



THE EFFECTS OF PLAY-BASED ACTIVITIES TO ENHANCE GRADE 11
LEARNERS' READING COMPREHENSION SKILLS



An Independent Study Submitted in Partial Fulfillment of the Requirements
for Master of Education ENGLISH LANGUAGE TEACHING

Department of Curriculum and Instruction

Silpakorn University

Academic Year 2022

Copyright of Silpakorn University

ผลของการใช้กิจกรรมการเล่นเป็นฐานเพื่อพัฒนาทักษะการอ่านเพื่อความเข้าใจของ
นักเรียนชั้นมัธยมศึกษาปีที่ 5



การค้นคว้าอิสระนี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรศึกษาศาสตรมหาบัณฑิต
สาขาวิชาการสอนภาษาอังกฤษ แผน ข ระดับปริญญาโทมหาบัณฑิต
ภาควิชาหลักสูตรและวิธีสอน
มหาวิทยาลัยศิลปากร
ปีการศึกษา 2565
ลิขสิทธิ์ของมหาวิทยาลัยศิลปากร

THE EFFECTS OF PLAY-BASED ACTIVITIES TO ENHANCE GRADE 11
LEARNERS' READING COMPREHENSION SKILLS



An Independent Study Submitted in Partial Fulfillment of the Requirements
for Master of Education ENGLISH LANGUAGE TEACHING

Department of Curriculum and Instruction

Silpakorn University

Academic Year 2022

Copyright of Silpakorn University

Title THE EFFECTS OF PLAY-BASED ACTIVITIES TO ENHANCE GRADE 11
LEARNERS' READING COMPREHENSION SKILLS
By MR. Noparit KUAHOUIKHWANG
Field of Study ENGLISH LANGUAGE TEACHING
Advisor Assistant Professor Suneeta Kositchaivat, Ph.D.

Faculty of Education, Silpakorn University in Partial Fulfillment of the
Requirements for the Master of Education

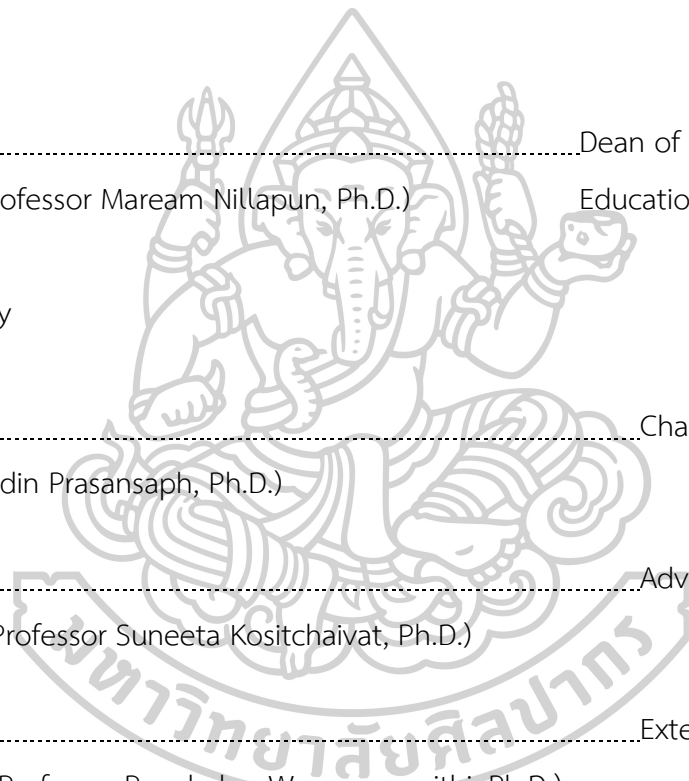
.....Dean of Faculty of
(Assistant Professor Maream Nillapun, Ph.D.) Education

Approved by

.....Chair person
(Sorabordin Prasansaph, Ph.D.)

.....Advisor
(Assistant Professor Suneeta Kositchaivat, Ph.D.)

.....External Examiner
(Associate Professor Puchalee Wasanasomsithi, Ph.D.)



61254318 : Major ENGLISH LANGUAGE TEACHING

Keyword : PLAY-BASED LEARNING (PBL), PLAY-BASED ACTIVITY, READING
COMPREHENSION SKILLS

MR. Noparit KUAHOUIKHWANG : THE EFFECTS OF PLAY-BASED ACTIVITIES TO
ENHANCE GRADE 11 LEARNERS' READING COMPREHENSION SKILLS Thesis advisor :
Assistant Professor Suneeta Kositchaivat, Ph.D.

Many regards play as an aimless activity for learning. Still, the play has several benefits. The objectives of this study were 1) to investigate the effects of play-based activities on grade 11 learners' reading comprehension skills before and after implementation 2) to explore grade 11 learners' satisfactions toward play-based activities. The sample was 43 of grade 11 learners from Mattayomthanbinkamphaengsean school (a high school) in Nakhon Pathom province by using a purposive sampling technique in which one class or intact group was included during the first academic year of 2021. The instruments used in this study were 1) three lesson plans with play-based activities 2) the pre and post-tests 3) a closed questionnaire towards the instruction. The obtained data were analyzed by mean, standard deviation, and paired sample t-test. The mean and standard deviation of items were used to evaluate the student's satisfactions towards play-based activities.

The research findings were as follows: 1) the posttest scores were significantly higher than the pretest at a .05 level 2) the learners' satisfactions were significantly high. Thus, it could be concluded that play-based activities benefit English learners when implementing practical activities to enhance reading comprehension skills.

ACKNOWLEDGEMENTS

The completion of this study has obtained contributions from several stakeholders to whom my heartfelt debt, and I would like to express my sincere gratitude. First and foremost, I have greatly benefited and continuously supported by my research advisor: Asst. Prof. Dr. Suneeta Kositchaivat has shaped my research topic and enlightened my research path. Furthermore, I would like to thank the research committee members: Assoc. Prof. Dr. Punchalee Wasanasomsithi, Dr. Soranabordin Prasarnsaph, and Dr. Sarath Withanarachchi Samaranayake have given valuable comments, constructive feedback, and practical advice for improvement of my research instruments. They have widened my perspectives and truly deepened my understanding of research. Most importantly, their patient responses to my inquiries are greatly appreciated. Furthermore, I am thankful Dr. Rin Cheep-Aranai and Mr. Chaiwat Kaewphanngam who have encouraged me whenever I was in the difficulties. Without these beloved teachers, my research would not be successful and completed. Also, my greatest thanks must go to my colleagues who have encouraged and assisted me while conducting research. Lastly, I would like to thank myself and my family, who truly trusted me. I could not realize that my thirst for knowledge would pay off and tremendously widen my academic perspectives.

