“APPLES TO APPLES” TO FOREIGN LANGUAGE LEARNING
THE COMPARISON OF PLAY AND NON-PLAY INTERVENTION AT A CHINESE
ELEMENTARY SCHOOL

A Thesis

Presented to the faculty of Graduate and Professional Studies in Education
California State University, Sacramento

Submitted in partial satisfaction of the requirements for the degree of

MASTER OF ARTS

in
Child Development
(Theory and Research)

by
Yan Hao

SPRING 2014
"APPLES TO APPLES" TO FOREIGN LANGUAGE LEARNING

THE COMPARISON OF PLAY AND NON-PLAY INTERVENTION AT A CHINESE
ELEMENTARY SCHOOL

A Thesis

by

Yan Hao

Approved by:

_________________________, Committee Chair
Dr. Juliana Raskauskas

_________________________, Second Reader
Dr. Li-Ling Sun

__________________________
Date

iii
Student: Yan Hao

I certify that this student has met the requirements for format contained in the University format manual, and that this thesis is suitable for shelving in the Library and credit is to be awarded for the thesis.

__________________________, Department Chair

Dr. Susan Heredia

Department of Graduate and Professional Studies in Education
Abstract

of

“APPLES TO APPLES” TO FOREIGN LANGUAGE LEARNING
THE COMPARISON OF PLAY AND NON-PLAY INTERVENTION AT A CHINESE
ELEMENTARY SCHOOL

by

Yan Hao

The aim of the present study was to investigate the English learning and motivation of elementary school children participating in a play intervention using the “Apples to Apples” game. Thirty-six children participated in the study, 18 participated in the play intervention group and 18 participated in a comparison group. A quasi-experimental design was used with pre and post data collection over a one month period. The results suggest that children participating in the play intervention showed a significant increase in English test scores and in their motivation for language learning over the one month period. This study supports the use of play-based interventions in improving children’s language and motivation in foreign language learning.

____________________, Committee Chair
Dr. Juliana Raskauskas

____________________
Date

v
DEDICATION

To my parents
ACKNOWLEDGEMENTS

First and foremost, I would like to express my appreciation and gratitude to my advisor, Dr. Juliana Raskauskas, for her encouragement and support. She has provided her quality time and immense patience to help me with my writing. Without her guidance, this thesis could not have been completed.

I would like to thank my second reader Dr. Li-Ling Sun for teaching me how to do good research and giving me lots of valuable suggestions.

I am very grateful to Dr. Lynda Stone, over the past three years I have received lots of support and encouragement from her. Her encouragement has made this a thoughtful and rewarding journey.

I also thank Dr. Sheri E. Hembree, without her understanding and help, I could not complete this thesis this year.

I am truly grateful to Jessamyn Carino, thank you for listening to me and encouraging me keep going these years. And thanks for being my friend.

I would like to thank my parents, Mr. Jianan Hao and Mrs. Aiping Jin for their support and encouragement. They have been always there for me and believing in me throughout these years.

Lastly but certainly not the least, I would like to thank my husband, Buyue Qian. Without his love and support, I would not have been able to pursue my dream here. Also thank to my son, Daniel Qian, you are my angel. I love you.
# TABLE OF CONTENTS

Dedication ........................................................................................................................................ vi
Acknowledgements ............................................................................................................................ vii
List of Tables ....................................................................................................................................... x
List of Figures ....................................................................................................................................... xi

Chapter

1. **INTRODUCTION** .................................................................................................................. 1
   - Statement of the Problem ........................................................................................................ 1
   - Purpose and Significance of the Study ................................................................................... 3
   - Methods ..................................................................................................................................... 7
   - Definition of Terms .................................................................................................................. 9
   - Limitations of the Study .......................................................................................................... 11
   - Organization of the Study ...................................................................................................... 12

2. **LITERATURE REVIEW** ......................................................................................................... 14
   - Theoretical Framework for Play and Learning ....................................................................... 15
   - Play and Language Learning .................................................................................................. 23
   - Motivation and Learning ........................................................................................................ 32
   - Present Study ............................................................................................................................ 35

3. **METHODS** ............................................................................................................................. 38
   - Research Design ..................................................................................................................... 38
   - Participants .............................................................................................................................. 38
Data Sources and Instruments ................................................................. 39
Procedures ........................................................................................................ 42
Analytical Methods .......................................................................................... 43

4. RESULTS ........................................................................................................ 44

5. DISCUSSIONS ................................................................................................. 49
   Limitation of the Study and Future Research .............................................. 53
   Implications ................................................................................................... 58

Appendix A. Demographic Survey for Children ........................................... 59
Appendix B. English Language Learner Motivation Scales (ELLMS): Pre-College ...... 60
Appendix C. Cambridge Young Learners’ English Tests .................................. 63
References ........................................................................................................... 75
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Tables</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Descriptive Statistics and T-test Results for English Performance (YEL Score) and Motivation (ELLMS Score) in Play Intervention Group</td>
<td>45</td>
</tr>
<tr>
<td>2. Descriptive Statistics and T-test Results for YEL Score and ELLMS Score in Non-Play Comparison Group</td>
<td>46</td>
</tr>
<tr>
<td>3. T-test Comparing Play Intervention Group and Non-Play Comparison Group on Post YEL English Test Score and ELLMS Test Score</td>
<td>47</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figures</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A Model of Game, Motivation and Learning</td>
<td>20</td>
</tr>
<tr>
<td>2. New Input-Process-Output Model</td>
<td>23</td>
</tr>
</tbody>
</table>
Chapter 1

INTRODUCTION

Statement of the Problem

It can be commonly observed that modern technology has turned our world into a small village. English plays a role as a global language that has impact on countries all around the world. China is thought to have the largest English-learning and English-using population in the world (Jian, 2002). The number of English learners in Mainland China is now around 300 million, which represents around a quarter of China’s population. Moreover, the number of elementary and secondary school students who learn English as a foreign language has reached over 100 million (Kosansy, 2011). English education in China has historically followed traditional instructional methods for teaching children in schools, relying on rote instruction following textbooks instead of more interactive strategies that have been shown to engage learners more and promote longer-term retention. This may be because there are few teaching tools readily available to aid English instruction in China (Basha, 2011). Educators, parents, and researchers are starting to focus on how we could improve the pedagogical tools used in the English classroom in China.
One of the reasons why teachers have moved from rote-learning to more interactive techniques is learning a foreign language is difficult and children need to be motivated to persist in the face of challenge. Motivation is widely accepted by researchers as one of the key elements to learning because it helps maintain students’ interest in learning, especially when learning difficult material, and even can predict the future success of some students (Wang, 2008). Many researchers have investigated how motivation can be stimulated (Ebata, 2008; Wang, 2008; Zhang, 2012). Play is one answer to this question.

Play is a critical teaching tool that is used in successful English teaching classrooms (Basha, 2011). Recently there has been increasing emphasis on the importance of play in both preschool and primary school settings. In general, the research has shown strong links between play and children’s language, physical, cognitive, and social development. In past years, there are many studies that have investigated the relation between the play and language development, particularly focusing on the links between pretend play and language development (Lillard et al., 2011; McCune, 1995; Nicolopoulou, 2005; Smith & Jone, 2011). In addition, studies also show that play is beneficial to children’s second and foreign language development (Chiu et al., 2012; Piirainen-Marsh & Tainio, 2009; Shahzad, 2011; Smith, 2006).

When investigating the value of play in language learning, the relationship between
play and motivation also needs to be studied carefully, since there are inextricable connections between play, motivation to learn, and language development (Felicia, 2011).

The purpose of the proposed study was to test a play-based intervention for English language instruction and also to investigate whether use of this play strategy was related to motivation among Chinese students studying English as a foreign language.

**Purpose and Significance of the Study**

Specifically, this study aimed to explore whether a play-based intervention helped fifth and sixth grade children learning English vocabulary as a foreign language in a Chinese elementary school. The study compared Chinese children before and after the intervention with respect to their motivation for learning English and achievement in English. The intervention consisted of a play-based English vocabulary intervention game and a traditional (non-play based) English class, over a period of one month in total.

The significance of this study is in discovering how teachers can use play as a teaching strategy for English instruction in China. Play interactions have the ability to not only improve motivation and achievement but also aids social and emotional development (Elkind, 2007; Mellou, 1994). Theorist Lev Vygotsky especially promotes the importance of the relationship between play and language acquisition. According to Vygotsky (1976; 1978), play interactions often happen where children and adults or more
knowledgeable others share their understanding through language tools which promotes learning. These interactions where children are engaged and challenged occur within the zone of proximal development. He believed that learning only happen when the child is in this zone, interacting with people and in cooperation with peers. In these social interactions, children and adults need to communicate with each other and sharing their ideas, specifically for children, they use “private/inner speech” as a tool to plan activities and strategies and therefore help their development. From social interactions, language carries information and accelerates children’s thinking, and finally “internalized” as “inner speech” and becomes children’s thought. Thus, children have opportunity to development their abilities in these interactions (Vygotsky, 1976; 1978). Following the theory framework from Vygotsky, current research has focused primarily on how children learn language through social interactions and play. In addition, a modified Input-Process-Outcome Game model was also used as theory framework in this study.

