

# Enlightenment of Multiple Intelligences on Oral English Education for Chinese Children

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## ABSTRACT

This paper mainly studies the enlightenment of multiple intelligences on Chinese children's oral English education. Based on logical/mathematical intelligence theory and bodily/kinesthetic intelligence theory, this paper uses case study, analysis and explanatory research methods to explore the importance of multiple intelligences to Chinese children's oral English education and the relationship between these two theories and oral English education. This paper analyzes and summarizes the positive effects of logical intelligence and physical intelligence on Chinese children's second language learning, and expounds the application of multiple intelligences in children's oral English teaching from the perspective of language environment and children's growth law. This paper expounds the logical/mathematical intelligence and bodily/kinesthetic intelligence in English second language acquisition education for Chinese children. This paper summarizes the countermeasures to improve Chinese children's oral English education.

**Keywords:** *multiple intelligences, oral English education, Chinese children, logical/mathematical intelligence, bodily/kinesthetic intelligence*

## 1. INTRODUCTION

English, as the international language, has already become a compulsory course in all schools, from primary school to high school, in China. However, Chinese students who learn English as the second language have not a good environment, so learning English, to some extent, becomes a hard task for some children. Besides, in some traditional Chinese teaching modes like "chalk + talk aloud" and "sage on the stage", the only thing students need to do in the class is sitting still and listening to the teacher, which will definitely make them feel bored and sleepy.

Multiple intelligence includes at least eight kinds of intelligence of person, like linguistic intelligence, logical intelligence, musical intelligence and other intelligence, disapproving that some teachers only measure students by their scores. And different people have different levels of these kinds of intelligence. Gardner believed that in this way, students can acquire language in an all-round, multi-channel and personalized way through different intelligences; It can help improve the areas where

students' abilities are weak; promote students' active participation, enhance students' confidence and obtain a greater sense of achievement. All in all, multiple intelligence theory has an important role in oral English education for Chinese children.

This essay focuses on the application of the multiple intelligence, especially logical intelligence and bodily intelligence to English second language acquisition education for Chinese children. Therefore, the study content of this essay consists of three parts: multiple intelligence theory and English language education for Chinese children, the application of logic/mathematical intelligence, and the application of bodily/kinesthetic intelligence.

The first part is multiple intelligence and English language education. Multiple intelligence contains at least eight intelligence. And Howard Gardner argues that each person is unique for being born with different intelligence. Focusing on all intelligence of each child can find their potential intelligence so as to help them learn English in their most acceptable way. The second

part is the application of logic/mathematical intelligence, which place emphasis on logic, stimulating children to think and practice language in a logical way and making their oral communication be smoother. And there are some teaching strategies proposed by the author. The third part comes to the application of bodily/kinesthetic intelligence, which mainly focuses on the activities to take advantage of children's nature in English education.

By combing the multiple intelligence and English second language acquisition education for Chinese children, the teaching features and strategies can be explored more deeply, which is beneficial to teachers to have a good understanding about making a good use of children's potential intelligence in English learning and choose appropriate strategies, so that successful English teaching can be achieved.

## **2. THE THEORY OF MULTIPLE INTELLIGENCE AND ENGLISH LANGUAGE EDUCATION FOR CHINESE CHILDREN**

Howard Gardner, a psychologist at the University of Cambridge, UK, believes that human intelligence takes many forms. Everyone is born with multiple abilities, not a single ability. Human intelligence is diverse in individuals, with at least eight different intelligence levels, including speech/language intelligence and logic/mathematics intelligence, bodily/kinesthetic intelligence, music/rhythm intelligence, interpersonal intelligence, personal intelligence and naturalistic intelligence.