MR. Noparit KUAHOUIKHWANG

TABLE OF CONTENTS

	Page
ABSTRACT	iv
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
CHAPTER I INTRODUCTION	1
1.1 Background and Significance of the Study	1
1.2 Research Questions	4
1.3 Objectives of the study	4
1.4 Hypothesis	4
1.5 Scope of the study	4
1.6 Population and sample	5
1.7 Definition of terms	5
CHAPTER II LITERATURE REVIEW	7
2.1 Language Learning Theory with Play	8
2.1.1 Play with Experiential Learning Theory	8
2.1.2 Play with Sociocultural Learning Theory	9
2.1.3 Play with Constructivist Theory	11
2.2. Play-Based Learning (PBL)	14
2.2.1 Definitions of Play	14
2.2.2 Definitions of Play-Based Learning	14

2.2.3 Types of Play	15
2.2.4 Characteristics of Play.....	17
2.2.5 General Benefits of Play	18
2.3 Reading skill.....	19
2.3.1 Definition of reading.....	19
2.3.2 Definitions of Reading Comprehension	20
2.3.3 Levels of Reading Comprehension	21
2.3.4 Teaching Reading Skills.....	22
2.3.5 Assessments of Reading Comprehension Skills.....	26
2.4 Related Studies.....	27
2.4.1 Published Literature across Different Teaching Contexts in the World	27
CHAPTER III RESEARCH METHOD	31
3.1 Research Design and Approach.....	31
3.2 Variables.....	32
3.3 Sample Selection	32
3.4 Research Instruments.....	33
3.5 Data Collection.....	37
3.6 Data analysis.....	38
CHAPTER IV RESULTS	40
4.1 Effects of Play-Based Reading Activities on Reading Comprehension Skills	40
4.2 Effects of Play-Based Activities on Learners' Satisfactions.....	41
CHAPTER V DISCUSSIONS AND CONCLUSIONS.....	44
5.1 Summary.....	44
5.2 Findings.....	45

5.2.1. Findings related to the pre and post-tests of reading comprehension	45
5.2.2. Findings related to the attitudinal questionnaire	45
5.3 Discussions	45
5.3.1. Discussion related to the first research question.....	45
5.3.2. Discussion related to the second research question	47
5.4 Conclusion	48
5.5 Limitation of the study	48
5.6 Recommendations for further studies.....	49
REFERENCES	50
APPENDICES.....	56
Appendix A List of experts validating instruments	57
APPENDIX B The Item-Objective Congruence Index of the Lesson Plan A, B, C.....	58
APPENDIX C The lesson plans for play-based activities	64
APPENDIX D The Item-Objective Congruence Index of the pre-test and the post-test	67
APPENDIX E The Difficulty and Discrimination Test.....	69
APPENDIX F The Reading Comprehension Test	70
APPENDIX G The Item-Objective Congruence Index of the Questionnaire	79
APPENDIX H An attitudinal questionnaire toward Play-based activities (for Expert)....	81
APPENDIX I An attitudinal questionnaire toward Play-based activities (for students)..	83
VITA.....	85

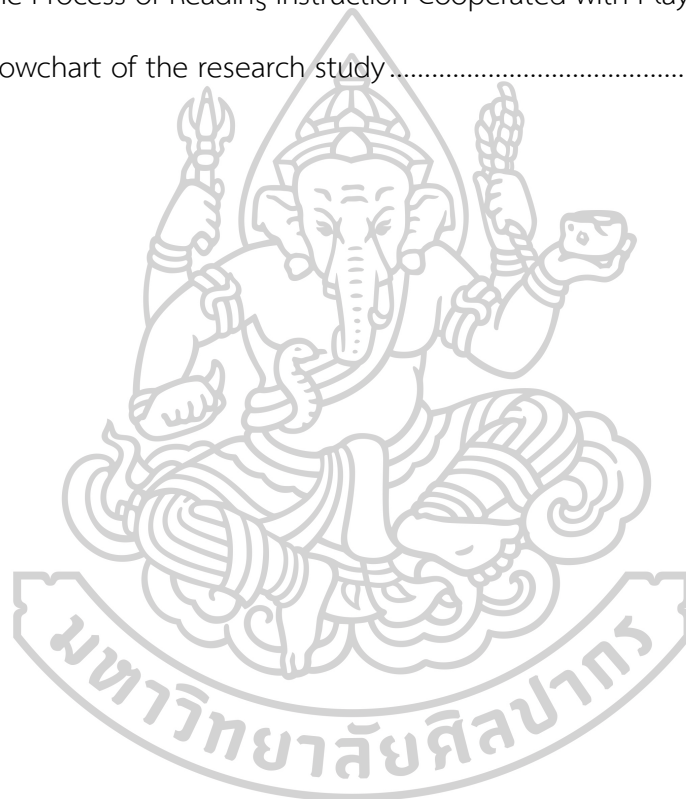
LIST OF TABLES

	Page
Table 1 A Diagram One Group Pretest-Posttest Design	32
Table 2 Paired Samples Statistics.....	40
Table 3 The percentage, mean scores and standard deviation of grade 11 learners' satisfactions toward play-based activities.	41



LIST OF FIGURES

	Page
Figure 1 The concept of Vygotsky's scaffolding.....	11
Figure 2 The conceptual framework of reading instruction integrated with Play-based activities.....	30
Figure 3 The Process of Reading Instruction Cooperated with Play-Based Activities...	35
Figure 4 Flowchart of the research study.....	38



CHAPTER I

INTRODUCTION

1.1 Background and Significance of the Study

Reading is one of the essential language skills that people mostly use to update their life skills in the 21st century. The degree to which individuals improve their reading skills can be used to assume their success, and this ability enables them to achieve further progress. As Fromkin, Rodman, and Hyams (2011) stated, “Language is the source of human life and power.” Reading skills improve other areas of expertise, such as second language acquisition, language literacy, and critical and logical thinking, but also widen the reader’s worldview and serve numerous benefits. To illustrate, people can access vast sources of information and knowledge, as most materials are available in English (Anderson, 2008). According to Willis (2008), reading someone can use to obtain specific information he or she needs. Therefore, it is evident that reading English plays a crucial role in all areas of expertise, especially in language teaching and learning, as it provides numerous merits to efficient readers.

Although reading is very important among the four language skills—listening, speaking, reading, and writing—reading comprehension goes beyond mere reading. In general, reading means understanding the meaning of the written text. On the contrary, “reading comprehension” means obtaining a deeper understanding of the text. It goes beyond the literal meaning of the text. Some educators regard comprehension as a basic determinant of a learner’s ability to understand the meaning of the text by combining prior knowledge and experiences. While perusing a text, readers should not only have watchful eyes on the text till the last line but also understand, infer, analyze, and grasp the essence of what they are reading. It is believed that reading competence and reading comprehension should be first developed to help students become effective readers (Grabe & Stoller, 2002). Moreover, a level of comprehension can be used to identify readers’ reading abilities as it is regarded to be a terminal goal of reading. Hence, enhancing the profound values of reading comprehension is inevitable, especially in language skill development.