*Play and Language Learning.* There has been abundant research exploring play and its positive effects on children’s language learning and development (Gerlach, 2012; Lillard et. al., 2011; Magos and Politi, 2008; Perry, Hogan & Marlin, 2000; Welsch, 2008). Play is regarded as fostering young children’s development in the domains of “creative expression, cognitive competencies and literacy skills, social competence and
healthy lifestyle” (Kieff & Casbergue, 2000, pp. 9–10). Play is an important setting for children’s language learning (Brown, 1994), and it could help them learning in a natural way (Hewes et al., 2006). Kelly-Vance and Ryalls (2008) stated that children feel more comfortable in an environment when engaged in some form of play. This kind of familiar environment also gives children who have special needs an opportunity to engage their cognitive and language abilities (Sualy et al., 2011).

Not only many studies concerned with play and its value for language development, the relationship between play and foreign language acquisition has also been explored in recent years. Role playing is viewed as an excellent way to improve one’s skills of verbal expression skills in a range of simulated situations (Gerlach, 2012; Magos & Politi, 2008). Play uses games with rules also has been investigated by researchers in domain of foreign language study (Chiu et al., 2012; Piirainen-Marsh & Tainio, 2009; Shahzad-Azarmi, 2011 Smith, 2006). Smith (2006) explored the promotion of bilingual learners’ English learning when they come together to play a specially designed board game. The results revealed that the process of English learning also happens in the context of children’s playing (Smith, 2006). Padak (2010) was able to find three keys to success in motivating struggling readers: purposeful, authentic reading programs; time for independent reading; and an authentic and purposeful instructional
routine. Moreover, Connolly, Stansfield, Hainey and Boyle (2011) suggested that an alternate reality game could improve students’ motivation of learning a foreign language.

Motivation and Learning. Motivation is a key in language learning (Zhang, 2012). It promotes learners’ continuous engagement in learning even after they complete a goal (Ebata, 2008; Zhang, 2012). Researchers have divided motivation into two types: intrinsic versus extrinsic motivation. Intrinsic motivation is based on internal reward often pleasure in an activity or personal pride of a job well done rather than hope to reach and external reward. An extrinsic motivation refers to motivation that focuses on personal reward that comes from factors outside individual (Deci & Ryan, 2000).

According to previous studies, play is an important factor to increase the intrinsic motivation of children when they are learning language (Habgood et al., 2005). Malone (1982) stated that learning could be considered as both emotional and cognitive process. When children are involved in a play activity, they are promoted by intrinsic motivation, and easy for deep learning (Felicial, 2011). Thus teaching languages through games is one of the best methods for learning foreign languages (Shahzad, 2011).

The current study focused specifically on the value of the game “Apples to Apples” in the vocabulary acquisition of play intervention and the motivation of foreign language study. Apples to Apples is a language arts word game. Each player has seven red nouns
cards, and the judge flips a green adjective card. Every player places a red card face down that best matches the green card. Judges pick their favorite red card. Students build vocabulary and parts of speech knowledge when they are playing the game.

Methods

Participants

In the current study, participants included 36 fifth to six grade elementary school students. The elementary school located in Weinan City, Shaanxi province of China. All participants had studied at least 400 English words and range in age from 10-12 years.

Procedures

Human Subjects approval for this study was obtained through the IRB Committee at California State University, Sacramento. Students in one elementary school in regional of Western China were asked to agree to participate in the study. Before starting the experiment, a letter from the researcher was sent to parents asking for their consent to allow their child to participate in the study.

From the group of children whose parents gave consent, the researcher selected 36 of the students as the participants in this study. The participants were randomly assigned to one of two groups: Non-play-based comparison group (traditional instruction) and the play-based intervention group (Apples to Apples instruction). Each group had 18 students
and the researcher balanced gender so each group had equivalent numbers of boys and girls. Both control and experiment group were taught the same vocabulary of English. All of the vocabularies were from the game “Apples to Apples”. The vocabulary instruction was occurred after school and the only difference was the teaching method used. The control group was taught the vocabulary in the traditional method of English class in China while the experiment group played the game “Apples to Apples”. The experiment lasted one month, in particular, one hour per time, two to three days a week and the hours were same to each group.

At the beginning of the study, the Demographic Survey was first given to participants in order to collect the basic information and to investigate any group differences at the start. Secondly, the English Language Learner Motivation Scale: Pre-College (ELLMS) and the Cambridge Young Learners’ English Tests (YLE) test was administered to test their motivation for English language study and their English proficiency level pre-treatment. Next, the control group was taught the vocabulary in the traditional method of English class in China and the experiment group played the game “Apples to Apples” at the same time. Follow up data was collected after children had participated in the study for one month. After all assessments were completed, parents received a summary of their child’s progress over one month experiment.
**Analytical Methods**

Data were analyzed using the Statistical Package for Social Sciences (SPSS) software. Descriptive and frequency analyses were computed to derive an overall summary of demographic data of the participants. T-tests were performed to test all hypotheses. Results showed that children participating in the play intervention showed a significant increase in English test scores and in their motivation for language learning over the one month period and children in the control group did not.

**Definition of Terms**

**Play**

Johan Huizinga (1955) defined play as “a free activity standing quite consciously outside ‘ordinary life’ as being ‘not serious’, but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner.” (p.13)

Kenneth Rubin and his colleagues’ (1983) definition of play is based on the idea that play behavior is (a) intrinsically motivated; (b) distinct from exploratory behavior; (c) free from rules imposed by authority figures; and (d) actively engaged in by the players.
Lev Vygotsky (1978) stated that play is an activity: desired by the child, commonly involving an imaginary situation, and always involving rules. Play used in this study is a game with rules, which is a common form of play among elementary school age children (Chiu et al., 2012; Piirainen-Marsh & Tainio, 2009; Shahzad-Azarmi, 2011).

**Motivation**

Vallerand (1997) reported one of the most well-known distinctions in motivation theories, dividing motivation into two types: intrinsic versus extrinsic motivation. *Intrinsic motivation* is based on internal reward often pleasure in an activity or personal pride of a job well done rather than hope to reach an external reward. An *extrinsic motivation* refers to motivation that focuses on personal rewards that comes from some factors outside of the individual (Deci & Ryan, 2000).

**English Foreign Learner**

English foreign learners or as EFLs, are students who are study English in a non-English-speaking region. Study can occur either in the students’ home country as part of the normal school curriculum (Liu & Wang, 2012).

**Apples to Apples**

Apples to Apples is a language arts word game. Each player has seven red nouns cards. The children in the group take turns being the judge. After the judge flips a green
adjective card then every player places a red card face down that they think best matches the green card. The judge picks the noun card they feel is the best match. Students build vocabulary and parts of speech knowledge when they are playing the game.

**Limitations of the Study**

The relation between play and children’s language development has been studied well in past research, but there is not enough information on how play could help Chinese elementary students to study foreign language. The present study extends the literature by examining how play can help Chinese students learn English by increasing their motivation for learning. One strength of the current research is that it includes elementary school students, where past researchers about Chinese students learning foreign languages have included only high school or college students. Moreover, the present study developed a new Input-Process-Output model that can be used to explain language learning process from the sociocultural perspective.

Several limitations of this study should be acknowledged:

Foremost is the selective nature of the sample. The participants were only a small sample from one elementary school in China. They may not be representative of all situations of Chinese elementary students.

Moreover, there are many kinds of play types in our everyday life, but only a board
game named “Apples to Apples” was adopted in this study. Using one particularly game to stand for all types of play while studying its impact on children English language learning may have influenced or limited findings, the results may not be generalizable to all types of play.

Third, the intervention studied only last one month, which may have been too short to test the improvement of language development. Therefore the potential influence of play on children’s language learning may not be fully reflected in these findings.

Finally, only quantitative methods were used in the present study, including qualitative methods, specifically observation of the play interactions, could give a more rich analysis of how the language processes used in the game.

**Organization of the Study**

Chapter One has presented an overview of this research study, which includes the purpose and significance of the study, methodology, theoretical framework, definition of terms, and the study’s limitations. Chapter Two provides a literature review of the following three areas: (a) theoretical framework for play and language learning; (b) play and language learning; (c) motivation and learning. Chapter Three contains a detailed description of the methodology used in the research study. It provides information on participants, procedures, and the data analysis. Chapter four presents the results of the
participants on English skill and motivation for learning English at start and at the end of the one month period. Lastly, Chapter Five discusses the implications of the study’s major findings, its limitations, and future research that can develop from this study.
Chapter 2

LITERATURE REVIEW

Recently there has been increasing emphasis on the importance of play in both preschool and primary school settings. Play is a pleasurable experience, identifiable by six characteristics of play, such as being intrinsically motivated, controlled by the players, and etc. In addition, the researcher also concluded that play develops the foundation of skills necessary for children to succeed in school and life, and comprehensively discusses the impact of play (Hewes et al., 2006).

