CREATIVE EDUCATION AND THE IMPROVEMENT OF

LANGUAGE LEARNING IN CHILDREN OF PRESCHOOL AGE

Approved: _Wonim Son_   Date: _____05/ 03/ 16_____

Last Updated: Apr. 26th, 2016

CREATIVE EDUCATION AND THE IMPROVEMENT OF

LANGUAGE LEARNING IN CHILDREN OF PRESCHOOL AGE

A Seminar Paper

Presented to

The Graduate Faculty

University of Wisconsin-Platteville

In Partial Fulfillment

Of the Requirement for the Degree

Master of Science in Education

English Education

By

Chujun Zhang
2016

ACKNOWLEDGEMENTS

I would first like to thank my thesis advisor Doctor Wonim Son of the Early/Middle School Childhood Education School of Education at the University of Wisconsin Platteville. The door to Prof. Wonim's office was always open whenever I had a trouble spot or a question about my writing. She consistently allowed this paper to be my own work, but steered me in the right direction whenever she though I needed guidence.

I would also like to thank Professor Kohler Busch Madelon, University of Wisconsin-Platteville assistant German professor. She was the expert in educational methods learning, and she also introduced some important resources for me to read. Even though she was not my seminar paper advisor, she still offered me a lot help.

It is my duty to record my thankfulness to Dr. Daniel E. Leitch & Dr. Yuanyuan Hu; they took responsible for this program and they prompt inspirations, timely suggestions with kindness, and their enthusiasm and dynamism have enabled me to complete my thesis.

A special thanks goes to Dr. Tom Lo Guidice for creating the first version of this seminar paper template.

Finally, I take this opportunity to acknowledge the sevices of the total team of MSEE program in University of Wisconsin Platteville.

With warm regards.

Abstract

CREATIVE EDUCATION AND THE IMPROVEMENT OF

LANGUAGE LEARNING IN CHILDREN OF PRESCHOOL AGE

Chujun Zhang

Under the Supervision of Dr. Wonim Son

Because of globalization, children will have more chances to access different languages, thus, language learning ability is more and more important for children, even at the preschool age. This dissertation mainly examines the interaction between creative education and the language learning capacity. It is an efficent way to improve the language learning ability of children by using creative teaching stragegies and activities to promote their thinking skills. Even though we have thousands of different languages in the world, for any kind of spoken language, we would always need three building blocks: phonemes, morphemes and grammar. Our capacity to communicate and comprehend a language relies on personal logical thinking and intellectual development. In turn, thinking develops hand in hand with language (Gopnik & Meltzoff, 1986). As for the theories for the interaction between thinking and language ability, children acquiring a better thinking ability is strongly correlated with overall vocabulary development (Breen, 1985; Rhyner and Bracken, 1988), language development (Zucker and Riordan, 1990), and school readiness and academic achievement (Breen, 1985; Panter, 2000; Panter & Bracken, 2009; Sterner and McCallum, 1988). Through Jean Piaget's (1959) cognition theory, if we involve the

kids into some kinds of activities, such as waste recovery handwork, we will help

them create a different way to think and build a new concept, like critical thinking.

Creative education is a kind of empirically supported education, which as Piaget's

theory said, its interventions are important for thinking ability improvement such as

basic concept acquisition.

TABLE OF CONTENTS

Page

Statement of the Problem

Definitions of Terms

Purpose of the Study

Significance of the Study

Delimitation of the Study

Methodology

1. The Creativity in Early Childhood Education
   1.1 Definition of Creativity
   1.2 Recent Studies on Creatvity
   1.3 The Importance of Creativity in Early Childhood Education
2. Creative Thinking
   2.1 Creative Thinking's Brain Mechanism
   2.2 Creative Thinking Skill Facilitate Strategies
   2.3 CreativeTeaching Activities
3. Language development
4. Language Learning and thinking
5. Summary

Chapter I Introduction

Linguist Benjamin Lee Whorf (1956) contended that language determines the way we think: "Language itself shapes a [person's] basic ideas" (p.375). Even though Whof's linguistic determinism hypothesis is too extreme, we can also combine this theory with the bilingual example, and get the conclusion that "our words may not determine what we think, but they do influence our thinking" (Borodisky, 2011, p.36). A language-rich enviornment can help improve high-ordered thinking skills for children.