According to Gardner's theory, everyone is born with different intelligence, which is unique. The theory of multiple intelligences is closely related to modern teaching, which forces teachers to surpass the traditional teaching mode. Moreover, everyone's intelligence is not balanced in all aspects, so each student's intelligence is reflected in different aspects. These intelligences are not absolutely independent, but interact and play a role in the form of combination. It regards respecting each student's natural personality, comprehensively evaluating each student's achievements and developing students' potential as the core concept, and aims to rebuild students' learning confidence and interest, and finally realize their all-round improvement and development. Due to the lack of awareness of potential intelligence, children need special care. As a teacher, we should recognize the differences between each student and cherish their personality. We should not only use scores to measure a child, but also find their potential intelligence and fully reflect each student's personality. Only under the guidance of multiple intelligences theory can English teaching stimulate children's interest in learning English and promote the development of children's multiple intelligences. Such guidance is very beneficial to the growth of children. In language teaching, we should

activate children's different intellectual potential, mobilize children's enthusiasm for autonomous learning, make the classroom atmosphere more and more effective, and let multiple intelligences go deep into language education.

### ***2.1 The value and significance of Multiple Intelligence Theory in the second language acquisition of children.***

Gardner summarizes the importance of integrating meta-cognitive skills into second language learning in his document *Multiple Intelligence Theory and English Teaching*: Students can acquire language in an all-round, multi-channel and personalized way through different intelligence; It can help improve the areas where students' abilities are weak; Promote students' active participation, enhance students' confidence and obtain a greater sense of achievement. Teachers shall also help students develop their potential and provide the opportunity to apply it. The Multiple Intelligence Theory is a great challenge to the traditional teaching mode which pays too much attention to children's language development and logical thinking, and prefers language intelligence and logical/mathematical intelligence, thus ignoring the development of other intelligence, which is too limited. Actually, in their learning process, some children are gifted in sports, art or music, but have obstacles in learning a second language. We should not label children as "poor students" because of obstacles in the learning process in this regard, which will hurt their self-confidence and frustrate them. According to Gardner's theory, students like this are not real poor students [1].

"Intellectual ability and intelligence theory of behavior and attitude is not determined by the rises and falls of intelligence tests or intelligence, but by the greatest achievement of human civilization. In other words, intelligence depends on whether a person can solve practical problems or create products with cultural value. Therefore, multiple intelligence make teaching more meaningful, rather than unifying children. The purpose of teaching is not to let everyone similarly, on the contrary, the real meaningful teaching is to cultivate and develop children's abilities in all aspects, recognize the diversity of intelligence and achieve effective teaching.

### ***2.2 Interpretation of children's second language acquisition teaching from the perspective of Multiple Intelligence***

With its particular interpretation of the theory of intelligence and remarkable integration, the Multiple Intelligence theory provides new ideas, viewpoints, and thinking patterns for the development of the academic curriculum, which has great impact on a child's second language learning.

### *2.2.1 Second language acquisition without a good language environment as first language acquisition*

Children's mother tongue learning has a good language environment, while second language acquisition is the opposite. It is particularly important to provide a good learning environment for children's second language acquisition [2]. Children mainly rely on teaching and daily practice to learn the language. Students in some areas rarely have the opportunity to communicate with foreign teachers in foreign language learning. If the teaching direction and content of a single assessment goal, children will lose interest in language learning and even form some bad learning habits. In fact, children's English learning has its own advantages. The most important factor hindering children's English learning is the lack of a good language environment. Without a good context, children cannot give full play to their advantages in second language acquisition, while their disadvantages in language learning, such as poor acceptance ability and low conscious memory ability, are more prominent. We should provide children with a good English learning environment, carry out small class teaching, hire teachers with strong foreign language teaching ability, and create a relaxed and pleasant learning environment. Without a good context, children cannot give full play to their cognitive and effective memory abilities.