Play is one critical teaching tool that is used in successful English teaching classrooms (Basha, 2011). Many studies have investigated the relationship between the play and language development (Lillard et al., 2011; McCune, 1995; Nicolopoulou, 2005; Smith & Jones, 2011). Moreover, some of the studies show that play can also contribute to children’s second and foreign language development (Chiu et al., 2012; Piirainen-Marsh & Tainio, 2009; Shahzad, 2011; Smith, 2006).

Many teachers have moved from rote-learning to more interactive techniques because learning a foreign language is difficult and children need to be motivated to persist in the face of challenge. Motivation is widely accepted by researchers as one of
the key elements to learning because it helps maintain students’ interest in learning, especially when learning difficult material, and can even predicts the future success of some students (Wang, 2008). Since there are inextricable connections between play, motivation in learning, and language development, investigating the value of play to motivation for language acquisition is warranted.

The aim of the present study was to test a play-based intervention for English language instruction and to also investigate whether this play strategy is related to motivation among Chinese students who are studying English as a foreign language. Vygotsky’s theories about play and language development as well as a developmental model of Input-Process-Output model informed this study. The research questions were grounded in a review of the literature that covers the following two general areas: (a) play and language learning; and (b) motivation and learning. Before discussing these literature areas and specific research questions the theoretical framework that this study is based on will be reviewed.

**Theoretical Framework for Play and Learning**

The present study explores Garries, Ahlers and Driskell’s (2002) developmental Input-Output model in language acquisition in game environment and relates it to Lev Vygotsky’s (1978) sociocultural theory. Garris et al. (2002) developed this model to
present a useful tool for understanding how learning happens in the process of game play, and how motivation benefits students’ learning. Firstly, Vygotsky’s sociocultural theory as it relates to play is discussed; Secondly, Garris’s model and how it explains learning using games is presented; Lastly, a new model about play, motivation and leaning developed for this study by combining elements of Vygotsky and Garris et al. will be discussed.

**Vygotsky’s Socialcultural Theory and Play**

Vygotsky considered play to be important to the development of children (Vygotsky, 1933). Vygotsky concluded that play allows a child to control a situation him/herself. For example, a child who fusses and cries when put to bed might pretend to go to bed without crying during subsequent sociodramatic play. In play, the child can control their behavior and emotions because the child controls the play frame or imaginary situation. The child can pretend to cry but can stop in the play episode, unlike in real life. Play, in this instance, helps the child gain greater self-control and regulatory abilities over previously uncontrollable emotional states. In addition, through play, children can stretch themselves in self-control, language use, memory, and cooperation with others.

When sociocultural theory is applied to cognitive benefits of play it is shown how fantasy play and play that requires children to follow rules or do problem solving can
help children developing cognition. Vygotsky's (1987) famous work, *Thought and Language*, explored the interrelationship of thought and language. For Vygotsky, patterns of thinking and cognitive skills are the products of the particular culture within which an individual grows up. In the process, language plays a crucial role in determining how a child will think because modes of thought are transmitted to the child by means of words. Vygotsky (1987) believed that cognitive development proceeds from being social to individual. In other words, a child's cognitive development originates in socialization activities and then goes through a process of increasing individuation. Language facilitates this, for example when the child begins to differentiate between speech that is directed towards the others and speech that is self-directed. Private speech is when the child talks through problems and uses language to develop solutions; after the child grows older she/he will internalize that private speech in the mind.

The reason why play can be so beneficial to development is play typically occurs within the zone of proximal development (ZDP) in children. According to Vygotsky (1933), the ZDP is the distance between one's actual developmental level and one's potential developmental level when interacting with someone or something in the social environment (Vygotsky, 1978). Vygotsky assumed that interactions with adults and peers in the zone of proximal development help children move to higher levels of mental
functioning. As Lantolf (2001) explains, when children pretend to be a mother, father, a doctor and so on, in the playing, they could get feedback from others, this is a moment that Vygotsky says they are working within the ZPD, the moment in which they engage in activities that are not just about enjoyment, but allow them to project into the future. Lantolf concluded that play could contribute to children’s effective learning, thought organization, and problem solving abilities. Such ideas are imitated by Sylva et al. (1974), who found that children use information from mistakes during play to construct internal models that assist them in solving future problems.

**A Model of Game, Motivation, and Learning**

Play can contribute toward increasing intrinsic motivation of children when they are learning a language (Habgood et al., 2005). Malone (1982) stated that language learning can be considered as both emotional and cognitive process. When children are involved in play activities they are intrinsically motivated which makes it easy for deep learning to occur (Felicia, 2011). There are many kinds of play types, including fantasy, storytelling, music, movement, games, etc. Play always promotes excitement, enjoyment, and a relaxing atmosphere when students study languages (Shahzad, 2011). Thus teaching languages through play is one of the best methods for learning foreign languages.

In recent years, video games and new media have increasing been integrated into
academic studies, with research showing them to be useful educational tools. During the past 10 years, the number of game-based learning studies has significantly increased. Chui et al. (2012) states that relevant and engaging games allows more learning to occur because learners have the opportunity to interact and to negotiate meaning. It is especially significant for second language learning, since games provide a more meaningful situation for learners to use language than other kinds of learning practice. Under the game environment, children have an opportunity to repeat words or phrases, this repetition offers participants a resource for not only interpreting the game but also for engaging with the second language learning. Playing a game is a way to help children develop their linguistic and interactional competence in the second language (Piirainen-Marsh & Tainio, 2009). At the same time, the field of foreign language pedagogy has been pay their attention to how playing the computer games could help students in their foreign language learning (Garris et al., 2002).

Garris et al. (2002) developed an Input-Process-Output Model of instructional games and learning. They stated that instructional games not only enhance students’ intrinsic motivation but also serve as extrinsic motivation by awarding points or advancing levels. Because the instructional games are interesting and achieving the outcome is important, the games can help learners maintain motivation in self-directed learning.
A tacit model of learning inherent in instructional games was developed and is illustrated in Figure 1. Firstly, the program contains almost all of features or characteristics in games. Secondly, in the center of the model, there is a cycle that includes user judgments or reactions such as enjoyment or interest, user behaviors such as greater persistence or time on task, and system feedback. “To the extent that we are successful in pairing instructional content with appropriate game features, this cycle results in recurring and self-motivated game play” (Garris et al., 2002). Finally, the students’ engagement in game play could cause the learning outcomes that also show in the Figure 1.
One of the advantages of this model is the game cycle in which involves repeated judgment-behavior-feedback loops. This means that play engages cognitive processes of reactions and judgments (increased interest, enjoyment, involvement, or confidence), then these judgments lead to learner’s behaviors, and these behaviors lead to system feedback on performance provided by the game context which shapes future choice and judgments. Although originally applied to electronic games, this model presents a useful tool for understanding how learning happens in the process of game play and how the motivation benefits for students’ learning within the game environment.

A New Input-Output Model

According to Vygotsky (1987), the learning of a new language is embedded in social interactional, cultural, institutional, and historical context. For the students of learning a new language, they always in school and interactions with their teachers, classmates, reading or listening materials and also some computer leaning programs. From Vygotsky’s perspective, learning is a mutual influential and interactional process between learners and their learning environment, since any process of learning cannot be independent from social interactions and relations. In the present study, the game “Apples to Apples” is an activity that involved in language learning, it also has social interactional characteristics. For example, in the input stage, children reading the instruction of the
game and following the game characteristics is interactive. According to Vygotsky’s genetic analysis, the reading material development results from social interaction and the reading activity will result in learning changed form of further social interaction (Wertsch, 1991). In addition, under the sociocultural perspective, in the output stage, any output, is the form of speaking or writing, serves the purpose of interactions. Min (2006) states that input and output rely on each other. Output is dependent on a relationship between previous input and the learners’ individual manipulation of this input. That is, how the learner uses the input in combination with existing knowledge to create new knowledge.

In Gerries et al.’s model, we can understand how the children use the input (instructional content and game characteristics) in combination with existing knowledge to create new knowledge. However, the Gerries’s original model was developed to apply to computer game based learning where the current study is using a task card game “Apples to Apples.” It is argued that the Gerries et al.’s model can be adapted to apply to this face-to-face game playing as well. To address this, and to include the interactive component suggested by Vygotsky’s theory, in the current study the term “system feedback” in the model was changed to “peer/adult feedback” in order to explain how the players sharing their thinking and ideas in the game process. The modified Gerries et
al. model is provided in Figure 2:

Figure 2: New Input-Process-Output Model

Following the new Input-Process-Output Model (Figure 2) and the theory framework from Vygotsky, current research has focused primarily on how children learn foreign language through the process of game play. The next two sections will provide an overview of the literature regarding (1) play and language learning and (2) motivation for learning.