Thai students in basic education study English as a compulsory subject and pay more attention to developing fundamental language abilities, especially reading skills. For reading skills, Thai students mainly depend on classroom instruction that helps them acquire new information and keeps them updated on worldwide news. However, the desired outcomes regarding English proficiency are still far-reaching because Thailand was ranked 62nd in English proficiency out of 70 countries by the Education First Institution in 2015, or 14th out of 16 countries in Asia (First, 2015). Likewise, Sawangsamutchai and Rattanaich (2016) reported that the English proficiency of Thai students is low, especially in reading: EF English Proficiency Index in 2014 showed that the level of English skills was ranked at very low proficiency. In 2017, the Ordinary National Educational Test of English scores were 50 percent below the average. Thus, the value of reading abilities urged many stakeholders to develop new policies to improve students' reading competencies.

Consequently, a low reading proficiency of most Thai learners has been observed in all grades even though it is one of the standardized skills included in the national school and higher education test. Most grade 11 learners in the researcher's class have encountered reading difficulties, which include a lack of reading comprehension, identifying the main idea, or grasping important views from their reading passages. In addition, they find reading lessons impractical, disengaging, and uninteresting in that they find no opportunity to express their opinions. They tend to be serious and strict concerning teaching and learning reading in class. Additionally, they are familiarized with a teacher-centered environment in that a teacher takes a dominant role throughout the period, and learners are bombarded with lectures and tests. As a result, most students have become passive learners. To address this problem, reading teachers should use appropriate approaches or class techniques to enhance reading comprehension abilities.

Consequently, a low reading proficiency of Thai learners has been seen in all grades of education. However, it is one of the standardized skills included in the national school and higher education test. As well as, many of the grade 11 learners in the researcher class have been encountering reading difficulties. Regarding reading comprehension, they cannot answer the teacher's questions. Also, they cannot

identify or grasp important views from their reading passages. In addition, they find reading lessons impractical, disengaging, and uninteresting in that they find no opportunity to express their opinions. They tend to be serious and strict concerning teaching and learning reading in class. Additionally, they are familiarized with a teacher-centered environment in that a teacher takes a dominant role throughout the period, and learners are bombarded with lectures and tests. As a result, most students have become passive learners. To address this problem, reading teachers should use appropriate approaches or class techniques to enhance reading comprehension skills.

Thus, appropriate approaches or useful techniques for enhancing reading comprehension abilities are necessarily required, and the role of the teacher needs to find out a special approach without interrupting the nature of children's learning characteristics. Several approaches and techniques can be used to develop students reading abilities. In other words, reading instruction must turn into passive learning to engage learners in active circumstances in which delivering a lesson must kindle students' interest and curiosity. Many researchers and scholars have proposed several approaches and techniques to improve reading skills with practical implicatures, such as task-based, activity-based, problem-based, and play-based. Nowadays, learning through play grabs educators' attention as play provides learners with several merits and is an effective way of learning, as described below.

Integrating play activities in teaching and learning pay off many benefits to its players, especially language learners as J. Moyles (2005) states that play offers the best learning experience and remains a priority in early childhood education. Through play, learners interact with peers, determine solutions to tasks or problems, and develop skills that improve social interaction, cognitive skills, language abilities, and mature emotions over time. Moreover, research shows that children can express their thinking better while experiencing language development through play (Dewar, 2008). Although play has shed light on enhancing children's development in all areas, most importantly language competencies, fewer studies have explored the effects of play on young children. Hence, implementing play-based activities among young learners is worth researching.

Throughout the aforementioned statements, the researcher highly attempted to research the development of reading comprehension skills of grade 11 learners of Mattayomthanbinkamphaengsean school through play-based activities. This study examines how children develop reading comprehension skills with the premise that play-based activities would help them improve their reading comprehension skills. In particular, two of the research questions have been identified as follows:

1.2 Research Questions

Based on this study, the writer formulated the research questions as follows:

1. How do play-based activities affect grade 11 learners' reading comprehension skills?
2. What are grade 11 learners' satisfactions toward play-based activities?

1.3 Objectives of the study

This study addressed two objectives:

1. To investigate the effects of play-based activities on grade 11 learners' reading comprehension skills.
2. To explore grade 11 learners' satisfactions toward play-based activities.

1.4 Hypothesis

1. The post-test mean scores of reading comprehension skills of grade 11 learners are significantly higher than their pre-test mean scores.
2. The grade 11 learners have high satisfactions toward play-based activities.

1.5 Scope of the study

The research study employed the quasi-experimental design; one group pre-test and post-test focused on developing reading comprehension skills after implementing play-based activities. This study was conducted at Mattayomthanbinkamphaengsean School during the first semester of 2021 and the study sample was limited to grade 11 students.

1.6 Population and sample

The population: The population of this study was 214 of grade 11 learners studying English as a compulsory subject at Matthayomthanbinkamphengsean School, Nakhon Pathom, Thailand, in the first semester of the academic year 2021. Their ages ranged from 16 to 17 years old (grade 11).

The sample: The study sample consisted of 43 of grade 11 learners, and they were selected using a purposive sampling technique in which one class or intact group was included. They were majoring in English and Chinese program. Even though, they were in a language program, their English proficiency was low.

1.7 Definition of terms

Play-Based Learning (PBL)

Play-Based Learning (PBL) refers to an instructional pedagogy that provides a meaningful and joyful learning context in which the learners actively interact with people or are engaged in selected activities through play activities prepared by teachers.

Play-Based Activities

In general, play-Based Language Learning Activities refer to language learning activities that are designed based on the theories of children's play and oral language learning. In the present study, Play-Based Activities are adapted reading activities which characterized by contextualizing of reading processes, Language play, the game with the rule and pretend play are used as play activities to develop reading comprehension skills.

Reading Comprehension Skills

Reading comprehension skill is a reader's ability to understand and grasp intrinsic ideas or purposes of a written language, directly and indirectly, by incorporating prior knowledge and guided clues in the text. The 30 multiple-choice questions are used to assess four levels of reading comprehension skills consisting of literal, inferential, interpretive, and critical.

Significance of the study

This study investigated the effects of play-based activities on grade 11 learners' reading comprehension skills so that the results could shed light on how play-based activities could be implemented to develop reading comprehension skills as follows:

1. Play-based activities would be an alternative teaching model for educators to develop reading comprehension skills in teaching and learning contexts.
2. The results of this study would provoke pedagogical activities to not only develop reading comprehension outcomes but also promotes motivations and high satisfactions of language learners.