### *2.2.2 Without interested in spoken English, Children are too young and cognitively immature to enjoy the appealing of spoken English.*

A good interest is half success. The focus of English teaching for children shall be cultivating their enthusiasm for learning and laying a solid foundation for their lifelong learning [3]. For example, when teaching color, teachers can let children point to the color around them to test students' understanding of color words, which develops children's physical intelligence. Teachers can also ask students to sing the color song "Who's Wearing Yellow Today?" so as to further master related words, and develop children's sound intelligence at the same time; Teachers can also let children draw colorful pictures or colorful rainbows, and let children describe the color of the items in their painting, which develops children's spatial ability and language intelligence.

### *2.2.3 Children are active and inattentive.*

A single teaching method will make children tired. The application of a variety of teaching methods can enhance students' interest, and appropriate classroom games can stimulate students' learning motivation [4]. On the one hand, game is one of the teaching methods that students are most interested in. It can be used to improve students' interest in learning, make them more actively

participate in the language, and finally be able to use the language consciously and naturally. The teacher can use the preposition "hide and seek" in one place, for example, when the child can learn the preposition. Everyone will ask, "where are you?" Then the child replied, "I'm here, behind the door.". On the other hand, children are naturally active and like role-playing, so they can choose virtual situations in teaching. For example, when teaching food words such as "chocolate" and "reproduction", you can set the situation of supermarkets or small stores, and work with customers and salespeople to let children experience the authenticity of the situation and carry out vivid oral communication exercises. In short, the application of various teaching methods not only improves children's interest in learning English, but also develops children's multiple intelligence.

## **3. PRACTICAL THINKING ON THE APPLICATION OF LOGIC/MATHEMATICAL INTELLIGENCE IN ENGLISH SECOND LANGUAGE ACQUISITION EDUCATION FOR CHINESE CHILDREN**

Logical/mathematical intelligence refers to the ability of quantification, calculation and hypothesis, which means the individual's sensitivity to various relationships of things, such as analogy, comparison, causality, logic, and the ability to think through mathematical operation and logical reasoning. In China, traditional teaching methods focus on the accumulation of knowledge and pay less attention to the cultivation of students' learning methods and innovative ability. In the process of second language learning, students spend time on foreign language pronunciation practice, but the effect of teaching assessment is not obvious, which makes students lack confidence and have great pressure and burden in learning oral English. With the application of logical/mathematical intelligence, teachers try to use a variety of teaching methods related to logical thinking, which is helpful to oral teaching.

### ***3.1 The positive influence of the application of logic/mathematical intelligence on the improvement of Chinese children's oral English learning and teaching practice.***

The practice of speaking means that the students use standard English to express what they are thinking and their emotions under a particular situation, which including combination, judgment, summary and supposing to promote the interactive. What's more, that also require students to connect with their own knowledge and experience to deal with problems and express opinions.

Children, however, especially the low-ages children, are abstract in thinking. For the aim group who are

between 7 to 10 years old, they always thinking surrounded by themselves, and have not have the ability to reverse thinking, which cause a difficult problem in teaching using normal ways, but that does not mean that we cannot perform relevant logic training [5]. Although they lack of the ability of thinking, they are rich in imagination and ideas. To be specific, teachers should use students' potential advantages to push the development of logical thinking.

The logic/mathematical intelligence could strengthen the logical ability, thinking ability and creative ability, and it has been applied in many areas including math, computer science and so on, which has a great significance in English speaking. The most important thing in learning English is the application of language which is the bridge to link different culture and gain knowledge, so the oral English is pretty important but also is the part the children are short in. In that way, if teachers can apply the logic/mathematical intelligence well in class to stimulate children to think and practice their logical ability, their oral communication could be smoother.

### ***3.2 The application of logic/mathematical intelligence to the teaching practice of Chinese children's oral English learning***

The textbook for students age from 7 to 10 is mainly about stories and dialogues. For that, teachers can organize many games especially the role-playing, which means that students can classify and analyze the story according to their own understandings and hints about the characters. Therefore, when teachers are doing exercises with children, the first thing is guiding them to clarify the context of the text, organize students to understand the characters in the dialogue and conversation, which can not only increase the interest of learning, but also promote students to speak English. During the speaking, students can also use their logical ability to validate the written story and change it on time. What's more, teachers can also supply oral communication topics based on students' interest and experience [6], leading to independently choosing, refining and expanding the meaning of text discourse in a free environment. Besides, teachers should use their own language to bring students into the communicative environment, and then encourage children to use logic and mathematical intelligence to organize plots, language, and complete oral practice again and again.

