### Application of Multimedia and Network English Teaching In Multiple Intelligence Development

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Abstract—Based on Howard Gardner's Multiple Intelligence theory, this paper puts forward that college English teaching assisted by multimedia technology and network could promote multiple intelligence to the greatest extent. By taking advantage of students-center, teachers-mediator, task-base drive, constructivism approach, network support, extracurriculum assist, which all contribute to multiple intelligence development, both college English teaching and multiple intelligence are bond to obtain its best effect.

Keywords-multiple intelligence; multimedia technology; network; college English teaching

### I. INTRODUCTION

At present, modern multimedia technology and network has been widely applied in the field of college English teaching process so that improvement of network teaching effect as well as enhancement of language ability have become the final goal of numerous teachers' concern. However, if study can be regarded as an all-round capability acquired course of which information obtaining and applying ability, problem-analyzing and solving ability, theory-implementing ability, self-controlling and selfpotential exploring ability, self-planning and selfsupervising and self-assessing ability are mainly consisting, language ability is merely supposed to be considered as one basic part of all-round capabilities. Therefore, to improve English ability is rather than the ultimate objective of learning but as a medium by which language intelligence evolution together with English learning effective development have found its way to interact and grow up with each other. There is no doubt that college English network teaching with multimedia technology is the most advanced teaching mode, which features as multi-faceted and three-dimensional effect. Only by exploiting this mode can multiple intelligence, in which language intelligence is included, achieve the greatest development accordingly in the long run as well as take a lead in the future of this filed.

### II. MULTIPLE INTELLIGENCE THEORY

In 1980s, American psychologist Howard Gardner come up with the theory of multiple intelligence, who deemed that intelligence can be defined as individual's ability to handle difficult problems or create effective products under certain circumstances of social and cultural environment. He also

stressed that intelligence exists in a form of independent of each other and multi-dimensional ways rather than integrating form centered with language ability and logical ability of which we used to think. Therefore, college English teachers are strongly recommended to establish the goal as development of multiple intelligence oriented instead of language intelligence only.

### A. Structure of Multiple Intelligence Theory

Howard Gardner pointed out the structure of intelligence is composed of eight intellectual elements. First, linguistic intelligence, which refers to ability to think with words and express with words as well as appreciate the meaning of the words. Second, logical mathematical intelligence, which directs as the ability to calculate, quantify, think over proposition and assume together with complicated mathematical operation. Third, spatial intelligence, which means to perceive visual space and world accurately. Fourth, bodily kinesthetic intelligence, which drives at one person's ability to handle objectives and adjust body skillfully. Fifth, musical intelligence, which is defined as the ability to fell, identify, memorize, transform and express music. Sixth, interpersonal intelligence, which points at the ability to understand and socialize with people effectively. Seventh, interpersonal intelligence, which contains that the ability to recognize, understand and reflect on oneself. Eighth, naturalist intelligence, which involves in the ability to identify or classify the natural world and engage in productive work by means of applying these specialties.

### B. Implication of Multiple Intelligence Theory

By analyzing the theory of multiple intelligence, main implications of MI could be summarized as the following four aspects. First, each individual intelligence has its own characteristic and unique form of expression. In terms of Howard Gardner's multiple intelligence theory, as an individual, every person has possessed relatively independent eight intelligences spontaneously, which make everybody's intelligence with its own style by different combinations among them. Second, intelligence stresses that the ability actually refers to deal with practical problems and create the effective productions for society requirement. From the perspective of Gardner, only two abilities are

supposed to be emphasized, which involve in actual problem-solving ability and effective products-creating ability. Third, the developing direction and degree of individual intelligence have greatly confined to influence and limitation from environment and education. Fourth, it puts emphasis on looking upon intelligence problems from multiple-dimension perspective. To be specific, it means that the constitution of intelligence is made by multiple-dimensional and relevant independent abilities rather than one or two core abilities.

# III. MUTUAL PROMOTION BETWEEN MULTIPLE INTELLIGENCE AND COLLEGE ENGLISH TEACHING

Multiple intelligence theory mainly provides multidimensional ways of development for all learners, which emphasizes the ability of giving insight into specific things, thinking independently and handling problems specifically. Meanwhile, it also indicates that combining with students' intelligence characteristics can lead to each learner's own establishment of recognition for all things so that reasonable all-round development could be achieved.