CHAPTER II

LITERATURE REVIEW

This chapter is devoted to the theoretical, empirical, and pedagogical impact of language learning theories that are consistent with play-based activities on the reading comprehension skills of grade 11 learners as follows:

2.1 Language Learning Theories with Play

2.1.1 Play with Experiential Learning Theory

2.1.2 Play with Sociocultural Learning Theory

2.1.3 Play with Constructivist Theory

2.2 Play-Based Learning (PBL)

2.2.1 Definitions of Play

2.2.2 Definitions of Play-Based Learning (PBL)

2.2.3 Types of Play

2.2.4 Characteristics of Play

2.2.5 General Benefits of Play

2.3 Reading Skills

2.3.1 Definitions of Reading

2.3.2 Definitions of Reading Comprehension

2.3.3 Levels of Reading Comprehension

2.3.4 Teaching Reading Skills

2.3.5 Assessments of Reading Comprehension Skills

2.4 Related Studies

2.4.1 Published Literature across Different Teaching Contexts in the World.

2.1 Language Learning Theory with Play

This study focuses on the initial theorists who helped shape a deeper understanding of the children's learning process. In terms of play-based learning and cognitive development, Ültanir (2012) points out that J Dewey (1993) and L. S. Vygotsky (1980) are fundamental theorists who have conducted research studies and formed theories. Dewey and Vygotsky have explained how children acquire and learn through interactions with their environment. The next sections will explain the correlation between play-based learning and cognitive and social development.

2.1.1 Play with Experiential Learning Theory

Experiential Learning Theory (ELT) provides a holistic model of the learning process and a multilinear model of adult development, consistent with what we know about how people learn, grow, and develop. Additionally, ELT accentuates the central role that experience plays in the learning process, an emphasis that distinguishes it from other learning theories. Therefore, the term "experiential" differentiates ELT from cognitive learning theories, which tend to emphasize cognition over effect, and behavioral learning theories.

John Dewey (1900) defines the term "Experiential learning," better known as "learning by doing," as the physical actions and experiences themselves being the tools used to construct meaning and extract knowledge. J. Dewey (1920) also adds that "Experience becomes an affair primarily of doing," which means that to learn a concept, there needs to be a relevant application of the said concept (p. 86). Experiential learning theory believes that knowledge is created through the transformation of experience. In other words, knowledge stems from grasping and transforming experience" (Kolb, 1984: 41).

According to the theory, Experiential Learning can be classified into two main types: field-based experiences and classroom-based learning. The former is the oldest and most established form of experiential learning, integrated into higher education in the 1930s, including internships, practicums, cooperative education, and service learning. while the latter lies in multi forms, composed of role-playing, games, case studies, simulations, presentations, and various types of group work. Experiential

learning in the classroom had rapidly increased since 1987 when "Chickering and Gamson recommended 'active learning' as one of the seven 'principles of good practice' for excellence in undergraduate education" (Lewis & Williams, 1994: 7).

Interpreting the theory of "learning by doing," Kuh (2010) and Verner (1964) assert that experiences seem to be the most influential factor for learning as well as contributing to learners' development in higher education. Regarding this theory, John Dewey (1998) also indicates that children should be exposed to real-life challenges to enhance creativity, where "real education is achieved via social experiences" (Ültanir, 2012: 200).

To implement 'Experiential Learning Theory', John Dewey (1998) claimed that through social experiences, children should be exposed to real-life challenges to enhance creativity. Likewise, Jean Piaget (1973) also introduced two methods; the first one requires that the subject's awareness of what they are doing, while the latter conveys recurring information or learning.

To conclude, a child's cognition will gradually increase when engaging and experiencing the surrounding environment. In other words, the pedagogical approaches and environment in the classroom should support and facilitate the learners, especially in real-life contexts and circumstances where they can interact and transform experience into comprehension and lasting knowledge.

2.1.2 Play with Sociocultural Learning Theory

Vygotsky, one of the famous theorists, is renowned for sociocultural research (Limberg & Alexandersson, 2010). Sociocultural theories provide a clear picture of learning and development as being embedded within social events while a learner interacts with other people, objects, and events in the collaborative environment (Lev Semenovich Vygotsky & Cole, 1978). His works on Sociocultural theories, *Mind in Society* (Lev Semenovich Vygotsky & Cole, 1978) and *Thought and Language* (L. Vygotsky, 1986), have stressed the significance of social interaction and cultural context in human cognitive development.

He argues that “the social dimension of consciousness is primary in time and fact. The individual dimension of consciousness is derivative and secondary” (Lev S Vygotsky, 1979: 30). From this point of view, it can be assumed that individual mental condition does not come from social interaction, but the particular structures and processes revealed by people can be guided to their engagement with other people.

Sociocultural theories demonstrate that human cognitive development derives from engagement in social activities, as an individual interacts with other people, objects, and events. Therefore, cognitive development cannot be separated from the social, cultural, and historical contexts from which such development emerges (Johnson & Johnson, 2009). Similarly, Lave (1991) maintain that learning is embedded within activity, context, and culture. Knowledge needs to be presented through authentic contexts, settings, and situations. They emphasize that social interaction and collaboration are key components to situating learning. This social and cultural engagement is mediated by culturally constructed tools such as language, materials, signs, and symbols that create uniquely human forms of higher-level thinking. In his well-known genetic law of development, Vygotsky emphasizes the primacy of social interaction in human cognitive development in which human mental abilities emerge twice: “first, on the social level, and later, on the individual level; first, between people (inter-psychological) and then inside the learner (intra-psychological)” (Lev Semenovich Vygotsky & Cole, 1978: 57).

Vygotsky's language learning theory states that play is a medium for social experiences. During play activities, learning occurs when a teacher or an advanced learner assists learners. Vygotsky calls this the Zone of Proximal Development (ZPD). The ZPD is the set of skills or knowledge a student cannot do on his/her own but can do with the help or guidance of someone else. It is the skill level just above where the student currently is. ZPD is often shown as a series of concentric circles. The smallest circle is the set of skills a student can learn on his/her own without any help. Next is the ZPD, or skills a student cannot do on his/ her own but can do with a teacher or someone with his/her help. Beyond that are skills the student cannot

do yet, even with someone's assistance (see figure 2). In sum, Vygotsky's theory on language learning mainly concentrates on the environment where the child is raised (Lev Semenovich Vygotsky & Cole, 1978).

