form, visiting the doctor, making a complaint, asking for directions, etc. In the process of implementing this approach, learners take advantage of their own cognitive potentials and their existing resources of the target language, sensing and learning the target language through practice. Coincidentally, the basic concepts of the task-based teaching approach conform to those of MI Theory.

Therefore, the application of MI theory into the task based teaching approach will enable students to utilize their multiple intelligences and improve their language skills through a variety of teaching activities. The following is a table showing the relationship between the development of multiple intelligences and task -based teaching activities.

TABLE 1.
THE RELATIONSHIP BETWEEN THE DEVELOPMENT OF MULTIPLE INTELLIGENCES AND TASK-BASED TEACHING ACTIVITIES

	Task-based teaching activities that match with MI theory	Intelligences involved
Listening	Listening to English stories, news & songs, dubbing background music for texts, attending lectures, mimicking by means of real objects and pictures, holding discussions in English.	Verbal/Linguistic intelligence Visual/Spatial intelligence Musical intelligence Interpersonal intelligence Intrapersonal intelligence
Speaking	Encouraging students to read texts aloud and tell stories with rich gestures and expressions; encouraging them to illustrate the pictures in the text, asking them to answer questions with the aid of real objects、pictures or gestures & expressions; asking the English group to hold discussions on specific tasks; asking students to deliver English speeches or play English games concerning the specific situation of the text.	Verbal/Linguistic intelligence Logical-mathematical intelligence Bodily-kinesthetic intelligence Visual/Spatial intelligence Musical intelligence Interpersonal intelligence
Reading	Doing independent thinking of the texts or the materials to be learned, inducing & summarizing these texts or materials after reading, keeping notes and holding task based discussions.	Verbal/Linguistic intelligence Logical-mathematical intelligence Interpersonal intelligence Intrapersonal intelligence
Writing	Keeping English diaries、 classroom notes and observation notes, writing English compositions, compiling English electronic works and English blackboard newspaper.	Verbal/Linguistic intelligence Logical-mathematical intelligence Musical intelligence Interpersonal intelligence Naturalistic intelligence
Translating	Mutual translation from Chinese to English or English to Chinese, establishing hobby clubs and practicing interpreting in group work.	Verbal/Linguistic intelligence Logical-mathematical intelligence Interpersonal intelligence

To further illustrate the application of MI theory in the task-based teaching, the author takes the teaching of "Sailing Round the World" as a sample teaching. Taken from a currently used textbook for Chinese college students, the text gives a brief account of how Sir Francis Chichester, a British adventurer travelling round the world alone in a small yacht in spite of the fact that he had lung cancer. First, the author designed the specific tasks for students to fulfill, that is, the task before class, the task in class and the task after class. With teacher's help, the students are supposed to fulfill

the tasks through the collaborative learning process of sensing, experiencing, practicing and participating, with a view to improving their overall language skills and facilitating their development of multiple intelligences.

Before-class tasks involving the application of multiple intelligences:

1. Teaching tasks: collecting video clips and/or writing materials about Chichester's adventure; rewrite the text; make PPT for the text "Sailing Round the World".

2. Teaching aims: cultivating students' reading ability as well as their abilities concerning Verbal/Linguistic Intelligence, Visual/Spatial Intelligence, Musical intelligence, Interpersonal intelligence and Intrapersonal intelligence.

3. Material source: the written or audiovisual materials from the Internet; the audiovisual materials from other sources; the books and journals from the library.

4. The form of activity: group work or pair work.

Most students took an active part in the process of performing the tasks through cooperation with other members of the group. As it turned out, through collecting, screening and reading the information, students' reading ability has been improved.

5. In-class tasks involving the application of multiple intelligences:

Teaching tasks: demonstrating what they find about Chichester's adventure.

Teaching aims: cultivating students' listening and speaking ability as well as their abilities concerning Verbal/Linguistic Intelligence, Logical-mathematical intelligence, Visual/Spatial Intelligence, Bodily-kinesthetic intelligence, Interpersonal intelligence and Intrapersonal intelligence.

Form of activity: group work or pair work.

Teaching Procedure:

1). Group discussion

2).The individual work for each group, including choosing a specific topic for telling or writing the story

IV. The Assessment of Students' Performance in MI Theory Perspective

Gardner (1993) holds that assessment is an essential component of MI education. It is particularly important to use varied modes of assessment that will allow students to show their strengths and performance optimally. In Gardner's eyes, assessment is defined as "the obtaining of information about the skills and potentials of individuals and useful data to the surrounding community" (1993).However, the traditional means of assessment of students' performance is to a large extent teacher-oriented, which is intended to determine what students have learned though it generally fails to do the job. Assessment should be integrated with learning and instruction and is intended to stimulate further learning. Specifically, David Lazear (1994) listed some key principles, such as:

Assessment design and execution should include educators who work with the students.

Assessment requires time and effort; educators should be given appropriate time to create and administer instruments.

Assessment should be authentic and central to the education process.

Assessment should drive the curriculum.

Assessment practices should be designed for students' benefit.