Because of these four features as integrity, differentiation, practical ness and development, all eight intelligences of MI could only find its best way out under certain advanced circumstance, which multimedia technology and network environment are able to offer and interact with due to their unique advantages as intuition, autonomy, scientific nature and reciprocity. To be specific, multimedia technology aims at supplying certain exterior spur with pictures, words, sounds and videos etc, which could be described as a comprehensive stimulation from all senses. Thanks to its intuition trait, plus network enables students to be given enough learning space and flexibility, each individual's potential and unique differentiation might be motivated and activated so that innovative spirits can be shaped via multimedia technology and network environment. Therefore, what MI theory matter is to facilitate the success of application in MI field, multimedia technology and network must interactive with every aspects of MI so as to reap a mutual benefit.

## IV. STRAGEGIES ON DEVELOPMENT OF MULTIPLE INTELLIGENCE BY COLLEGE ENGLISH TEACHING

The students who has been playing the role of planner, controller, discussant and assessor during the process of learning are now taking advantage of multimedia technology and network to develop language intelligence by means of centering as students as well as regarding teachers as mediator. Teachers have been given the new role as manager, organizer, helper, stimulator, assessor, guide even learning model for the students' learning process. Teachers' responsibility should be widen to larger extent that contains allocating diverse resources appropriately, instructing students to obtain what they need accordingly, guiding students to classify information reasonably, stimulating students to proceed information with their own interests,

tutoring students with application of various learning strategies, and supervising the learning process in order to help them with problem-solving result in time.

# A. Task-based assignment by multimedia technology and network

Task-based teaching approach means to accomplish certain assignment by joint work in the classroom made by teachers and students so that the language acquisition could happen naturally. Teachers are supposed to put forward questions by means of dialogue for students 'own solution in stead of installing information in one breath, which not only help to settlement of problem but obtainment of sense of competence and sufficiency. Multimedia technology and network environment have enabled task-based teaching method to exert its best function such as the procedures of design for task, execution for assignment, solution to problems and conclusion obtaining. By making best use of network, precision and delicacy could be achieved beyond the limitation of both time and space so as to promote practical expertise for logic intelligence.

# B. Constructive-cooperation by multimedia technology and network

What constructive theory stress is to build up the connotation of new information as well as transform or reorganize the original experience. Language learning under circumstance of network environment means that a process made by students themselves to construct langue knowledge and ability, in another words productive learning, which not only refers to new knowledge acquisition but also new interpretation process of affairs with the help of multimedia technology. What's more, degree of students' participation has been greatly enhanced because of interaction with multimedia technology, which greatly contributes to the arousing of students' learning interest and performing of their dominant function. To be specific, on the one hand, multimedia technology and network have greatly shorten the distance between textbook and real life and enable students to develop a global horizon with language communicative ability enhancement. On the other hand, cooperative learning is strongly advocated to lower the anxiety of learner through network so that learners of all levels could communicate, negotiate and cooperate respectively.

### C. Achievement share by multimedia technology and network

Multimedia technology and network have enabled students to experience foreign culture, customs, beliefs and taboos and so on with a comprehensive and resourceful platform in a specific, authentic and vivid way. Learning motivation is completely spurred and incentive forged at the same time. Teachers are required to guide students to utilize this platform to present their projects, display and share their materials, learning methods, understanding of certain themes etc. By presentation in forms of oral or written one confidence is bond to be gained and ability of intelligence in

all round could be boosted. PPT, DV, or FLASH is the most popular ways for students to apply in displaying of their comprehensive capabilities. Therefore, students can make use of their spare time to learn aesthetic knowledge and music so as to touch audience and reevaluate their own fruits. Visual and special intelligence together with musical intelligence are able to fully develop.

### D. Effective supervision by multimedia technology and network

Students have already get used to traditional testoriented education that self-reflection is ignored or overlooked to some extent. With the help of network and multimedia technology students could memorize the effect of each learning process within high efficiency. In another words, the ability of recognizing, understanding and reflecting oneself will be promoted with time and labor saving. During the process of language learning, selfreflection intelligence finds it way out to improve learning efficiency. Meanwhile, extra-curriculum activities arranged by network and supported by multimedia technology have enormously improved observing intelligence and bodily kinesthetic intelligence spontaneously. For example, investigation on marketing, environment protection, endanger animals, learning pressure, health and care, love and friendship and so on, will entitle students to observe and practice relevant intelligence. In practice, teachers assign students with diverse tasks by use of multimedia technology and network.

#### V. CONCLUSION

To summarize what we discuss above, application of multimedia technology and network could guarantee the best achievement of multiple intelligence as well as improve them mutually. It is essential that both college English teaching and multiple intelligence should support and interact with each with the support of multimedia technology and network so that both of them could be perfected and improved to its best.

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