Moreover, higher thinking ability can also promote children's language development. Jean Piaget's (1959) cognition theory states kids keep developing their own prototypes and building concepts to set up their personal thinking models before they trun seven. If we involve them in some kinds of creative activities, such as waste recovery handwork, we will help them further develop their critical thinking skills. As soon as a new thinking model is built, their reactions to an object will be more abundant (Brown, 1986). So on the basis of their existing knowledge, they can understand more new words and more different ways to express themselves in a sepcific language. As a result, it will be easier for children who have higher creative thinking ability to acquire grammars of a language system or master how to use linguisitic symbols. This advantage will also appeare in second language leaning.

Statement of the Problem

1.Why is it so important for children to improve their linguistic performance ability?

2.What is the difference between traditional education and creative education?

3.What is the result of creative activities?

4.What is the relationship between language and thinking?

5.How does creative thinking abilities improve preschoolers' language learning capacity, and help them acquire a second language?

Definition of Terms

Symbols: that is, are not taken as clues or pointers to the presence of something, they are simply substitutes used to stand for that something (Hubert Alexander, Language and Thinking-- A Philosophical Introduction, p.53).

Prototype: is an early sample, model, or release of a product built to test a concept or process or to act as a thing to be replicated or learned from (Blackwell, A. H.; Manar, E., eds. (2015). "Prototype". UXL Encyclopedia of Science (3rd ed.). Retrieved 13 July 2015).

Abstracting: the "act or process of leaving out of consideration one or more qualities of a complex object so as to attend to others"(Cf. Whitehead, Science and the Modern Word, P.173).

Creativity:

       1.the ability to see things in new ways;

       2.boundary breaking and going beyond the information given;

       3.thinking unconventionally;

       4.making something unique;

       5.combining unrelated things into somthing new

(Fox, Jill Englebright & Schirrmacher, Robert, University of Houston- Victoria, 2012, Art & Creative Development for Young Children, p.5).

Creative movement: a tupe of movement that encourages children to move as they see fit, as opposed to following or imitating a teacher (Fox, Jill Englebright & Schirrmacher, Robert, University of Houston- Victoria, 2012, Art & Creative Development for Young Children).

Critical thinking: thinking that requires making decisions and judgments (Fox, Jill Englebright & Schirrmacher, Robert, University of Houston- Victoria, 2012, Art & Creative Development for Young Children).

Purpose of the Study

China has exam-oriented education; traditional education always focuses on the knowledge itself. Teachers always emphasize the standard answer in daily education activities since kids were in kindergarten. Education being taught in this way also hinders our kids to promote their lingustic ability by limiting their critical thinking skills. And it is a phenomenon that our young children are feeling more and more difficulty with expressing themselves in speaking or writing creatively. In the opposite way, they are willing to follow the teacher's model and hide their own personality. Needless to say they will feel confused when they have to think in a different way by themselves in their second language learning. If we use more creative teaching techniques, and help them improve their critical thinking skills, would they feel that it is easier to learn a language?

I am trying to prove that creative education methods, strategies, and activities can

improve their critical thinking skills and help them with the language learning. I will also give some suggestions for Chinese traditional education curriculums setting.

Significance of the Study

Langhuage is a critical factor in children's adjustment. Deficits in language development have been linked to social problems, conduct problems, and deliquency (Menting, van Lier, & Koot, 2011; Moffitt, 1993; Nigg & Huang-Pollock, 2003). Without language, our complex human communications would be quite impossible (Hubert G. Alexander, 1967). In this way, the language ablility is one of the important ability for humen beings. For Alexander's (1967) theory that to be a human being in the full sense requires that "a man have a well-developed language at his disposal and it is the foundation (symbol-using) for children to develop other high-class cognitive activities (such as abstract thinking) and wholesome personality". So children's language education in their preschool age is very important and can not be ignored.

In Jean Piaget's children's cognitive development theory, that children's language has developed rapidly before seven years old, and they are able to use some simple symbols to solve problems. He called this period of time as pre-operational stage, and this stage is in preparation for the concrete operational stage which creates a break for chlidren in categories, mathematics, and understanding time and space. Language itself is seemed as a combination of symbols; we always think someone with higher individual thinking skills has better behavior in problem solving. Depending on this

timetable of children's development, language develops hand in hand with children's thinking ability.

In this point of view, it is necessary to find out a scientific way to help preschoolers with their language acquisition, or figure out effecient teaching methods to improve their thinking skills, in order to promote their language's development. The literature on the teaching of tinking is growing (citations above). Books and articles on language acquisition and teaching thinking, each on its own, are widely avaliable. However, research on how thinking skills promote language or even a second language learning is not easily found. So it's necessary to review as much literatures as possible to approve how creative education promotes native or second language learning. Help the early childhood educators to find their curriculums by setting theoretical foundation.