**Play and Language Learning**

Play is considered important for optimal early development, and many educators and research encourage creating more appropriate opportunities of play for children (Elkind, 2007; Hewes et al., 2006). Large portions of studies have investigated how play
contributes to children’s language development (Hewes et al., 2006; Lifter, Mason & Barton, 2011; Sualy et al., 2011). Play is an important context for children’s language learning, and it could help them learning in a natural way (Hewes et al., 2006; Lifter, Mason & Barton, 2011), children may feel more comfortable in the environment when they engage in some form of play. They also state that play consists of spontaneous, naturally occurring activities with objects that engage attention and interest. Because of the spontaneous, natural emerging, play is important for three reasons: (1) play increases natural learning; (2) play can be used in context and provides opportunities for social and communicative interactions with peers and adults; (3) play has predictive value for communication and social skills. Sualy et al. (2011) also discussed how the familiar environment can give children who have special needs an opportunity to engage their cognitive and language abilities. The researcher assessed children’s free play skills and then assigned them to either an intervention or comparison group. The intervention consisted of short-term facilitated play instruction from adults and took place in the early intervention classroom. They argued that play interventions have positive effects on play skills of children with language delays and is effective in increasing the complexity of the children’s play behavior.

Hewes et al. (2006) defined different kinds of play that children engage in including:
exploratory play, object play, construction play, physical play (sensorimotor play, rough-and-tumble play), dramatic play (solitary pretense), socio-dramatic play where children pretend social roles and invent increasingly complex narrative scripts with friends in small groups (pretense with peers, also called pretend play, fantasy play, make-believe, or symbolic play), games with rules (fixed, predetermined rules) and games with invented rules (rules that are modifiable by the players). Exploratory play could be understood as very young children explore objects and environment. Dramatic play is defined as imaginative play that happened in early childhood. Construction play is children begin to construct with commercial toys, with found and recycled materials and with different of modeling media (Elkind, 2007; Hewes et al., 2006; Stagnitti, 2009).

Research indicates that engaging in play helps children to develop language skills, storytelling, vocabulary, and to explore the function of written language as a means to early literacy development (Perry, Hogan & Marlin, 2000). Perry et al. (2000) explored the relationship between play and development finding that the process of discovery brings pleasure and that pleasure leads to repetition and practice. Practice brings mastery and mastery brings pleasure and confidence to once again to act on curiosity creating a cycle. For example, pretend play is associated with enhancement in narrative such as story comprehension and story production (Lillard et al., 2011). Play, especially pretend
play, has been shown to contribute to children’s creativity, intelligence, problem solving, reasoning, and conversation development. It improves children’s social skills, language, and narrative ability, and helps children to develop healthily (Lillard et al., 2011; McCune, 1995; Welsch, 2008).

There is evidence that the use of turn taking games can also expand language and build vocabulary. Games help children practice skills like counting, color identification, problem solving and risk taking. Tomlinson and Masubara (2009) provided a critical overview of the literature on physical games in language learning. They concluded that physical games provide a motivated and meaningful experience of language in use. In the play environment children will focus more on their aim of winning the game rather than the fact they are practicing the language. In addition, through games, learners gain immediate feedback from the environment and study the language in an effective way. This is similar to the Garris’ Input-Process-Output Game Model proposed in Figure 2. Stansfield, Hainey and Boyle (2011) suggested that an alternate reality game could improve students’ motivation of learning a foreign language. Smith (2006) explored the promotion of bilingual learners’ English learning when they come together to play a specially designed board game. The board game is designed to help build an interactive context in their language learning environment and it could promote learners’ second or
foreign language development. The results revealed that the process of English learning indeed happens in the context of children’s playing. Pupils supported and mediate on another’s leaning under the game environment (Smith, 2006).

Piirainen-Marsh and Tainio (2009) also reviewed studies about “games and learning” and “collaborative game-play as an environment for learning” and investigate how the players display their engagement with the game as well as their competences in recognizing and reproducing the linguistic resources in their own activities. Results indicated that the collaborative game-play is an informal learning environment that enhanced the development of children’s learning of language.

Play creates opportunities for children to learn language from each other and to practice what they have learned from each other. The process of learning through interaction with other children is similar in first and second language learning (Smith, 2006; Tripp, 1980). Tripp (1980) stated that the process of children’s first/second language learning is: children imitate their models, receive corrections, create predictable routines, figure out meanings from context, and then permute and recombine what they have learned. Tripp thought in role play children’s have the opportunity to acquire and practice strategic language used in social relations. Role playing is viewed as an excellent way to improve one’s skills of verbal expression skills in a range of simulated situations
(Gerlach, 2012; Magos & Politi, 2008; Maxwell, 1997). For example, Maxwell (1997) described a Japanese classroom that used the role playing games in an English learning class. The results showed that the students’ verbal, nonverbal communication skills and their confidence in English language acquisition are both structured and improvised in the process of playing (Maxwell, 1997). According to Cook (2000), play in language learning is made up of two opposite spectrums: patterned sound at one end and pragmatic contextualized meaning at the other. The patterned end contains verse, speech, and semantic meaning. The pragmatic end resembles the interaction which takes place between interlocutors (touch, eye contact, affection, emotion, etc.). Butzkamm (1980) argues that types of language play vary widely, from vocabulary games to talking one’s self.

Many researchers also have focused on how media play could benefit children’s language development (Kuppens, 2010; Linebarger & Walker, 2005; Mendelsohn et al., 2010). Mendelsohn et al. (2010) found that the verbal interactions between low-income parents and their infants during media exposure was associated with language development. For the foreign language study, Kuppens (2010) stated that children and adolescents can study the foreign language by watching foreign language television, and the effect of watching subtitled television and movies is stronger with girls than boys.
Engaging the study in music in the early childhood classroom may support English language learner’s literacy development (Paquette & Rieg, 2008; Wang, 2013). Paquette and Rieg (2008) stated that integrating music to children’s everyday activities could enhance their interesting in learning language, and encourage their creativity as well as set a positive learning environment for them.

With the development of technology, computer games are increasingly being used by professionals and educators. Computer games are considered as a teaching tool to improve English language because it provides language learning environment for learners (Mich et al., 2004). When learners play games, they need to know basic English language in order to understand the instructions then they will develop their knowledge in the process of playing. Moreover, vocabulary as the most important English skill and it can be practiced in the game environment. In addition, computer games can increase motivation and pleasure for learners (Mich et al., 2004). For example, Bakar and Nosratirad (2013) conducted a mixed methods case study to explore that how a computer game can be adapted as a learning tool to help adult learner learning vocabulary independently. The findings showed that computer games could be used as a teaching tool to help adult learner learning English vocabulary independently. People use computers and electronic technologies every day including children. Computer games are not only beneficial to adult
learners when they are learning English but also to improve children’s language skills if they are actively engaged in the game (Kuppens, 2010).

The current study chose to use a board / card vocabulary game called “Apples to Apples” which is a type of play that has not been examined in relation to foreign language development. The reason this type of play was chosen, compared to other forms of play activity, is that this type of play is more easily and authentically adopted into current Chinese classroom processes. Smith (2006) stated two reasons why board games are good for examining pupil-pupil talk: (1) board games are generally highly structured and involve the use of words to facilitate play and movement toward the goal. The discourse created by a board game is most likely to be comprehensible and easier to predict. This may reduce pupil’s anxiety about learning other languages and facilitate their active participation. (2) Board game has rules that support active and symmetric participation. Thereby pupils can participate in the game in turns. For many board games children are required to talk to participate, and in the process of playing, there is likely to be repeated examples of discourse. The repetitive nature of such discourse allows learners to hear language forms several times. In addition, in these discourses, the repetition of one another’s discourse functioned to hold the scaffold help arising in the interaction in place, and ‘creating a cognitive space in which to work’ (DiCamilla & Anton, 1997, p.627). MaGraw,
Yoshimoto and Senneff (2009) present a novel application for speech technology to aid students with vocabulary acquisition in a foreign language through interactive card games. They also found that these card games have the potential to make a meaningful impact on language education. Furthermore, card games offer an advantage over narrow domain dialogue systems that might be of interest to student for a brief period of time.