In the process of practice of speaking, words also play an indispensable role, so how to accumulate words and recognize words are big challenges to both students and teachers. For that, teachers can organize corresponding games and activities to encourage students to participate in learning and oral practice, such as using spatial orientation reasoning ability, using hide-and-seek game strategies[7], teachers can say the corresponding

orientation words, such as under the table, next to the blackboard and something related to guide the students to the designated position then get win. At the same time, it is also available to use the ability of classification which is an important part in logical and mathematical intelligence, to classify different expressions of the same thing or the same action, so that these words can be mobilized from the mind when speaking in English.

What is worth mentioning is that under the new type of teaching class, teachers should change their leading roles in the past to a listener and a participant for students, using the most scientific way to encourage students gain knowledge continuously, dealing with issues in flexible method.

## **4. THE APPLICATION OF BODILY/KINESTHETIC INTELLIGENCE TO REALIZE THE IMMERSION TEACHING OF ENGLISH SECOND LANGUAGE ACQUISITION EDUCATION FOR CHINESE CHILDREN**

Bodily/kinesthetic intelligence entails the potential of using one's whole body or parts of the body (like the hand or the mouth) to solve problems or fashion products [8]. In other words, it involves using body to solve problems, create new products and convey ideas.

"Learning by Doing", a theory expounded by American philosopher John Dewey, is a good manifestation of applying bodily/kinesthetic intelligence into the practical teaching. Peggy Hickman, a support of this theory, once said, "...The teachers were to present real-life problems to the children and then guide students to solve the problem by providing them with a hands-on activity to learn the solution...", which shows what we can do to help apply bodily/kinesthetic intelligence into classroom instruction, and then make a great effect on children's full immersion in classroom atmosphere [9].

### ***4.1 The practical effect of classroom practice of bodily/kinesthetic intelligence on students' whole process immersion***

Applying body/kinesthetic intelligence to classroom practice is an effective way to stimulate students' interest and let them fully integrate into the classroom. In some traditional language teaching modes, such as "chalk + talking loudly" and "sage on the stage", the only thing students need to do in class is to sit quietly and listen to the teacher, which can not mobilize students' learning initiative. Under the guidance of bodily/kinesthetic intelligence, teachers can arrange some interesting classroom activities to let students join the class through physical activities, which helps to cheer up their spirit and motivates them to actively participate in classroom teaching.

Students' participatory activities in second language teaching classroom can strengthen the connection between curriculum content and real life. Dewey also opposed the traditional practice of separating knowledge from children's real life, and believed that the knowledge heard from teachers could not be directly internalized into their own knowledge. Dewey believed that children should follow their "game instinct" and learn in the game, which can not only achieve the purpose of the game, but also achieve the effect of learning. What children should do must conform to their physical and mental development characteristics. Let students take activities as the carrier to connect knowledge with learning. Give them enough freedom to transfer these decentralized activities to a guided and systematic learning environment. For example, when teachers design math problems, it is better for them to try to present them in real life. For example, when looking for the area of triangles, instead of giving students a triangular figure, it is better to show them some familiar things in daily life, such as the triangular red scarf that Chinese primary school students have to wear every day [9].

In addition, with the application of bodily/kinesthetic intelligence, the roles of teachers and students will change accordingly. For the teachers, they are no longer just resource-providers or promoters, which shows that they will not be "saints on the stage" or absolute classroom authorities any more. Establishing democratic relations between teachers and students helps create a more active and relaxed classroom atmosphere and make students feel relaxed to communicate with them. For the students, they are no longer just passive learners. They can absorb knowledge in a positive way and put forward their own ideas in activities. In short, with the help of bodily/kinesthetic intelligence, the whole classroom will change from teacher-centered to student-centered.