Delimitation of the Study

This is a research review for helping children to learn languages in their preschool age (0~7 year-old). So materials here which I choosed are coming from children psychology, children development and young children education. And the conclusion or outcomings may not be able to use on elder students.

Methodology

The research will be conducted in and depend on the literature from the Karrmann Library at the University of Wisconsin-Platteville using the University of Wisconsin

system UW= Search tool beginning Feb. through May. 2016. The databases avaliable through EBSCO which host with ERIC, Academic Search Elite and JSTOR, and they are my primary sources. When I was searching appropriate articles or books, I limited my search terms into "creative education", "language and thinking", "preschool students" and "early childhood education".

In the secondary research, a brief review of literature on creative education theories, activities and how it improves kids' thinking ability will be conducted. And a review of language learning thoeries and how a better thinking ability benefits the language learning was conducted.

Chapter II Review of Literature

Languages are man's chief window upon an understanding of the world and himself. To be a human being in the full sense requires that a man have a well-developed language at his disposal (Hubert G. Alexander, 1967). We start without language, yet by 4 months of age babies can recognize differences in speech sounds (Stager & Werker,1997) and they can also read lips (Kuhl & Melzoff,1982) . We call that the beginning of the development of babies' receptive language. Also, it's the milestone of our language acquisition. The theory of language acquisition has two different genres, one is behavioristic learning theory and the other is N. Chomsky's nativism. But the common view of them is the behavioristic view: by the interaction with adults, children can have many chances to imitate and strengthen their language cognition

(Ranling Peng, 2004). They acquire language by experiencing liguisitic environment and practicing language with other people, especially with their parents. Seefeldt (2004) also mentioned that during children's language acquisition, they need sound language and literacy skills to communicate with others and actively participate in a classroom learning community. And we call this kind of class which offers sound language materials and literacy skills as "language-rich environment class", it will offer numerous opportunities for kids in early childhood to practice language and literacy in a social setting. "A language-rich classroom includes an inquiry-based environment and curriculum in which children are frequently exposed to and interact with high-quality literacy materials and activities that support their passions and learning" (Justice 2004; Nekovei & Ermis 2006). In their opinion, effective early childhood curriculum settings which can improve childrens' language learning are led by highly responsive teachers who use some effective and scientific educational interventions to encourage children to contribute discussions and share ideas with each other. Compare with traditional education, creative education shows its superiority in setting this kind of " language-rich classroom".

1. The Creativity in Early Childhood Education.

1.1 Definition of Creativity

Creativity is a complex and slippery concept. It has multiple meanings. There is a broad acceptable definition of creativity in the early childhood years in provided by Mayesky (1998), in his theory that " creativity is a way of thinking or acting or making something that is original for the individual and valued by that person or

others" (p.4). In order to explain what is creativity, we can compare intelligent with creativity. Wright (1987) said, child with a good memory for concepts, rules, categorization, and symbols is regarded as intelligent; but the child who uses this information in unique and original ways is behaving creatively. A growing body of literature on the topic-- much of it developed from theories explored in the 1960s-- reveals that what it means to be creative means different things to different people in different contexts. The first systematic study of creativity was undertaken by Galton (1869). His focus was 'genius' and there followed a hundred studies on this theme, defined as achievement acknowledged in the wider public area. This line of investigation remained prevalent into the 1920s, when the focus in psychology shifted to intelligence.

1.2 Recent Studies on Creatvity

In the education history of creativity, Beetlestone (1998) focused on creativity in the early years' classroom. Woods (1995) and Jeffrey (1996) explored teacher creativity, and Craft (1996) looked at how to nourish the creative teacher. Beetlestone (1998) documents practical strategies for fostering creativity within the early year's curriculum, using examples from a large variety of early year's context. Wood and Jeffrey work through in depth case studies to document ways in which small group of teachers operate creatively in the face of a wider context, which arguably suppresses the creativity of the teaching profession. Craft (1996) explores in depth the perspectives of eighteen educators involved in a holistic postgraduate course specifically designed to nurture their own creativity. Creativity is a hot topic in early

childhood education and it's necessary for both pre-school year children and teachers who are going to teach them.