There is one primary study on foreign language acquisition and card games by Macedonia (2005). In this study it is asserted that the causes of non-fluency and accurate speech outside the classroom are attributed primarily to the type of exercises that are employed in the foreign language teaching. The traditional ways of learning foreign language does not lead to spoken language and the retrieval of learned material is too slow to enable successful speech. The researcher discusses some language game examples from her/his classroom practice, which contains wooden blocks, cards, finger games and board games. It was concluded that language games serve the function of redundant oral repetition of grammar structures and vocabulary in a playful way. The playful handing of grammar is more entertaining than written exercises so students more easily learn the language in this environment. The research shows that emotion plays an important role in children’s language learning, which leads to the discussion below on motivation for learning.
Motivation and Learning

What is Motivation?

Different researchers have examined motivation in different ways, but they have a basic agreement on the definition of motivation. They seem to agree that motivation is literally the desire to do things. Vallerand (1997) divided motivation into two types: intrinsic versus extrinsic motivation. Intrinsic motivation is based on internal reward often pleasure in an activity or personal pride of a job well done rather than hope to reach and external reward. Extrinsic motivation refers to motivation that focuses on personal reward that comes from some factors outside individual (Deci & Ryan, 2000). Wang (2008) suggested that students would lose their natural intrinsic interest in an activity if they pay more attention to some extrinsic requirement. In China, English is a compulsory course, most of English learners are motivated primarily by extrinsic motivators. For example, they are motivated by school expectations to study the subject, marks in school, future rewards - high scores in English examinations may provide better job opportunities, the hiring company usually preferred chooses the student who has higher scores in English exams. Moreover, the universities require all of the students pass a stander English test for graduation. Under such environment, the intrinsic motivation of students in English language study is unlikely to be improved. However, Wang (2008) has shown that extrinsic
rewards could be combined with, or sometimes can lead to, intrinsic motivation if students are sufficiently self-determined and internalized. He also argued that the strong desire to learn could lead to successful achievement in English learning. In current study, both intrinsic and extrinsic motivation in foreign language learning was examined.

**Importance of Motivation in Foreign/Second Language Learning.**

Motivation is key for successful language learning (Zhang, 2012). Motivation promotes learners’ continuous engagement in learning even after they complete a goal (Ebata, 2008; Zhang, 2012). Winke (2013) constructed a study to investigate the language aptitude for Chinese language learning. The study concluded that a highly motivated second language learner will (a) want to integrate with speakers of the language, (b) have a very good attitude about learning the second language, and (c) desire to communicate with other in the second language. A highly motivated second language learner can even make up for deficiencies in cognitive abilities, which suggests that motivation mediated the cognitive abilities on second language learning (Sternbery, 2002; Winke, 2013).

Attitudes and motivational factors play a crucial role in foreign language learning (Engin, 2009; Gardner & Lambert, 1972; Shahzad, 2011). Teacher must use activities to develop students’ positive motivation. Attitudes and motivation have been found to have
independent and significant relationships with foreign language learning achievement (Engin, 2009; Gardner & Lambert, 1972). Therefore, students who are highly motivated and have positive attitudes are more likely to do well in learning a foreign language than students who are less highly motivated or who have negative attitudes. This is why teacher of foreign language have always tried to find strategies that could stimulate students’ motivation on foreign language learning. If teachers have good information about students learning strategies and their motivation, they can assist the students in improving their learning techniques and language learning skills.

Wang (2008) focused on what can stimulate students’ motivation, such as using an appropriate teaching method, having practical teaching materials for students, help students succeed in language learning, and helping them have a communication purpose. These interesting and fun experiences bring positive emotions to students, Macedonia (2005) states that positive emotions promote learning process, and these enhancements are not only in cognitive perception but also neurological performance. Thus, educators should be aware of the important role of emotions in the learning process and help learners perceive the fun of the activity as motivation.

Similarly, Negueruela-Azarola (2011) has shown that motivation a key component in foreign language studies. Their research used sociocultural theory as a framework to
analyze narrative interviews between the student participants and teacher participants. The study identified three main features of foreign language classroom motivation as: changing articulations, meaning-based historical reasons, and mediating and nondeterministic.

Changing articulations means that the motivation is not a stable feature of human beings, it is connected and shaped by activities and practices, moreover, the activities and practices are also change all the time. Motivation has meaning-based historical reasons means that motivation is historical emotion and it connected to making sense of past goals and activities. Thirdly, motivation is a mediating tool since it causes and effects learning.

**Present Study**

In summary, research has shown that there are inextricable connections between play, children’s motivation in learning, and language development (Felicial, 2011). The English teaching classroom in China is more likely to follow traditional instructional methods, relying on rote instruction following textbooks than more interactive strategies that have been shown to engage learners more and promote longer-term retention. Because of studies showing that play is beneficial to children’s second and foreign language development (Chiu et al., 2012; Piirainen-Marsh & Tainio, 2009; Shahzad, 2011; Smith, 2006), it is important to provide strategies for Chinese educators to integrate play into foreign language education. The purpose of the study is to test a play-based
intervention for English language instruction and to also investigate whether this play strategy is related to motivation among Chinese students who are studying English as a foreign language.

The present study focused specifically on the value of the vocabulary game “Apples to Apples” in the vocabulary acquisition of play intervention and the motivation of foreign language study. Apples to Apples is a language arts word game. Each player has seven red nouns cards at the start and there is a pile of green adjective cards. Students take turns being the judge. At the start of every round the judge flips a green adjective card. Every player places a red card face down that they think best matches the green card. The judges pick their favorite red card and the student who submitted that card wins that round. Students build vocabulary and parts of speech knowledge when they are playing the game.

In general the connection between play, children’s motivation in learning, and language development were explained by the modified Garries’ et al. model (Garries et al., 2002). The study tested a play-based intervention for English language instruction and also investigated whether this play strategy is related to motivation among Chinese students who are studying English as a foreign language. Four hypotheses were tested in this study:
1. Children in the play-based intervention group will show significant increase in English skill from pre to post test; Children within the play-based group will increase motivation from pre to post-test.

2. Children in Non-play-based group will show no significant increase in English skill from pre to post test; children within the non-play based group will no increase motivation from pre to post-test.

3. Children participating in the play-based classroom will show significantly higher scores in the English post-test compared to the non-play group.

4. Children participating in the play-based classroom will show higher motivation for learning English compared to the non-play group at the end of the one-month period.
Chapter 3

METHODS

Research Design

This study is a 2 (test time: pre vs. post) x 2 (play: control vs. intervention) factorial design, with test time varied within groups and play varied between groups. Motivation and English vocabulary serve as dependent variables. The study was conducted in one elementary school in Western China with students in fifth and sixth grade randomly assigned to conditions. A survey was used to collect children’s demographic information at the beginning. The pre and post data were collected on the effects of the play intervention on children’s motivation and language proficiency. The general experimental design of the study was a comparison of the intervention trial consisting of pre-test→Apples to Apples Play intervention→post-test to a control group that receive vocabulary instruction in the traditional manner between their pre and post-test. The treatment conditions were conducted during an after school program at the designated school.

Participants

Participants included 36 fifth to six grade elementary school students. Of the 36 children, 18 were boys and 18 were girls. The age of participants ranged from 10 years to
12 years and 6 months ($M=11.06, SD= .68$). All participants were enrolled in 5th or 6th grades and had studied at least 400 English words previously. Eighteen of the participants were 5th graders and 18 of them are 6th graders.

In the intervention group there were 9 boys and 9 girls, with a mean age of 10.9. Within this group, 10 children were 6th graders and 8 were 5th graders. For the intervention group there were 9 boys and 9 girls, with a mean age of 11.2. Within this group, 8 children were 6th graders and 10 were 5th graders.

**Data Sources and Instruments**

**Demographic Survey.** The Demographic Survey (see Appendix A) was designed by the researcher in the study. The survey consists of six questions asking about name, gender, primary language, years of study English, GPA of their English course, and how long they spend in English study per week.

**Motivation of Language learning.** The English Language Learner Motivation Scale: Pre-College (ELLMS) was used to estimate children’s change of motivation before and after the experiment (Ardasheva et al., 2012). The ELLMS is shown in Appendix B and is a modified version of the Language Learning Orientations Scale-intrinsic Motivation, Extrinsic Motivation, and A Motivation Subscales (LLOS-IEA, Noels et. al., 2000) including modifications to make the instrument appropriate for use with younger
(pre-college) English language learners. It can be used with elementary (ages 9–11 years), middle (ages 12–14 years), and high school (ages 16–17) English language learners.

For the current study, the ELLMS was adapted for the purpose of examining the participants’ motivation of learning English as a foreign language. Twelve items of the ELLMS investigate the factors that related to English language learning motivation. The items responses were assessed on a five-point Liner type scale ranging from 5=agree to 1=disagree. The total motivation score in the pre test ranged from 39 to 56 ($M=46.36$, $SD=4.55$). The score in the post test ranged from 38 to 56 ($M=47.25$, $SD=4.51$).