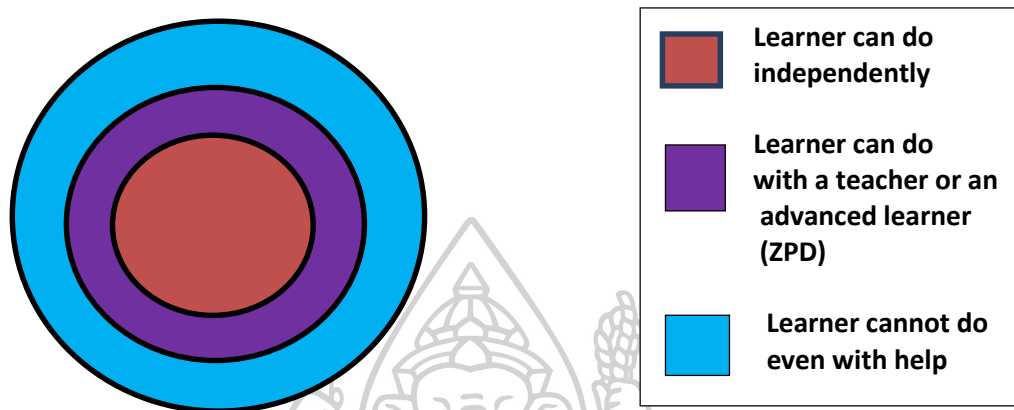


Figure 1 The concept of Vygotsky's scaffolding

Sociocultural Learning Theory believes that cognitive development can occur through social engagements such as interaction with people, meaningful activity, and experiences to which children belong.

2.1.3 Play with Constructivist Theory

J. Piaget (1950), a Swiss Psychologist, is known for his 'cognitive-developmental theory,' which states that children think differently from adults. He opens the way for educators to explore how children learn new knowledge. He unveiled that cognitive behaviors evolved through stages of mental development called 'cognitive schemes,' He focuses more on individual contact with objects than with people. Jean Piaget and Cook (1952) also views language and thought as significant cognitive processes. He theorizes that mental development occurs through three periods from birth to pre-adolescence. Moreover, J Piaget (1962) thinks that providing a child with activities and an environment to support growth corresponding to the child's developmental level, as social support and opportunities for interactions and communication will enrich the learning experience.

The Theory of Cognitive Development (J. Piaget, 1950) identifies four stages, each containing the processes to adapt assimilation and accommodation. The former is the process of children facing or experiencing new knowledge and absorbing it to add to what they already know. And the latter is the process when new knowledge cannot be matched with what they already know. The previous knowledge must be adjusted to accommodate the new understanding. His four cognitive development stages are as follows: 1) Sensorimotor stage (birth to age two), 2) pre-operational stage (ages 2-7), 3) Concrete operational stage (ages 7-11), and 4) Formal operational stage (age 11+). The 'Pre-operational' stage affects kindergarten when children use mental imagery and language. Children are very egocentric and view things around them from one point of view—theirs. Only in the 'Concrete operational' stage are children capable of taking another person's point of view and reasoning with concrete knowledge as the egocentric stage diminishes. Children can think logically, abstractly, and theoretically during the Formal operational stage. Understanding these child developmental stages informs teachers of how classroom instructional practices need to be performed. Here are the underlying aspects of the theory :

Assimilation

Learners go through the assimilation stage by using the existing schema to deal with a new learning/situation. This assimilation stage enables the learner to accept new learning by relating the new to his/her old existing knowledge. Learners may sometimes be prompted to understand a new concept during class discussions. This understanding can be further fostered when the learner can relate to his or her existing schema. According to Whitbourne, Sneed, and Skultety (2002), identity assimilation is maintaining one's identity despite society's approval. The study revealed that identity assimilation is positively related to self-esteem among women.

Accommodation

By definition, accommodation happens when the existing schema (knowledge) does not work and needs to be changed to allow the learner to deal with new learning. In a class discussion, for instance, sometimes conflicts may arise. Some learners may be adamant and stick to his/her schemas. However, successful

learners learn to accept the ideas of others and try to fit the new ideas into his/her old, existing ways. Sometimes the ability to accommodate is a skill in social interaction. The study by Whitbourne et al. (2002) found that women use more accommodation skills than men. However, the study also revealed that the increased ability to accommodate would decrease self-esteem.

Adopting constructivist theory through play, J Piaget (1962) defines play as assimilation, or the child's efforts to make environmental stimuli match his or her concepts. Piaget's theory of language acquisition states that children's cognitive development occurs in stages, and children must be cognitively ready to learn new concepts. Piaget recognized that play is not only for fun but can be an essential learning tool for developing language. During play, children could combine existing knowledge and skills and apply them to a new situation. In the Piagetian view, a child constructs knowledge through a complex process, and the development of thinking determines how that child speaks and what he or she will say. A child learns to use language and represent objects through images and words. Teachers, therefore, need to be aware of the child's abilities and level of development to set appropriate tasks.

To conclude, Constructivist Theory emphasizes that development happens in stages depending on physical and social environments that help children integrate new information with existing knowledge.

To summarize the three theories stated above, the shared belief is that children can gradually develop cognitive, literacy, and social skills through interacting with stimuli such as objects, and people around them, social engagement, and activities that allow them to adapt to new experiences and ideas with their schemata. So, play-based language learning activities are used as mediation to arouse learners' engagement, aiming at developing language competencies and allowing them to learn and acquire the language naturally and meaningfully.

2.2. Play-Based Learning (PBL)

2.2.1 Definitions of Play

The play has been considered a behavior for a long time. However, what play is and how it differs from other behavior commonly observed in young children has been debated. In fact, because of its complexity, it is proven problematic when people try to decide on an agreed definition of play (J. R. Moyles, 1989). Consequently, Brooker (2011: 154) suggests that any play discussion should always begin with 'it depends' so that an exact definition of play remains unsolved.

However, the Ontario Ministry of Education (2010: 13) states, "play is a means to early learning that capitalizes on children's natural curiosity and exuberance." Besides, the play has come to be understood as contingent (Grieshaber & McArdle, 2010), dependent on context (Brooker, 2011), relational (Rogers, 2010), and culturally mediated (Marfo & Biersteker, 2011). According to Montessori education, play is regarded as "the child's work," Working with toys and objects helps children develop cognitively, socially, and emotionally (Lillard et al., 2013). Moreover, Cheep-Aranai and Wasanasomsithi (2016) states that play integrates mental and physical activities that happen in a meaningful context. These scholars proposed that children show what they know and what they are thinking through play. Following the logic, children's play behavior could be used to evaluate their knowledge, and play could thus be an effective pedagogy in assisting children in learning and developing.

After synthesizing the previous definitions above, play is regarded as a children's acquisition to develop maturity and literacy through engaging with stimuli such as activities, peers, and objects. Their literacy and knowledge are being developed over time as they play.

2.2.2 Definitions of Play-Based Learning

Play-Based Learning provides a deeper understanding of instructional areas however Pyle, Poliszczuk, and Danniels (2018) attribute this difficulty in the definition of play to include what activities may be considered as play. Weisberg, Hirsh-Pasek, and Weisberg, Hirsh-Pasek, and Golinkoff (2013) define play-based learning as an important pedagogical approach to support academic and social outcomes.