1.3 The Importance of Creativity in Early Childhood Education

As Perntice (2000) mentioned that two constituencies, educators of young children and art educators, have argued strongly and consistently for proper recognition of the value of creativity in education. For many years, leading theorists have championed creative and critical thinking as essential educational processes (Bloom, 1956; Dewey, 1993; Guilford, 1997; Taylor, 1984). They even said "the progress of civilization is essentially attributable to creative thinking" (Mayesky, 1998). Creativity stands at the center of preparing children for life. It involves adaptability and flexibility of thought, which is deemed critical for students in reports on education (e.g., the Carnegie Forum on Education, 1986). Furthermore, the frequently stated purpose of early childhood education is educating and nurturing the "whole child" who has development in the cognitive, emotional, social, physical, and language domains. And creative expression enhances physical development, social development, emotioal development, postive mental health; it can also help children interact with others (Jill Englebright Fox & Robert Schirrmacher, 2012).

At times, the early years are very important to the development of creative potential (Lowenfeld & Brittain, 1975), and that creative imagination peaks during the preschool years and drops at kindergarten when children often begin more "formalized" schooling (Torrance, 1963). The creative education for children in preschool age is not only dependent on the school and teacher. Those teachers who

value the creativity of young children and who strive to promote creativity in the school environment find they have greater success when the child's family understand and shares the teachers' goals and collaborates with the teacher to support those goals at home (Kristen, M. Kemple & Shari, A. Nissenberg, 2000). So the early childhood education that I mentioned before is a kind of educational intervention which needs the support from school, family and society.

2. Creative Thinking

DeBono (1970) identified two types of thinking: vertical and lateral. Vertical thinking involves learning more about something or arriving at an accepted, convergent answer; however, lateral thinking is a way of using one's mind that leads to creative thinking or products. Creativity has been identified as a cognitive process or way of thinking. Creative thinking is a skill that not only helps children solve problems in their daily lives, but also prepares them for life in the 21st century.

2.1 Creative Thinking's Brain Mechanism

As Jill & Robert (2012) said, creativity can also be discussed as a funciton of the brain, so in some ways the creative thinking ability depends on the brain's physical development first. As Heath and Wolf (2004) said, the brain functions in very different ways during various phases of the creative process, the brain's plasticity influences creative outcomes.

Different organizations of human's brain have different fuctions, their structure and its activity may changed by many kinds of infulence factors. "The human brain houses two separate but interacting thinking hemispheres. Each hemisphere has

specialized functions. The right hemisphere controls the individual's creative abilities, body awareness, spatial orientation, and recognition of faces" (Jill & Robert, 2012). During the early years, the brain has the greatest capacity for change. The developing brain is malleable, flexible, and plastic and has the ability to explode with new synapses or connections (Heath and Wolf, 2004). In Jill's (2012) publications, "the brain's neural plasticity allows it to constantly change its structure and function in response to external experiences. The environment affects not only the numbers of brain cells and numbers of connections among them, but also the way those connections are wired. On the postive side, brain growth can be positively stimulated. On the negetive side, however, neglect or abuse can impede the child's developing brain functions". It emphasizes the importance of the positive environment that you create for children, just as a stimulating environment and family factors can enhance creativity, negative conditions can restrict it. The environmental effects can come from: home, school, gender roles, society and tradition (Jill and Robert, 2012).

2.2 Creative Thinking Skill Facilitate Strategies

In Robert's(2012) opinion, in order to make a better environment for creative thinking ability development, children need adults who facilitate creative expression. He has given several strategies for sending postive messages to children that their creative expression is valued. Such as:

1) Celebrate creativity: help children indentify with creative heroes. It's important for children to understand that creativity isn't limited to those who show special talents; creativity can flourish wherever it is supported and appreciated (Gelineau,

2004).

2) Value children's creativity: allow children the freedom to think and act differently. View creative development as a vital component of the whole child.

3) Be a creative partner: Be a play partner who follows the lead of children rather than imposing your own plot, sequence, and script.

4) Provide time and space for creative expression: children need plenty of space to lay out materials and work alone or together to give form to ideas. Time and space should be fluid and flexible.

5) Provide toys and materials conducive to creativity: let children creatively use and transform toys and materials. Accept the fact that samll blocks from one center will be transported to another to be used for play.

6) Provide a psychological climate conductive to creativity: children flourish in a psychologically safe setting that respects, trusts, and empowers them to act autonomously without fear or criticsm,rejection, failure, or pressure to conform.

7) Weave creativity and creative expression throughout your curriculum: the curricular areas (mathematics, social studies, science, language arts) provide ample opportunities for children to use both sides of the brain (Robert, 2012).