**English Achievement Test.** The pre and post-test of children’s English language proficiency was adopted an international standard test that named Cambridge Young Learners’ English Tests (also know as YLE) to evaluate (Appendix C). YLE is one of the University of Cambridge ESOL Examinations tests targeted at children age between 7-12 years. The examination has three different levels: Starters Exam, Movers Exam, and Flyers Exam. Each level of examination is divided into three different sections: Reading and Writing, listening, and speaking. The test aims to give children a head start in English, help them develop their practical language skills, and reward their progress of English proficiency. The division of levels is according to ability rather than the age of the children. Therefore, a five-year old child may pass the Flyers level of exam and twelve
years old child may fail in the Starters level test. All participants in current study were taken starters level test in both pre and post test. The participants at play intervention group had YEL English Test score before ($M=75.94, SD=15.34$) and after ($M=79.61, SD=15.87$); the participants at non play comparison group had YEL English Test score before ($M=78.27, SD=10.34$) and after ($M=79.01, SD=10.23$).

**Apples to Apples.** Apples to Apples is a party game designed for four to ten players and play for 30-60 minutes. The game helps children study English vocabulary in an interesting way. In the game each person from the group has seven red cards and one person is picked to be a judge per round. The “red apple” cards are printed a noun or noun phrase. The judge chooses a green card and states what the word is on the card. The words on the “green apple” cards are some adjective words. After this, the other players choose a card from their set that they think matches the word that the judge picked. The judge is in charge of deciding which card they feel matches the green card the best. This decision is subjective; the official rules encourage the judge to pick the match card in a creative, humorous, or interesting way. In the process of play, children need to communicate their reason of choosing the card and sharing their understanding of the words. The game is a good way to improve children’s vocabulary and comprehension skills of English (Hardy, 2012). The proposed study adopted the kids edition of Apples to
Apples due to two reasons: 1) the age of the participants (10-12 years old), 2) the participants are studying English as a foreign language, their English proficiency level may lower than native speaker children. The words in the kids edition of Apples to Apples might easier for them to play.

**Procedures**

Human subjects approval for this study was obtained through the Institutional Review Board (IRB) Committee at California State University, Sacramento. An elementary school in regional of Western China was asked to agree to participate in the study. Before starting the experiment, a letter was sent from the researcher to parents asking for consent for their child’s participation. The letter described the research and its importance and the fact that the study had the support of the administrator of the school.

From the group of children whose parents give consent, the researcher used random sampling stratified by gender to select 36 of the students as the participants in the study. The participants were randomly assigned to one of two groups: the control group (traditional instruction) and the experiment group (Apples to Apples instruction). Both the control and experiment group were taught the same vocabulary of English during the period of treatment. All of the vocabulary words were from the game “Apples to Apples.” The vocabulary instruction occurred after school and the only difference was the teaching
method used. The control group was taught the vocabulary in the traditional teaching method of English in China while the experiment group played the game “Apples to Apples”. The trial comparison continued for one month, in particular one hour each three days a week. Both groups met in different rooms during the same hours.

At the beginning of the study, the Demographic Survey was administered to the participants. Secondly, the English Language Learner Motivation Scale: Pre-College (ELLMS) and the Cambridge Young Learners’ English Tests (YLE) was used to assess participants’ motivation for English language study and their English proficiency level at the baseline of the study. Next, the control group was taught the vocabulary in the traditional method of English class (teacher-directed instruction) in China, and the experimental group played the game “Apples to Apples” at the same time. The participants took both ELLMS and YLE again. After all assessments were completed, parents received a summary of their child’s progress over one month experiment.

Analytical Methods

In chapter 4 data will be analyzed using the Statistical Package for Social Sciences (SPSS) software and findings presented. Paired samples t-tests were used to test hypotheses 1 and 2 and independent sample t-tests were performed to test hypotheses 3 and 4.
Table 1 and 2 present the descriptive statistics (including mean and standard deviation) and the $p$ values of the both play intervention group and non-play comparison group before and after one month experimental period. In order to compare the two groups to ensure they were equivalent to start, an independent samples t-test was conducted to compare the play intervention group ($M=75.94$, $SD=15.34$) and non-play intervention group ($M=78.27$, $SD=10.34$) at the pre-test in Cambridge Young Learners’ English Tests (also know as YLE). This test was founded to not be statistically significant, $t(34)=-.54$, $p=.60$. The results indicated that children in the play and non-play intervention groups did not differ significantly on English performance level before the intervention. In addition, another independent samples t-test was conducted to compare the play intervention group ($M=46.56$, $SD=4.83$) and non-play intervention group ($M=46.17$, $SD=4.38$) at the pre-test in English Language Learner Motivation Scale: Pre-College (ELLMS). This test was also not statistically significant, $t(34)=.25$, $p=.80$, suggesting that the two groups did not differ significantly on motivation before the
intervention. Together these results indicate that the two groups were equivalent in both YEL Score and ELLMES Score at start of the experiment.

Table 1. *Descriptive Statistics and T-test Results for English Performance (YEL Score) and Motivation (ELLMS Score) in Play Intervention Group*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
<th>n</th>
<th>p</th>
<th>r</th>
<th>t</th>
<th>Df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YEL Score</td>
<td>75.94</td>
<td>15.34</td>
<td>79.61</td>
<td>15.87</td>
<td>18</td>
<td>.00</td>
<td>.95</td>
</tr>
<tr>
<td>ELLMS Score</td>
<td>46.56</td>
<td>4.83</td>
<td>48.33</td>
<td>4.51</td>
<td>18</td>
<td>.00</td>
<td>.94</td>
</tr>
</tbody>
</table>

Table 1 presents the descriptive statistics (including mean and standard deviation) and the *p* values of the play intervention group pre and post intervention. As indicated earlier, the first hypothesis was: children in the play-based intervention group would show significant increase in English skill and motivation from pre to post test. A paired-samples *t*-test was conducted to compare children’s YEL English Test scores and ELLMS scores before and after play intervention. There was a significant difference in the YEL English Test score before (*M*= 75.94, *SD*=15.34) and after (*M*=79.61, *SD*=15.87) play intervention experiment. In addition, there is also a significant difference in ELLMS scores before (*M*=46.56, *SD*=4.83) and after (*M*=48.33, *SD*=4.51) play intervention experiment *t*(17)= -4.44, *p*=.00. These results suggest that this play situation did help children’s English learning and learning motivation. Specifically, the results suggest that over a month’s period children’s English skill showed improvement as well as their
motivation for learning. Hypothesis 1 was supported by these results.

Table 2. Descriptive Statistics and T-test Results for YEL Score and ELLMS Score in Non-Play Comparison Group

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
<th>n</th>
<th>p</th>
<th>r</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEL Score</td>
<td>M= 78.27, SD=10.34</td>
<td>M= 79.01, SD=12.03</td>
<td>18</td>
<td>.25</td>
<td>.85</td>
<td>-1.20</td>
<td>17</td>
</tr>
<tr>
<td>ELLMS Score</td>
<td>M= 46.17, SD=4.38</td>
<td>M= 46.17, SD=4.37</td>
<td>18</td>
<td>1.00</td>
<td>.99</td>
<td>.00</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 2 presents the descriptive statistics (including mean and standard deviation) and the p values for the comparison group before and after one month experimental period. As was estimated in hypothesis 2, that children in the Non-play-based group would not have significant increases in English test scores and learning motivation from pre to post test. Paired-samples t-tests compared control group children’s YEL English Test scores and ELLMS scores before and after the one month experimental period.

There were no significant differences in the YEL English Test score before (M= 78.27, SD=10.34) and after (M=79.01, SD=10.23) experiment period; t(17)= -1.20, p=.25. In addition, there was also no significant difference in ELLMS scores before (M=46.17, SD=4.38) and after (M=46.17, SD=4.37) the experiment period; t(17)= .00, p= 1.00). These results suggest that children’s English skill as well as their motivation for learning showed no improved over the month period for students receiving the traditional class instruction. Therefore, hypothesis 2 was also supported by the test results.
Table 3. *T*-test Comparing Play Intervention Group and Non-Play Comparison Group on Post YEL English Test Score and ELLMS Test Score

<table>
<thead>
<tr>
<th></th>
<th>Play Intervention Group</th>
<th>Comparison Group</th>
<th>t</th>
<th>df</th>
<th>P</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YEL Score</td>
<td>79.61</td>
<td>15.87</td>
<td>80.05</td>
<td>12.04</td>
<td>-0.09</td>
<td>34</td>
</tr>
<tr>
<td>ELLMS Score</td>
<td>48.33</td>
<td>4.51</td>
<td>46.17</td>
<td>4.36</td>
<td>1.46</td>
<td>33.96</td>
</tr>
</tbody>
</table>

Table 3 presents the *t*-test results for the play intervention group and non-play comparison group including mean and standard deviation for post YEL and ELLMS test scores. As indicated earlier, hypothesis 3 and 4 stated that a significant difference between the children participating in the play-based intervention group and those in the non-play-based group receiving traditional vocabulary instruction was expected for English test score/motivation scores at the end of the one-month. Specifically, it was anticipated that children participating in the play-based classroom would show higher English score/higher motivation compared to the non-play group at the end of the one-month period. Independent-samples *t*-tests were conducted to compare children’s YEL score after the one month experiment for the play intervention group and non-play
comparison group. There were no significant differences in the scores for play intervention group (\(M=79.61, SD=15.87\)) and non-play comparison group (\(M=80.05, SD=12.04\); \(t(34)=.09, p=.92\). These results suggest that children participating in play-based intervention group do not show higher English test scores compared to those in the non-play-based group receiving traditional vocabulary instruction at the end of the one-month. Hypothesis 3 was not supported by the test results.