Roskos and Christie (2011) propose that play-based learning refers to classroom experiences integrating active, social learning experiences with meaningful content. Play-based learning can occur through both teacher-directed and student-directed play experiences. Also, Early Childhood Education and Early Childhood Development (2019: 39) as they state that “. . . play has a purpose. It’s how children make sense of the world around them and find a place in it. Play is defined as fun, open-ended, and spontaneous activity chosen by the player.”

In this study, Play-based learning refers to an instructional pedagogy that provides a meaningful and joyful context of learning in which the learners actively interact with people or are engaged in selected activities through play prepared by teachers based upon the nature of children’s play.

2.2.3 Types of Play

Many scholars have differently classified the types of play. However, there are still some shared and similar classifications which will be discussed in the following section.

Pyle and Danniels (2017) propose the continuum of Play approach that includes both educator and child-led activities, including five types as follows:

Free Play: Self-directed and uninterrupted by educators, this includes pretend play that allows kids to try out emotions and ideas. It establishes a shared imagined world that involves planning, coordination, and dispute resolution. Free play includes exuberant outdoor activities like running, jumping, and climbing. It lets kids test what is physically possible and what they can do.

Inquiry Play: Child-initiated inquiry play lets kids figure out how something works and express their ideas through drawings, paintings, dance, and song. Educators then ask questions and encourage kids to explore further. By extending the play, educators allow kids to practice problem-solving, critical thinking, innovation, and communication skills.

Collaborative Play: Child and educator-directed collaborative play involve taking turns, sharing, following rules, negotiating, and compromising. Children who engage in collaborative play work together on projects to reach a common goal. It builds on inquiry play by incorporating information, skills, and ideas that educators introduce to help boost learning.

Playful Learning: Organized by an educator around a child's interests and abilities, this planned play focuses on prescribed activities with playful elements. Playful learning activities allow kids to evaluate their accomplishments, set new goals, and adapt.

Learning Games: Prescribed with specific rules and structure, learning games promote mathematical, physical, literacy, and inquiry skills. Children practice taking turns and resolving differences while educators assess specific learning outcomes and follow up accordingly.

Smith (2008) categorize play into five aspects:

1. Locomotor play which emphasizes physical or body movement such as running, jumping, and exercising activities that use muscles.
2. Second, Social play is an interaction with other people in which the kids mature socializing skills while getting older.
3. Third, Object play in which children play with or manipulate objects-toys, dolls, and cars. Solitary and social learning are promoted in this type.
4. Language play refers to the use of linguistic forms to make meaning. The state language play contains laughter and repetition of linguistic elements, including phonology, vocabulary and meaning, grammar, and pragmatics.
5. Pretend play is viewed as children's imaginative manipulation of real objects or actions related to the roles of adults in real life, such as a doctor or a firefighter.

In addition, types of play are organized by The National Council for Curriculum and Assessment (2009) in the following paragraphs.

1. Creative play

It involves children exploring and using their bodies and materials to make and do things and to share their feelings, ideas, and thoughts. They enjoy being creative by dancing, painting, playing with junk and recycled materials, working with playdough and clay, and using their imaginations.

2. Games with rules

In the beginning, children often play by their own rather flexible rules! In time they also partake in more conventional games with ‘external’ rules. Language is an important part of games with rules as children explain, question, and negotiate the rules. Rules are often an important part of pretend play, where children negotiate rules about what can and cannot be done.

3. Language play

Children play with sounds and words. It includes unrehearsed and spontaneous manipulation, often with rhythmic and repetitive elements. Children like playing with language – enjoying patterns, sounds, and nonsense words. They also love jokes and funny stories.

4. Physical play

It involves children developing, practicing, and refining bodily movements and control. It includes the whole body and limb movements, coordination, and balance. These activities involve physical movements for their own sake and enjoyment. Children gain control over their gross motor skills before refining their fine motor skills.

In this study, only three sorts of play proposed by the above scholars were used to suit play-based activity: the game with rules, language, and pretend play. Those activities were applied to fit the language classroom. However, this study did not use other types of play in the literature review regarding limitation and practicality.

2.2.4 Characteristics of Play

Gray (2013) identifies five key characteristics:

1. “Play is self-chosen and self-directed; players are always free to quit.”
2. “Play is an activity in which means are more valued than ends.”
3. “Mental rules guide play.”
4. “Play is non-literal, imaginative, marked off in some way from reality.”
5. “Play involves an active, alert, non-stressed frame of mind.”

To summarize, the common characteristics of play should be enjoyable, meaningful, and educational activities for children.

2.2.5 General Benefits of Play

Even though play is sometimes viewed as an aimless activity or task, many scholars regard the benefits of implementing play in classroom language teaching and learning in many ways as it provides opportunities for them to get involved in content areas while improving language Moon and Reifel (2008). Below are general views on play's benefits:

Language Development

Language development is one of the necessary areas that learners should master since it allows any language learners to scaffold other linguistic masteries. During play, Children have more opportunities to practice more complex resulting in language development (Weisberg et al., 2013). Janet Moyles (2012) asserts that Socio-dramatic play promotes students' language skills, and when they play with other children, their language abilities are crucially improved during play. Similarly, Antokhin (2006) mentions that Language play illustrates how children learn the proper use of language in formal and informal settings. Experimenting or play allows the learner to use language in various ways and see what works and what is appropriate and not appropriate in various settings. Lastly, Play seems to support the development of linguistic skills, prerequisite skills for children learning to read (Roskos & Christie, 2011).

Problem-Solving

Problem-solving is challenging for children when they use their intelligence to cope with difficulties or discover a technique to accomplish their goals. Wang and Chiew (2010). As children encounter obstacles or difficulties in play, they manage to conceptualize, give reasons to support, and solve problems (Hyvönen, 2011). Moreover, children's abilities are increasingly elevated in play-based learning experiences since they incorporate causes and effects, generate ideas, and solve problems (Fiorelli, 2011). And also, many theorists have agreed that while children play with objects, they think and solve problems in many different ways (Lillard et al., 2013).

Social and Emotional Skills

In modern society, not only do learners need to be knowledgeable, but also, they have to adjust themselves to act as if they belong to society and manage their moods efficiently. Play is beneficial, especially for social and emotional development, because children are associated with other peers. They bring joy and fun and share the social experience with friends when playing. Besides, children learn to be assertive, negotiate, cooperate, and share through play. This collaborative skill is important in developing social skills and building friendships. These benefits are consistent with many scholars, stating that children also develop their social and emotional skills through play (Berk & Meyers, 2013). Similarly, the famous theorist Lev Semenovich Vygotsky and Cole (1978) notes that play is necessary for a child's development, where a child learns, plays, and develops social, emotional, and cognitive skills.