2.3 CreativeTeaching Activities

It's really hard to manage parents' education strategies in their home, but it's more feasible for teachers to manage strategies that they are going to use for more target students in preschool age education. There are thousands of different activities for promoting creative thinking in the class, such as: science (Ashraf, 2009), art work

(Wendy, 2015) and literature activities, etc. However, whatever the form that creativity may take, the child develops large and small muscle skills through manipulating the appropriate tools or apparatus (Jill and Robert, 2012).

While a number of studies were taken for measuring the relationship between classroom quality and development outcomes, there was very little research which studied the relevance between overall quality of early years education and specific pedagogic practices or specific learning activities. Where researchers have sought to make links between rating scales and children/adult behaviour, they have often used target/ focus child observations to measure children's activity and engagement in their pre-school classroom (Kathy, 2007). A common methodology would be to use a quality measure (such as the Early Childhood Environment Rating Scale- Revised- ECERS; Harms *et al*., 1998) and to relate the overall quality scores to observations of childrens' activity throughout the day.

Ashraf (2009) made an experiment on the effect of science activities on fostering creativity in pre-school children. In this study, the effect of sicence activities on creativity improvement of male preschool children by a brainstorming teaching method was investigated. According to his findings, the brainstorming teaching method to increase creativity in children can be used by doing some selected science activities. For example, 'Bloomin' Bulbs' is a typical science activity for pre-schoolers which was introduced by Elizabeth Swartz (2005). Purchase a prepared holiday amaryllis bulb for students to use in practicing their observation and recording skills. Water the bulb according to package directions. Have students date recordings,

e.g. amount of growth, amount of water, etc. For comparison purpose, other plants could be started as well.

Within childcare settings, children are usually offered a rich variety of experiences, ranging from creative activities involving art (Kathy Sylva, 2007). Arts are considered essential for helping children explore the world through their sense; children can engage in concepts of making and creating. Accordingly, the goal is to help children develop domain-intrinsic knowing (Pramling Samuelsson et al., 2009). Domain-intrinsic knowledge can be defined as specific knowledge about each of the art forms. The essence of young children's meaning-making is a synthesis of thought, body and emotion (Wright, 2003a, 2003b). Like Elizabeth (2005) offered, "ice cubism" is a typical art activity. Fill an ice cube tray with water. Let it frezze half way, then place a popsicle stick in each cube. Finish freezing. Use the ice cubes for paint brushes. Put some blobs of paint in a larger piece of paper for students to drag and swirl with their temporary painting tools.

Susanne Garvis (2012) used interviews to figure out "how are the arts currently uesd in kindergarten and preparatory classrooms?" and "what beliefs do early years teachers have about the teaching of the arts in early years classrooms?". She found out that (1) "arts were part of the daily routine in kindergartens but not in preparatory classrooms"; (2) "teachers's philosophy about the arts shaped classroom practice"; and (3) "teachers' prior experiences in teacher education shaped arts practice".

In Elizabeth's (2005) "Green Pages", dramatic role playing, story telling and sentence making are all literature activities. Those effective activities which are given

by trained teachers in the pre-school class are powerful catalyzers for children's creative thinking and better learning ability (Angela K. Salmon, 2010).

3. Language development.

We use language every day, but what is language? "Language is our spoken, written, or signed words and the ways we combine them to communicate meaning" (David, G. Mayers, 2013, p.365). It is tempting to extend the meaning of "language" to include all symbol systems and even all forms of human expression, such as how we find them in the various arts. Thus, we sometimes speak of music as a language (Alexander, 1967). For a spoken langugage, we would need three building blocks: phonemes, morphemes and grammar. In David's theory, language becomes increasingly complex as we move from one level to the next. Using words which are created by those three building blocks, we can then create an infinite number of sentences. We humans have an astonishing capacity for language. A human being's brain is like the hard drive of computer; "with remarkable efficiency, we store tens of thousands of words in our memory, effortlessly assembling them with near-perfect syntax, and spew them out three words a second" (Vigliocco & Hartsuiker, 2002, p.452). Seldom do we form sentences in our minds before speaking them.

When do we have language? Children's language development moves from simplicity to complexity. At the beginning of infants' lives, they can not speak, but it does not mean that they have no language. Yet by four months of age, babies can recognize differences in speech sounds (Stager & Werker, 1997). They can also read lips; they prefer to look at the faces that matched a sound they heard (Kull & Meltzoff,

1982). This marks the beginning of the development of babies' receptive language; their ability to understand what is said to and about them. Even though language learning is a lifelong process, humans' ability to learn language is negatively related to their age. Childhood seems to represent a critical or "sensitive" period for mastering certain aspects of language before the language-learning window closes (Hernandez & Li, 2007). Later- than- usual exposure to language with children aged two to three years old unleashes the language capacity of a child's brain, producing a rush of language. By about age seven, however, those who have not been exposed to either a spoken or a signed language gradually lose their ability to master any language. People who learn a second language as adults usually speak it with the accent of their native language, and they also have difficulty mastering the new grammar (Myers, 2013). The window on language learning closes gradually in early childhood.