Similar findings were produced for hypothesis 4; The independent-samples t-test comparing children’s in the play intervention group (\(M=48.33, SD=4.51\)) and non-play comparison group (\(M=46.17, SD=4.36\)) on ELLMS score after one month was non-significant, \(t(34)=1.46, p=.15\). These results suggest that while children participating in play-based intervention group did have higher ELLMS scores on post-test compared to those in the non-play-based group receiving traditional vocabulary instruction at the end of the one-month, this difference failed to reach significance, so hypothesis 4 was also not supported by the test results.
Chapter 5

DISCUSSIONS

The present research builds on the existing research on how play and motivation can influence foreign language learning, and extends this research by including a Chinese elementary school sample and the Apples to Apples game. It used a pre-post treatment experimental design with a control comparison group to provide a methodologically controlled investigation of the effects of play intervention on children’s motivation and language proficiency.

Play is an important context for children’s language learning, and it could help them learn in a natural way (Hewes et al., 2006). Gerlach (2012) suggests that role playing in foreign language classes is not only for fun but can also be a great way to “put your verbal skills to the test”. Magos and Politi (2008) presented the results of research on immigrants who learned Greek as a second language. Their study showed that play assisted in the teaching of second language to immigrant learners. In addition, play is thought to be an effective technique to arouse the interests of learners and make the language acquisition process more enjoyable (Liu & Ding, 2009).
The present study’s success indicates that the game “Apples to Apples” may be a useful tool for using play to learn English. Apples to Apples involves the children participating in play that reflects their current English abilities and then challenges them to expand vocabulary and the expression of ideas in English in order to interact with peers at an increasingly competent level. The present study found that children in the play intervention group showed increases in English test score after one month of playing Apples to Apples. These findings are consistent with previous research studies, which concluded that board games that require discussion in the process of play are more likely to use repeated examples of discourse during the game leading to better language outcomes (Smith, 2006). Repetitive discourse allows learners opportunities to hear the same word/sentence more than once scaffolding learning and creating “a cognitive space in which to work” (DiCamilla & Anton, 1997, p.627). This process is in line with Vygotsky’s explanation of how learning occurs.

The results of the present study further indicated that over the month children in the play intervention group not only increased in their vocabulary but also increased their motivation for learning language. It is known that attitudes and motivational factors can play a crucial role in foreign language learning (Engin, 2009; Gardner & Lambert, 1972). Language games can increase learner’s positive motivation in language learning. These
findings are consistent with previous research that found that teachers’ motivational strategies (such as using games in classroom) lead to enhanced motivation in language learners (Moskovsk, 2013). It seems that the game “Apples to Apples” increased children’s positive motivation for English learning over the one-month experimental period in the play intervention group.

When the current study applies the new Input-Output model described in Chapter 2 to explain children’s English learning process in the present study, the game “Apples to Apples” can be identified as an activity that facilitated the foreign language learning process. According to the model, this was achieved through the process model where children reading the instructions of the game and following the verbal and reading characteristics of the game, combined with their existing knowledge to create new knowledge. In the game cycle, game play can lead to certain user judgments based on their past knowledge to understand what the words on the cards mean, and make a decision on the best red card to play. In this process, children shared their understanding of the words, and try their best to communicate with other peers and teachers; teachers guided and assisted children during game play to understand the meaning of the words which feeds back into this game cycle. In addition, in the game cycle, game play also can lead to certain user reactions such as increased interest, enjoyment, involvement, or
confidence leading to greater persistence or intensity of effort. Increased effort improves
performance and lead to teacher/peer feedback on performance in the game context. It
can be included that through these interactive processes motivation for learning English
can be improved through play and can lead to better future performance. Overall,
therefore, the results of the present investigation provide compelling evidence that using
play in the foreign language classroom can result in a significant change in the learner’s
foreign language motivation and also significantly improve their English test score.

Contrary to expectations, the results did not show significantly higher English test
scores or motivation for children participating in play-based intervention group compared
to those receiving traditional vocabulary instruction at the end of the one-month. These
findings failed to support the last two hypotheses in the current study. Since the play
intervention did improve performance and motivation from pre- to post-test for the
intervention group and the control group did not improve from pre-to-post it is possible
that the between group differences were not significant due to the limited time of our
experiment or small size of each group. It is possible that given a longer term of
play-intervention exposure or a larger sample of participants, the results would show
differences between the control and intervention groups, these limitations should be
addressed in future studies.
Limitation of the Study and Further Research

The relations between play and children’s language development have been studied well in past research, but there was not enough information on how play could help Chinese elementary students to study foreign language such as English. The present study potentially supplements the literature on how play can help Chinese students learning English while increase their motivation of learning another language. One particularly strength of the current research is that the data are based on elementary school students. In the past research about Chinese students learning foreign languages have included mostly high school or college students. Moreover, the present study developed a new Input-Process-Output model that can be used to explain language learning processes from the sociocultural perspective.

Several limitations of this study should be acknowledged:

Foremost is the selective nature of our sample. The participants were only a small sample from one elementary school at China. They may not be representative of all situations of Chinese elementary students. When we separated the two groups, the gender was balanced by the researcher so each group had 9 boys and 9 girls. However, gender does play a critical role in language learning so future research will need to include that
in analysis. Boyle’s (1987) research in Hong Kong on university students of English revealed that female students were more successful than male students in the exams applied. In addition, Ludwig (1983) found that male university students of German, French and Spanish in the US were more instrumentally motivated than female students, and according to Gardner and Lambert (1972)’s study, female students of L2 French in Canada were more motivated than the male students and also had more positive attitudes towards the speakers of the target language (Block, 2002). Thus, the findings might be different if the study were not controlled for gender.

Future studies can further examine gender patterns in foreign language learning by expanding this study into a larger population. Using a more diverse population that includes Chinese students from different regions of China may be more representative of the English proficiency of Chinese students. In addition to expanding the sample, further research could pay attention to other age groups of students. It would be interesting to know whether similar findings would exist in older and even younger children using play to learn English.

This current study was limited by characteristics of the procedure and measures used. Firstly, there are many kinds of play types in our everyday life, but only the board game
that named “Apples to Apples” was adopted in this study. Using one particular game to stand for all types of play while study its impact on children English language learning, the results may not generalize to all types of play.

Teachers who administered the experiment suggested that other types of play might be easier to use in their English class or supplement the Apples-to-Apples. Role play and music play were two forms they favored. Gerlach (2012) suggested that role playing in foreign language classes could be a great way to “put your verbal skills to the test”.

Role-play has been employed by many researchers in foreign language study with success (e.g., Magos & Politi, 2008; Liu & Ding, 2009). This is consistent with Schellin (2006) which claims that simulation, role play and drama are three very useful English Foreign Learner learning tools. Moreover, they argued that role play as a teaching method have common with dramatization, such as their aims and procedures. Using the combination of these techniques can benefit learners and help them to acquire the foreign language in a comprehensive way.

Music play is also thought as an important method to improve children’s language development. Vygotsky (1978) points out that higher forms of human mental activity are always mediated by symbolic means. Mediation can take many forms including audio
and visual materials (Donato & McCormick, 1994; McIntire, 2007). Music could be one of the symbolic means to mediate language acquisition because it transmits both audio and visual material to children in the learning progress. Wang (2013) conducted a case study of the acquisition of language skills of a Chinese young girls, the researcher suggested that the popular songs could be intergraded into family language education as one of the ways that support children’s early language development. Engaging the study in music in the early childhood classroom may support English language learner’s literacy development (Paquette & Rieg, 2008).

In addition, the game requires time for essential repetition. However, the after school classes were limitation to one hour a couple of times a week, thus more time to repeat the game and the words in it might have yielded bigger improvements in mastery or even led to loss of interest in the game. The current findings should be replicated over a longer trial period and integrated as part of the normal instructional day.