#### ***4.2 The application of bodily/kinesthetic intelligence to achieve children's English second language acquisition has increased the attraction of classroom education***

Different from some theoretical courses like Maths and Science, the ultimate goal of language acquisition is to use it as a tool for communication, which can explain why classroom interaction is extremely important in English classes. Therefore, it is more necessary to apply bodily/kinesthetic intelligence to arouse children's interest, so as to make them fully involved in the class. Moreover, arranging various kinds of in-class activities can also help encourage children to speak out and express their own ideas in English.

Furthermore, it is noticeable to find that our teaching target is children, which means that it is quite suitable to apply bodily/kinesthetic intelligence into classroom teaching. It is because this theory is especially designed for language beginners or young children. Due to the fact

that it is almost impossible to focus children's attention during the whole class by simply asking them to sit still, arranging some body movement activities will undoubtedly help to attract children's attention and arouse their interest. Therefore, the application of bodily/kinesthetic intelligence really helps to achieve children's English second language acquisition and increases the attraction of classroom education.

#### ***4.3 The application of bodily/kinesthetic intelligence in Chinese children's English classroom practice teaching program***

Nowadays, bodily/kinesthetic intelligence has been widely applied to Chinese children's English classes. Role-play and Total Physical Response (TPR) are two typical manifestations of this theory.

##### ***4.3.1 The Application of Role-play***

It is very common for English teachers to set role-play as an in-class activity because it offers multiple opportunities to practice a foreign language than any other teaching activities [10]. Role-play can not only help improve children's communicative and speaking skills, but also help simulate a real language environment. For example, in an English class talking about animals, the teacher can arrange a role-play session, asking students to work in pair and design a dialogue about animals in the zoo. In the preparation session, students will have the motivation to brainstorm the words and expressions in order to express their ideas in English, which can greatly improve their speaking skills. Moreover, in order to design a dialogue, students have to learn how to collaborate with their partners, how to accept others' suggestions and how to express their owns, sometimes they will ask teacher for help when they cannot solve problems even after group discussion, which can help improve their communication skills. Besides, students can act as a role of visitors or zoo keepers or even animals in the dialogue, and they can also add some body movements in the show time in order to make the whole presentation more vivid and attractive. It is really beneficial for students to practice English in a more realistic way in such a simulated environment. After sufficient preparation, students will be more willing to show their dialogue on the stage, which is a good way to promote their confidence in using English in contextualized environment.

However, there are also some disadvantages about setting role-play in classes. First and foremost, it may be difficult for teachers to maintain classroom discipline because the free discussion will bring chaos to the class. Secondly, it is difficult to ensure that all the students are concentrated on the task rather than chatting freely with their friends or doing something else. Although the teacher can go around the class to observe and help some groups, it is still unable to solve this problem.

### 4.3.2 The Application of Total Physical Response (TPR)

Total physical response (TPR) is a language teaching method developed by James J. Asher, who points out that we should integrate language with actions to teach English through Total Physical Response. At the same time, we should also develop a student's listening ability firstly, then the speaking. In TPR, instructors will give commands to students in the target language with body movements, then students will make responses with whole-body actions. TPR is a method especially used for beginning students, so it is quite suitable to be used for Chinese children who are in the early stage of learning English.

TPR can be applied into various kinds of games. For instance, there is an in-class game called "Simon says". In this game, teachers will give commands to students by making sentences with "Simon says", and students will try to do actions according to the sentences' meanings. For example, when the teacher says, "Simon says running!" Students have to make a gesture of running as a response. This game can not only help catch children's attention quickly, but also create a relaxed classroom atmosphere [11]. Besides, teachers can also use some exaggerated body movements when they are explaining something difficult for children, which is a good way to achieve teaching in English. Using TPR can also increase children's self-confidence and enhance their learning efficiency.