What is the human neural foundation of language? Today's neurosecience has confirmed brain activity in Broca's and Wernicke's areas during language processing (David G. Myers, 2013). It is a fact that "Broca's area processes language through a series of neural computation" (David G. Myers, 2013, p.372). Language functions are distributed across other brain areas as well. Accoding to the book *Psychology*, "functional MRI scans show that different neural networks are activated by nouns and verbs, or objects and actions; by different vowels; and by reading stories of visual versus motor experiences" (David G. Myers, 2013, p.372). Different neural networks also enable one's native language and a second language learned later in life (Perani

& Abutablebi, 2005). Enhancing brain erea's activity and building abundant relative neural networks will improve our linguistic activity ability. And that neural activity can be affected by external environment and life experience.

The rationalist or "nature" position holds that language, like other areas of human knowledge, is deeply rooted in our genetic endowment (Chomsky, 1959; Fodor, 1985; Pinker, 1984), while the empiricist or "nurture" position, in its various forms from behaviorism (Skinner, 1957) through constructivism (Piaget, 1977) and connectionism (Elman et al., 1997) to social learning theories (Tomasello, 2000), argues that language is mainly learned through experience. In the past years, advances in epigenetics brought about a better understanding of how environmental and genetic factors interact to shape cognitive functions and behavior (Lewkowicz, 2000; Weavr, 2004), and the mechanisms underlying brain plasticity in several perceptual and cognitive domains are also starting to be uncovered (Werker, JF & Hensch, TK, 2015; Gervain J et al.,2010). The origin of language is no longer seen as a simple dichotomy, since the contributions of both genetic and environmental factors are now acknowledged (Werker, JF & Curtin, S,2005; Gervain, J & Mehler, J, 2010). The question is rather to know how these factors interact during human language development.

4. Language Learning and Thinking

Thinking and language intricately intertwine; our words may not determine what we think, but they do influence our thinking (Boroditsky, 2011). More than this, thinking also affects our language learning. Through Gleitman's (1995) cognitive

theory of learning, that learning occurs when the minds connect what it already knows and new together; knowledge is constructed by the use of thingking process. In this point of view, promoting children's thinking capacity is a break-through in how to help them develop language learning outcomes.

As a famous scholar in this field, Alexander (1967) said "the primary use of signs and symbols is communication, the other basic use is simple selfexpression." Symbols are important for a communicator to express and transmit his/her information, and it's also important for a communicator to analyse and understand the language materials. It has been proposed that man's symbol-using capacity is his most essentially human characeristic. Alexander (1967) said, symbols are the visible and audible counterparts of our acts of thinking and feeling. He mentioned thinking process here. How does it characterize the thinking processes (cognitive process) which language teaching activites are involved?

Bloom's (1956) "Taxonomy of educational objective" is probably still the most comprehensive categorization available. In order to analyse levels of thinking in language learning materials, Adams-Smith (1981) used an adaptation of Bloom's framework, by Sanders (1966), as follow:

1) Memory: the recall or recognition of information;

2) Translation: changing information into a different symbolic form or language;

3) Interpretation: the discovery of relationships among facts, generalizations, definitions, values, and skills;

4) Application: solving a lifelike problem that requires the identification of the

issue and the selection and use of appropriate generalizations and skills;

5) Analysis: solving a problem in the light of conscious knowledge of the parts and form of thinking;

6) Synthesis: solving a problem that requires original, creative thinking;

7) Evaluation: making a judgement of good or bad, right or wrong, according to standards designated by the student (Adams-Smith, 1981).

Memory and translation belong to the lower level of thinking, students' understanding of the materials is still staying within the given information. But "traslation" involves a higher level of thinking than "memory", because the learners have to change the information from the original form into a different one, such as: use the instruction to make the boat, or, change a set of picture instructions into written form. Those applications of linguisitic can not work without these foundational thinking ability.

Interpretation, application, analysis, synthsis, and evaluaiton belong to a higher level of thinking, because students are asked to go bryond the given information. During "interpretation" and "application" categories, thinking goes through its abstracting progress.