Thirdly, only quantitative method used in the present study, but mixed methods should be able to help researchers to do detailed analysis of how children use language in the process of the game utilizing the sociocultural perspective. For example, if we use qualitative analysis of teachers’ and children’s communication in the play cycle or
teachers instruction in the class it may be easier to see how the teachers and children share their ideas and understand each other. This is important because these verbal interactions and scaffolding are proposed as the mechanisms through which language can be improved. Observation or video would also allow investigation of how the teachers construct their classroom and teach the children to learn the vocabulary in the comparison group and how that differs from interactions in the Apples to Apples group.

Lastly, the English test used in this study is an international standardized test and has a standardized scoring system. Typically test results are calculated by a computer system. However, because of time constraints and lack of access to scoring for this master thesis, the test scores were rated by the teachers from the afterschool program in the experiment, so the test results used here may differ from computer generated scores. Moreover, the YLE test is a comprehensive exam test that used to test children’s English proficiency so it also contains listening, reading, speaking and writing. However, the experimental design of this study was only to teach vocabulary in the play intervention group. Still, even in the play intervention group the participants may have a chance to practice their listening, speaking, and reading. Further research could use other kinds of play like computer games to fully develop children’s English language learning.
Implications

Teachers can use these findings to understand how much students could learn through play. Motivated by their interest in game play students are more likely to work hard in their language learning. Play could improve their vocabulary and communication skills in English. For example, children can improve problem-solving abilities through games and puzzles, can learn from role play. Make-believe play can stimulate several types of learning as children strengthen language skills by following models and getting feedback from other children. Books and toys that show pictures and matching words can also add to a child’s vocabulary. All of these forms of play could be adapted to help children learning a language. Apples to Apples is one strategy but teachers should look for other ways to try to adopt forms of play into their classroom teaching.

Parents also can benefit from this study by understanding the weakness of traditional methods of studying foreign language and seeking to make their children’s language study more playful in the future. In addition, Parents should understand that parental involvement in a child’s world of play is not only for the child but is extremely beneficial to the parent. Playing with children establishes and strengthens bonds that will last forever.
Appendix A

Demographic Survey for Children

1. WHAT’S YOUR NAME? ______________

2. I AM A: □ BOY    □ GIRL

3. WHAT GRADE ARE YOU IN THIS YEAR? □ 5th grade □ 6th grade

4. WHAT’S YOUR AGE? _______________

5. HOW MANY YEARS OF YOU STUDY ENGLISH?
   □ 5 years and up
   □ 3 to 5 years
   □ 1 to 3 years
   □ 1 year and below

6. WHAT GRADES DO YOU MOSTLY GET:
   □ All A’s
   □ A’s & B’s
   □ B’s & C’s
   □ C’s & D’s
   □ Failing

7. HOW LONG YOU USUALLY SPEND IN ENGLISH STUDY PER WEEK?
   □ 10 hours and up
   □ 5 to 10 hours
   □ 5 hours and below
Appendix B

**English Language Learner Motivation Scale (ELLMS): Pre-College**

**Intrinsic motivation**

1. It is fun to learn a new language.
2. I like learning new things.
3. I like to learn about Americans and how they live.
4. I like it when I do well in English.
5. I like it when I can understand difficult things in English.
6. I like doing difficult things in English.

**Introjected regulation**

7. I’ll feel bad about myself if I couldn’t speak English in my school.
8. I’ll feel bad about myself if I couldn’t speak to my American friends in English.

**External regulation**

9. I want to show my teachers that I can learn English.
10. I want to find a good job when I grow up.
11. My parents and teachers want me to learn English.
12. Everybody in school has to learn English.

**On the next pages, the items are organized in a random order.**
**DIRECTIONS:** We want to know WHY you learn English. Read each sentence and circle the answer (1, 2, 3, 4, or 5) that best describes HOW STRONGLY YOU AGREE OR DISAGREE with the sentence. For example, if you strongly disagree with the sentence, circle ❌. Use this answer key:

1 = Strongly disagree
2 = Disagree
3 = Not sure
4 = Agree
5 = Strongly agree

Think of how well the sentence describes you. Do not answer how you think you should be, or what other people do.

There are no right or wrong answers!

<table>
<thead>
<tr>
<th>If there are things you do not understand, ask your teacher to help.</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Not Sure</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I want to find a good job when I grow up.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. It is fun to learn a new language.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I like it when I can understand difficult things in English.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I like to learn about Americans and how they live.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. My parents and teachers want me to learn English.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I like it when I do well in English.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Everybody in school has to learn English.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I’ll feel bad about myself if I couldn’t speak English in my school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I’ll feel bad about myself if I couldn’t speak to my American friends in English.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I like doing difficult things in English.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I like learning new things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I learn English because …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I want to show my teachers that I can learn English.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix C

Cambridge Young Learners’ English Tests

Cambridge YLE
Starters
Listening
Sample Paper

UNIVERSITY of CAMBRIDGE
ESOL Examinations
English for Speakers of Other Languages

There are 20 questions.
You will need coloured pens or pencils.

My name is: ____________________________
Part 1
5 questions

Listen and draw lines. There is one example.
Part 2
5 questions

Read the question. Listen and write a name or a number.

There are two examples.

Examples

What is the girl's name? Lucy

How old is she? 7

Questions

1. What is Lucy's friend's name?

2. Which class are the two children in at school?

3. How many dogs are there at Lucy's house?

4. What's the name of Lucy's favourite dog?

5. How many fish has Lucy's friend got?
Starters Listening

Part 3 – 5 questions

Listen and tick (✓) the box. There is one example.

1. Which is Nick’s favourite ice-cream?
   A. strawberry
   B. banana
   C. mango
   Answer: C

2. Which is Nick’s favourite fruit?
   A. banana
   B. watermelon
   C. apple
   Answer: A

3. What is Sam doing?
   A. swimming
   B. reading
   C. playing
   Answer: B

4. Where’s Kim’s doll?
   A. in the car
   B. on the bed
   C. in the box
   Answer: A

5. What’s Dad doing?
   A. cooking
   B. washing
   C. working
   Answer: C
There are 25 questions.
You have 20 minutes.
You will need a pen or pencil.

My name is: ..........................................................
**Part 1**

- 5 questions

Look and read. Put a tick (✔) or a cross (✗) in the box.

**Examples**

1. This is a flower.
2. This is a cow.
3. This is a guitar.
4. This is a television.
5. This is a pineapple.

**Questions**

1. [ ]
2. [ ]
Part 1
5 questions

Look at the picture. Write the letters. Write the words.

Example:

\[
\begin{aligned}
\text{dress} & \\
\text{najse} & \\
\text{esohs} & \\
\text{cljkead} & \\
\text{nagabah} & \\
\text{rotsrevus} &
\end{aligned}
\]

Questions:
1. _______
2. _______
3. _______
4. _______
5. _______

Part 2
5 questions

Look and read. Write yes or no.

Examples:

A boy is reading a book.

Questions:
1. There are two children in the sea.
2. The lady is walking behind the elephant.
3. The girl is playing with a ball.
4. The woman in the boat has got a camera.
5. The crocodile is eating a croissant.
Part 4
5 questions
Read this. Choose a word from the box. Write the correct word next to numbers 1-5. There is one example.

A horse

Example: a (b) ... (c) ... (d) ...

What am I? I am a horse.

Example: I have four ... (a) ..., two ears, two eyes and long (b) ...

1. a (b) ... or (c) ...
2. a (b) ... and (c) ...
3. a (b) ... or (c) ...
4. a (b) ... or (c) ...
5. a (b) ...

Part 5
5 questions
Look at the pictures and read the questions. Write one-word answers:

Examples:
Where are the children?
What colour is the cat?

Questions:
1. What is the teacher drawing?
2. What is the teacher using?
2. What is holding the cat?

3. What is the mother doing now?

4. Where is the cat now?

5. How many children are looking at the cat?
Starters Speaking

Summary of Procedures

The usher introduces the child to the examiner.

1. The examiner familiarises the child with the picture first and then asks the child to point out certain items on the scene picture, e.g. ‘Where’s the monkey?’

2. The examiner asks the child to put object cards in various locations on the scene picture, e.g. ‘Put the shell under the tree.’

3. The examiner asks questions about two of the people or things in the scene picture, e.g. ‘What’s this? (Answer: fish) What colour is it? (Answer: grey)’

4. The examiner asks questions about the object cards, e.g. ‘What’s this? (Answer: a bike) and ‘Have you got a bike?’

5. The examiner asks questions about the child, e.g. ‘How old are you?’
REFERENCES


doi:10.5539/ass.v9n5p235

Basha, K., (2011, August 4) Five most challenging problems I faced teaching English. [Web log post]. Retrieved from:

http://www.teachenglishinasia.net/asiablog/5-problem-of-teaching


[Online review]. Retrieved from


=sr_1_1?ie=UTF8&qid=1364399617&sr=8-1&keywords=apples+to+apples+kids


Beacon Press.


[Online discussion group]. Retrieved from:


doi:10.1080/1369681032000169285