Fostering Creativity

Creativity, a necessary skill for the 21st Century, is a significant form of how children think freely and express themselves openly without judgment. To be creative, children need to lose being themselves, allowing themselves out of mind and control as they step out of fear. That significantly correlates with the aim of play. According to play, children's creativity can be greatly enhanced as many studies reveal that play has been linked to creativity development (Russ, 2003). Silverman (2016) states that pretend play facilitates children's creativity in which they can imitate a variety of others' roles. Similarly, Glăveanu (2011) mentions that interaction with adults and through play and experimentation with cultural artifacts helps develop children's creativity.

2.3 Reading skill

2.3.1 Definition of reading

Reading is necessary for language learners because it is relevant to learning and teaching. Many experts and researchers have defined what reading is as the following themes. Seyler (2000: 4) proposes that reading is an ability to comprehend

messages, ideas, and feelings written by the owner of that media. According to Farha and Rohani (2019), reading is a receptive skill that should be mastered in learning English. Whereas, B. S. Mikulecky (2011: 5) states that reading is a complex mental process in which the reader consciously and unconsciously uses various strategies to reconstruct the author's intended meaning based on given data in the text and from the reader's prior knowledge.

Given the definitions provided by the above authors, it can then be summarized that reading is a way of interpreting and understanding the authors' meanings or ideas written in a text. Background knowledge and process are used as important tools to reconstruct the meaning. But, in this study, reading means a reader's ability to comprehend the essences of written languages and messages that a writer implies by incorporating his or her previous knowledge.

2.3.2 Definitions of Reading Comprehension

Reading comprehension plays an important role in second language teaching and learning since it goes beyond the literal meaning of what is seen in the text. Some researchers regard reading comprehension as a basic tool of a learner's ability to build up the meaning of the text by combining prior knowledge and previous experiences. To support this view, B. S. Mikulecky, & Jeffries, L. (2007) mention that reading comprehension is making sense of what someone is reading by connecting the ideas in the text to what he or she has already known. In addition, Khoiriyah (2010) defines reading comprehension as combining information in a passage with previous knowledge to extract the meaning from the passage.

From what the authors mentioned above, it can be inferred that reading comprehension is an ability to extract the writers' ideas and emotions from the text using complex processes. Thus, comprehension requires skills such as recalling word meaning, finding accurate answers in paragraphs, making inferences from what is read, and connecting ideas in the text. In this study, reading comprehension is defined as a reader's ability to understand and grasp intrinsic ideas or purposes of a written language, directly and indirectly, by incorporating prior knowledge and guided clues in the text.

2.3.3 Levels of Reading Comprehension

1. Literal comprehension.

This level is the fundamental level in which the reader understands the meaning of the words and ideas of the author. However, the author's intended message is examined, criticized, evaluated, or utilized in any way.

2. Interpretive comprehension.

At this level, the reader not only knows what the author meant, but it also goes beyond simple comprehension. The reader correlates the relationship between lines, compares facts with personal experience, comprehends the sequences, identifies cause and effect relations, and generates the message.

3. Applied comprehension.

At this level, the reader not only receives or interprets the message but also evaluates the author's ideas, either accepting or rejecting them by applying them to some new situations.

4. Critical comprehension.

At this level, the reader analyzes, criticizes, evaluates, and personally reacts to information presented in a passage.

Conversely, Basaraba, Yovanoff, Alonzo, and Tindal (2013: 349) introduces a model of reading comprehension consisting of 3 levels of skills which are:

1. Literal comprehension

Answers the questions Who, What, When, and Where with information found directly in the text.

2. Inferential comprehension

Build on facts in the text: Predictions, sequence, and settings. Conclude the text.

3. Evaluative comprehension

Judgment of text based on fact or opinion, validity, appropriateness, comparison, cause, and effect.

In this experiment, only four levels of comprehension were assessed consisting of literal, inferential, interpretive, and critical.

2.3.4 Teaching Reading Skills

Principles for teaching reading comprehension

In addition, Harmer (1998: 70) guides some principles for teaching reading as follows:

1. Reading is not a passive skill.

Reading is an incredibly active occupation. To do it successfully, we must understand what the words mean, see the picture the words are painting, understand the argument, and work out if we agree. If we do not do these things, and if the students do not, then we just scratch the surface of the text and quickly forget it.

2. Students need to be engaged with what they are reading.

Any students who are not engaged with what they are reading text or not actively interested in what they are doing are less likely to get benefits from it. On the other hand, if they get fired up by the task topic provided, they tend to obtain much more from what is in front of them. Students should be encouraged to respond to the content of a reading text, not just to the language.

Certainly, it is necessary for students to study how the language is used in reading text, the number of paragraphs they contain, and how many times they use relative clauses. But the meaning and the message of the text are rather important, and students should be given a chance to respond to that message in some ways, such as expressing their thought or feeling about the topic-thus provoking personal engagement with it and the language.

3. Prediction is a major factor in reading

When we read any text written in our language, we usually know the content before we read it. For instance, we see the book covers, they provide a hint of what is in the book or even photographs and headlines; these also hint at what articles are about. When we get hints, our brain predicts what we will read. And also, expectations are set up, and the reading process is ready to activate. Consequently, teachers should give students hints so they can predict or anticipate what they will read or see in the text. It will make more efficient and engaged readers.

4. Match the task to the topic

The way we use the tasks will impact the students' responses. Good reading tasks and the right questions must be considered before making any tasks; otherwise, asking such boring and inappropriate questions can undermine the most interesting text. The most common passage should be exciting with challenging and imaginative tasks.

5. Good teachers exploit reading text to the full.

All reading text consists of words, phrases, sentences, ideas, descriptions, etc. It does not pay off if the teachers only have the students read it and then drop it to keep moving on to something else. Professional teachers should be able to integrate the reading text into interesting class sequences, using the topic for discussion and further tasks, using the language for study and later activation.

Reading comprehension activities

In the past, teaching reading skills were considered receptive because teachers only presented to students what they chose. However, these days, reading instruction has shifted from teacher presentations to providing learners with information or selected texts that incorporate activities to enhance reading skills in the classroom.