Abstracting is an important process for thinking; the process of abstracting is the key to our thought process, which is the "act or process of leaving out of consideration one or more qualities of a complex object so as to attend to others (Cf. Withehead, p.173)." When we look at the structure of our language, we find various ways of dealing with the concrete and the abstract. Alexander (1967) summarized into

4 points, (1) priamary nouns normally indicate whole concrete objects or else abstractable parts; (2) adjective and adverbs indicate abstractable qualities or modes; (3) prepositions and conjunctions indicate abstractable relations; and (4) verbs indicate either concrete events or abstractable functions.

In interpretation progress, students can identify rules, create understanding grammar, and the like. The application category is concerned with putting language knowledge, such as grammar rules into practice, by applying the "generalizations" derived from earlier activities to new content, and achieve some kind of goal. The given concepts have been assimilated into children own thinking elements.

The analysis category requires students to take their thinking one step further than the previous level. This stage involves students in showing their ability to put knowledge into practice by getting them to use their own content, such as: think of a paper model you know how to construct and write instructions for making it. But in synthesis category, students have to use what they have learned in the previous levels to solve what, for them, is not an already familiar problem, such as: think of a kind of paper model you have not made before. Then create instructions for constructing it. In these levels, students promote their problem solving ability, and they will use evaluation to make sure, how well their solution to the problem meets a set of evaluation criteria for determining success or failure, such as: think of a paper model you have not made before. Then create instructions for constructing it in the simplest possible way. So far, thinking completes the progress of language's application and comprehension , which goes from easy to difficult.

The interplay of thought and language are similar to trafic moving in opposite directions. Thinking affects our language, which affects our thought (David GM, 2013). Because thinking affects language, new words are added to our mental vocabulary. New words and new combinations of old words express new ideas. Their relationship is a kind of mutual promotion relationship, or, one can say, their development is sharing some kinds of positive correlating relationship.

5. Summary

Upon the review of the literature, I was glad to see that so many resources can prove the effectiveness of creative education for language learning. How creative education affects language learning can divide into two ways: direct effection and indirect effection.

Direct effection means using creative teaching methods in the process of language learning directly, such as: using dramatic plays in literature learning. We always focus on listening, speaking, reading, and writing skills which are four main categoties of language use.

Indirect effection was the key part that we discussed in this paper. The goal of creative activities here is to improve preschoolers' thinking skills, such as: critical thinking ability. A lot of experiments, which used target child observation methods to measure children's activity and engagement in their preschool classroom, proved this hypothesis. For example, Ashraf's (2009) experiment showed that brianstorming teaching methods can be used in some selected science activities to increase children's creative thinking ability. Kathy's (2007) study showed that artistic activities can also

develop children's domain-intrinsic knowledge and concepts of making and creating. We refer to those skills as creative thinking skills.

Symbol-using capacity shows our thinking ability, while language itself is an elaborate system of symbols (Alexander, 1967). In Alexander's (1967) theory, abstracting is an important process for thinking and we can also find various ways of dealing with the concrete and the abstract in the structure of our language. So we can say high-ordered thinking ability can help children easily learn a language. By connecting the logical elements together, creative education can improve our ability to learn and use a language.

Chapter III Conclusions and Recommendations

After reviewing the literature, I was glad to see so many resources can prove the effectiveness of creative education for language learning. The way creative education affects language learning can divide into two ways: direct effection and indirect effection.

Direct effection means using creative teaching methods in the process of language learning directly. We always focus on listening, speaking, reading and writing skills, which are four main categoties of language using.

Indirect effection was the key part that we discussed in this paper. The goal of creative activities here is to improve preschoolers' thinking skills, such as: critical thinking ability and the other different thinking levels. In Alexander's (1967) theory, abstracting is an important process for thinking, and we can also find various ways of

dealing with the concrete and the abstract in the structure of our language. Creative thinking skills can improve children's language learning in symbols using, grammar learning, and etc..

In this point of view, in order to create a better language learning environment for preschoolers in China, we should be more postive to bring more creative activities which are close to our daily life in our existing curriculums. Those activities involve arts, science, physical fitness, and literature. Do not urge our children to learn language courses early but acknowledge their needs of improving their thinking ability by taking part in creative activities.

References

Adams-Smith, D. (1981). *Levels of questioning: teaching creative thinking through ESP,* English teaching forum, p. 15-17

Beetlestone, F. (1998), *Creative children, Imaginative teaching,* Buckingham: Open University Press.