However, TPR also has its drawbacks. Firstly, it is unrealistic for teachers to use TPR through the whole lesson because they will be exhausted after keeping doing exaggerated body movements for 45 minutes. Secondly, although TPR can greatly improve children's listening and speaking abilities, it almost has no effects on their reading and writing, which means that it is difficult to develop children's comprehensive ability by using this single method. Thirdly, the application of TPR really requires a highly-ordered classroom discipline, or a dramatic reduction of the class size because all the activities are so easy to bring chaos to the class.

## 5. CONCLUSION

Human intelligence is a combination of multiple intelligences, including logical/mathematical intelligence and bodily/kinesthetic intelligence. This paper mainly focuses on these intelligences. Different people are born with different intelligence. They don't have balanced development in all aspects of intelligence.

In China, most schools mainly measure children's scores instead of discovering potential intelligence, and fully respect each student's personality. Students face many obstacles in learning English, such as lack of good language environment, lack of interest and so on. The

theory of multiple intelligences provides new ideas, viewpoints and modes of thinking for the development of academic courses, and has a great impact on children's second language learning. In children's education, in the oral English education studied in this paper, multiple intelligences have been given a key role. Explore how multiple intelligences can help Chinese children's oral English education.

The application of logical/mathematical intelligence in Chinese children's English second language acquisition education, analyzes the positive impact of this application on children's English second language acquisition, and puts forward some practical strategies. This paper puts forward the immersion teaching which combines the body movement intelligence, namely bodily/kinesthetic intelligence, with the education of second language acquisition, and expounds the practical effect of this intelligence in the classroom, as well as some teaching schemes based on this intelligence.

There are still some parts that can be further excavated in this paper. Firstly, because the situation of oral English education in China is very complex, this paper only analyzes the current situation of teaching in limited schools. Therefore, the two intelligences discussed in this paper can not solve all the problems in the teaching of second language acquisition in China. In addition, when using these two intelligences, the exploration scope of the needs of teaching places, teaching equipment and professionally trained teachers can be expanded. In some remote areas and relatively poor areas, the improvement of education should also be discussed.

## REFERENCES

- [1] H. Gardner, (1983) *Frames of Mind: The Theory of Multiple Intelligences*. Basic Books, New York.
- [2] H. Jeremy, (2000) *How to Teach English*. Foreign Language Teaching and Research Press, Beijing.
- [3] W. You, (2016) *Application Analysis of Multiple Intelligences Theory for English Teaching in Primary School*. *Campus English*, (2): 133.
- [4] Rolf Palmberg, (2003) *Starting with Multiple Intelligences Activities for Foreign Language Teachers*. <http://www.developingteachers.com/2003>.
- [5] Lianghui Cao, (2016) An example of the application of the combination of numbers and shapes to improve students' logical, mathematical intelligence—Taking junior high school science teaching as an example. *Exam Weekly*, 184-190.
- [6] Lei Wang, (2012) *Preschool Mathematical Ability Development Research Based on the Theory of*

Multiple Intelligences, Master dissertation, Shanxi University, Shanxi.

- [7] Qian Lu, (2014) A brief discussion on the application of the whole-body response method and the situational method in the cultivation of children's oral English communication ability. *Oversea English*, (18),18-19.
- [8] Gardner, H, (1999) *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York: Basic Books.
- [9] Meng Zhu, (2016) Dewey's teaching theory of "learning by doing" and its practical significance. *Theory Observation* (09), 159-160.
- [10] Gass, S. M., & Mackey, A, (2006) Input, interaction and output: An overview. *AILA review*, 19(1), 3-17.
- [11] Jing Tong & Cong Qi, (2021) The Application of TPR in the lower grades of primary school English Teaching Data of Culture and Education (09), 222-223+238.