Assessment practices should mirror assessment in the "real world."

Assessment should be individualized and developmentally appropriate.

Among these principles, the author would like to further illustrate on the core principles for applying MI Theory.

A. Assessment should be Diversified

A good assessment instrument can be a learning experience. As MI theory reveals, every student is more or less provided with the ability to deal with his daily life. However, it is very difficult to assess this ability through the traditional test depending on paper and pencil. Therefore, MI theory requires that teachers build diversified assessment mechanism for students, that is, a diversified mechanism to bring their students' multiple intelligences into full play as far as language learning is concerned. For example, one important characteristic of MI Theory-based assessment is context-driven assessment. Instead of being imposed externally, learners are put in a natural learning environment to work on problems or projects. When a learner is assessed in the actual working condition, it is likely to make much better prediction about his ultimate performance. The other characteristic of MI assessment is intelligence-based and intelligence-fair assessment. Since intelligence features set of psychological processes, it is important that these processes be assessed in an "intelligence-fair" manner. Gardner suggests using portfolios/ process folios, domain-project and apprentice model (1993) to evaluate students. In short, we need diversified forms of product and/or process-based, individualized-based, contextualized-based, performance-based and ongoing-based assessment which include paper-and-pencil tests, portfolios, journals/logs, projects, exhibits, performances, and displays, etc.(Lazear, 1999) with feedback gained not only from teachers and parents but also from students themselves and their peers, to reflect and reinforce MI-inspired instruction.

B. Assessment should be Authentic

Many researchers of MI theory nowadays share the belief that authentic assessment, which emphasizes assessing what students know(knowledge) and what students do(performance) from different perspectives provide a complete

picture of students' abilities, efforts and progress during the learning process. In their opinion, the traditional assessment is nothing more than "spurious assessment", because it ignores the learning of concepts, principles and the application of skills they have learned; therefore, such assessment is insufficient in reflecting the real performance of students. For this reason, the advocators of MI theory hold that the assessment should be authentic and that students should combine what they have learned with what they have experienced, since learning is implemented under the relevant situation. Only when learners are put under the authentic situation can assessment be meaningful. Gardener calls it "apprentice model", which is opposed to the uniform view of schooling and the formal testing (standardized tests).

V. Implications

First, in the process of training students' language skills, teachers should provide wider variety of materials and diversified activities. For example, in training students' listening skill, teachers should not be limited to the practice of the tasks designed by the textbook itself; rather, they should broaden the scope of tasks by means of listening to English stories and speeches, watching English animations and mimicking with the aid of props. By applying multiple intelligences, those who show no interest in listening practice are more likely to focus their attention on the task. Similarly, students' interest in writing can be aroused and their understanding of English be improved by keeping English diaries and writing English compositions. To a large extent, the development of students' language skills goes synchronically with the multiple intelligences; therefore, in the language learning process, students also get improved in terms of their Verbal/Linguistic Intelligence, Logical/Mathematical Intelligence, Visual/Spatial Intelligence, Bodily/Kinesthetic Intelligence, Musical/Rhythmic Intelligence, Interpersonal Intelligence, Intrapersonal Intelligence and Naturalist Intelligence.

Second, teachers should design and practice more modules for classroom teaching activities. Retelling the text is a case in point. By retelling the text, students are able to have a better command of the main idea of the text and put the words and expressions they have just learned into practice. However, such activities are likely to cause some students embarrassed, and to some extent, make them at a loss what to say in class. If teachers integrate the MI theory into the activity, they may find that this teaching aim can be achieved through many approaches, for example, by asking students to fulfill the task on a group basis. The group discussion not only increases students' chance to communicate with each other, but also make students relaxed.

Third, teachers should pay attention to students' weak points in different intelligences and bring their linguistic competence into full play. Generally, students' ability varies in terms of listening, speaking, reading, writing and translation. Students are less likely to gain a balanced development in these abilities because of the students' unbalanced mastery in the eight intelligences. Therefore, teachers are supposed to take into consideration both their strengths and weakness in terms of intelligence factors. When imparting new knowledge, for example, teachers should take advantage of their strengths, while reviewing and strengthening their existing knowledge, teachers should spare no effort to improve their intelligences which are comparatively weak so that a balanced development might be achieved.

Fourth, a series of assessment approaches should be adopted to gain an overall and objective assessment for students' performance in language learning. The assessment schema should integrate such factors as students' participation in classroom, their assignment after class, their performance in various language related activities and their performance in the final examination.

VI. Conclusion

MI Theory provides language teachers with a variety of means to understand and categorize human intelligences, throwing light on our awareness of what makes learning possible and effective for individual students. On the other hand, MI theory is to catalyze ideas. Therefore, MI model should not be considered as rigid or prescriptive pedagogical formula. Rather, it can be seen as a framework by which language teachers employ in creative, exploratory and trial-and- error reform. In brief, MI theory is a useful tool for planning language learning tasks which insure that students can cope in the presence of challenge. When learners see what they can do, this has a positive effect on their self-esteem and can lead to enhancing success in language learning.

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