Bloom, B. S. (1956). *Taxonomy of educational objectives,* New York: Longmans, Green

Boroditsky, L. (2011). *How does our language shapes thought,* Scientific American, pp. 63-65

Bracken, Bruce A. & Crawford, Elizabeth (2010), *Basic concepts in early childhood educational standards: A 50-state review,* Early childhood education journal, 2010, Vol. 37(5), p.421-430

Brown, R. (1986). Linguisitic relativity, In S. H. Hulse & B. F. Green, Jr. (Eds.), *One hundred years of psychological research in America.* Baltimore: Johns Hopkins University Press

David, G.Myers (2013). *Psychology tenth edition modules*, Hope College, Holland, Michigan, DC: Worth publisher

Gallon, F. (1869). *Hereditary genius.* London: Macmillan

Garvis, Susanne (2012), *Exploring current arts practice in kindergartens and preparatory classrooms,* Australasian journal of early childhood, 2012, Vol. 37 (4), P. 86-93

Gervain, Judit (2015), *Plasticity in early language acquisition: The effect of prenatal and early childhood experience,* Current opinion in neurobiology, 2015, Vol. 35,

p. 13-20

Gleitman, H. (1995). *Psychology (Fourth edition),* New York: W. W. Norton and Co. Inc

Hubert, G. Alexander (1969), *Language and thinking, a philosophical introduction,* Van Nostrand

Jill Englebright Fox & Robert Schirrmacher (2012). *Are and creative development for young children*, Seventh Edition. Belmont, CA, DC: Wadsworth Cengage Learning

Justice, L.M. (2004). *Creating language-rich pre-school classroom environments,* Teaching exceptional children, Vol. 37 (2), p.36-44

Kampmann, Jennifer Anne & Bowne, Mary Teresa (2011), *"Teacher, there's an elephant in the room!" An inquiry approach to   preschoolers' early language learning,* Young children, 2011, Vol. 66 (5), P. 84- 89

Kristen, M. Kemple & Shari A. Nissenberg (2000). *Nurturing creativity in early childhood education: Families are part of it,* Early childhood education journal, vol. 28, No. 1, 2000

Mayesky, M. (1998). *Creative activities for young children* (6th edition), Albany, NY: Delmar

Nekovei, D. L., & S. A. Ermis (2006). *Creating classrooms that promote rich vocabularies for at-risk learners,* Young children, Vol.61 (5), p.90-95

Rasol Abdullah Mirzaie, Farideh Hamidi & Ashraf Anaraki (2009). *A study on the effect of science activities on fostering creativity in preshool children,* Journal of Turkish Science Education, December 1st. 2009, Vol. 6(3), P. 81-90

Roy Prentice (2000). *Creativity: a reaffirmation of its place in early childhood education,* University of London, The Curriculum journal Vol. 11, No. 2 Summer 2000, P. 145-158

Sahin, N. T., Pinker, S., Cash, S. S., Schomer, D., & Halgren, E. (2009). *Sequential processing of lexical, grammatical, and phonological information within Broca's area,* Sicence,Vol. 326, p.445-449 (372)

Salmon, Angela K. (2010). *Tools to enhance young children's thinking,* Young children, 2010, Vol. 65(5), P. 26-31

Sylva, Kathy, Targgart Brenda and etc.(2007). *Curricular quality and day-to-day learning activities in pre-school,* International journal of Early Years Education, 2007, Vol. 15(1), P. 49-65

Seefeldt, C. (2004). *Scholastic early childhood today,* Helping Children Communicate, vol. 19 (1): 36-43. www2.scholastic.com/browse/article.jsp/id=3747357

Spilt, Jantine L., Koomen, Helma M. Y. and Harrison, Linda J. (2015). *Language development in the early school years: Then importance of close relationship with teacher,* Developmental psychology, 2015, Vol. 51(2), p. 185-196

Swartz Elizabeth (2005). *Ideas for Pre-k through Grade 8. Your green pages: 55 Skill-building activities you can use right now,* Teaching Pre K-8, 2005, Vol. 36 (2), P. 57-62

Vigliocco, G., & Hartsuiker, R. J. (2002). *The interplay of meaning, sounds, and Syntax in sentence production,* Psychological Bulletin, 128, p. 442-472

Whorf, B. L. (1956). Science and linguisitic. In J. B. Carroll (Ed.), *Language,*

thought, and reality: Selected writings of Benjamin Lee Whorf. Cambridge, MA: MIT Press, p. 375

Wright, C. (1987). Nurturing creativity potential: An interactive model for home and school. *Creative child and adult quarterly,* Vol. 12 (1), p. 31-38

Ranling Peng, 2004, ISBN 9787303002252 , *General Psychology*, p. 513-514