In reading comprehension, the teacher must teach strategies to help students understand the reading texts. According to Douglas and BROWN (2001: 291), ten strategies can be applied in teaching reading comprehension in the classroom and follows:

a) Identifying the purpose of reading

Efficient reading relies on clearly identifying the purpose of the text. Doing this helps students know what information they need to read the texts.

b) Use graphemic rules and patterns to aid in bottom-up decoding (for beginning-level learners)

At the beginning levels of learning English, one of the difficulties students encounter in learning to read is making the correspondence between spoken and written English. In many classrooms, the students are accustomed to oral language rather than spelling conventions, so using graphemic rules and patterns to deal with this obstacle is useful.

c) Use efficient, silent reading techniques for relatively rapid comprehension (for intermediate to advanced levels)

To comprehend the text does not mean readers need to be able to pronounce every word or know the meaning of every word; in contrast, they should know how to skip unwanted parts and still understand the point of view. Especially intermediate to advanced level students need not be speed readers, but the teachers can help them increase efficiency by teaching a few silent readings.

d) Skimming the text for the main ideas

Skimming is quickly reading to find the gist of the content. To skim, readers glide over the surface of a text and only select important points rapidly. The advantage of skimming is to help readers predict the purpose of a passage, the main topic or message, and possibly some of the developing or supporting ideas. e. Scanning

e) Scanning the text for specific information

Scanning is extracting some specific information without reading throughout the whole text. Scanning requires readers to search for information in a text, such as names, dates, definitions of a key concept, or a certain number of supporting details.

f) Using semantic mapping or clustering

The strategy of semantic mapping, or grouping ideas into meaningful clusters, helps the reader to provide some order to the chaos. Such semantic maps can be done individually, but they make for a productive group work technique as students collectively induce order and hierarchy to a passage.

g) Guessing

Guessing is a strategy in reading to predict the meaning of unknown words but needs to be practiced. But this guessing is certainly not blind guessing. To avoid this, a procedure needs to be set up.

h) Analyzing Vocabulary

One way for learners to make guessing useful when they do not recognize a word is to analyze what they know about it. Several techniques are useful here:

1. Look for prefixes (co-, inter-, un-, etc.) that may give clues.
2. Look for suffixes (-tion, -tive, -ally, etc.) that may indicate the part of speech.
3. Look for grammatical contexts that may signal information
 - i) Distinguish between literal and implied meanings

This strategy requires the application of sophisticated top-down processing skills. Not all language can be interpreted appropriately by attending to its literal, syntactic surface structure makes special demands on readers. Implied meaning usually must be derived from processing pragmatic information, as in the following examples: *He is taking a bath.* This sentence may function as “informing” in the context of a question: *where is John?* but it may also serve to express an apology in the context of responses to a call inquiry: *May I speak to John, Please?*

- j) Capitalize on discourse markers to process relationship

Discourse markers signal relationships among ideas or thoughts through phrases, clauses, and sentences. A full understanding of discourse markers can beneficially enhance learners’ efficient reading. Example of discourse markers is first, next, in addition, etc.

Reading is an interactive process between language and thought. According to Douglas and BROWN (2001), there are three stages in process teaching of reading among other which are:

Pre/Before reading: In this stage the teacher should be introducing topic of text that students will read in order to elicit students’ background knowledge. In other hand, the teacher should also introduce the strategy reading like as scanning, skimming, predicting, activating schemata which help student to comprehend text.

Whilst reading: In this stage, the teacher supports students to comprehend text. And, readers should be guided during reading activities to increase their interactions with a text. The process during the reading activities consists of identifying the main idea, finding details in a text, following a sequence, inferring from the text, and recognizing the discourse patterns.

Post/After reading: In this stage, there are many activities for teachers and students. The post-reading activity can also be in the form of a discussion in that students are asked to discuss the writer's ideas. This discussion can be in a group or whole class, depending on the class size.

To summarize the teaching principles above, reading is not a passive skill. To teach reading effectively, the teachers should select appropriate texts, plan useful stages of instruction, and activate students' schemata with what they are going to read before hands. In terms of students, they should be engaged with meaningful activities and texts as a bridge to understanding their levels or backgrounds.

2.3.5 Assessments of Reading Comprehension Skills

Reading is a receptive skill that is probably the most common of the four skills to be tested, and it may seem to be the easiest to measure. However, testing reading does have difficulties, and there are issues that anyone testing reading should be aware of. The task of a language tester is to set reading tasks that will result in behavior that will demonstrate their successful completion. The reading macro-skills are scanning text to locate specific information, skimming text to obtain general ideas, identifying stages of argument, and identifying examples presented supporting an argument. The micro-skills underlying reading skills are identifying referents of pronouns, using context to guess the meaning of unfamiliar words, and understanding relations between text parts.

According to Isnawati (2012: 41), the technique that might be used to test reading skills are:

1. Multiple Choices

The test takers provide evidence of successful reading by marking marks against one out of several alternatives. Its strengths and weaknesses have been presented earlier.

2. True/false

The test-takers should respond to a statement by choosing one of two, true or false.

3. Completion

The students are required to complete a sentence with a single word.

4. Short answer

It is in the form of questions and requires the students to answer briefly.

5. Guided short answer

This is the alternative of a short answer in which students are guided to have the intended answer. They must complete sentences presented to them.

6. Summary cloze

The tester summarizes a reading passage, and then gaps are left in summary for completion by test-takers. This is the extension of the guided short answer.

To summarize, testing can be evaluated by various types of questions. This study used multiple choices and cloze items to evaluate the students' reading comprehension.

2.4 Related Studies

2.4.1 Published Literature across Different Teaching Contexts in the World

This section reveals related research to explore play's positive benefits in developing language skills.

Neha and Rule (2018) explored imaginative play and reading development among Grade R learners in KwaZulu-Nata. This study investigated the relationship between early reading and play among 5-year-olds by presenting and discussing three reading-play vignettes. The finding showed that play is a meaning-making activity that can enhance children's experience of the content, process, and social significance of reading. In a schooling context that often dissociates reading and plays by creating exclusionary binaries, it is worth considering how to play as a natural and powerful meaning-making resource can contribute to children's reading development.

Fesseha and Pyle (2016) studied to conceptualize play-based learning from kindergarten teachers' perspectives. The study sought insight into how Ontario teachers define play-based learning and how their perspectives affect its implementation in kindergarten classrooms. The research instrument used in this study was a survey conducted by kindergarten teachers from around the province of

Ontario, two definitions of play were developed: one focused on social development through play, and the other on academic and social development in play. Results revealed inconsistencies in participants' definitions and implementations of play-based learning in kindergarten classrooms. And several participants described the enactment of play as entirely separate from learning yet still indicated some belief in the ability to learn through play. While all participants described positive perspectives of play-based learning, more than half described implementing kindergarten programs that did not fully integrate play-based learning as described in the Ontario curriculum. Participants were also asked to identify challenges they experienced in implementing play-based pedagogy. Participants in all enactment groups indicated experiencing challenges to their play implementation. These results support the need for a clear and consistent definition of play-based learning that will help determine how best to integrate play and the learning of academic skills.

Another study by Moedt and Holmes (2020) investigated purposeful play's effects on kindergarten children's reading comprehension, creativity, and language skills and abilities after shared storybook readings. The number of participants was 42 culturally diverse kindergarten students attending an urban public school in the northeastern United States. Findings revealed that purposeful play positively affected children's reading comprehension and language test scores.

In the Thai context, Phisutsakulrat (2014) studied the development of the instructional package by using the play way activities for a teacher on English vocabulary "Around Me" among prathomsuksa students 2 in school. The instruments of this research were structured interviews, lesson plans, the instructional package by using the play way activities for teachers on English vocabulary "around me," evaluation of the instructional package, evaluation of performance, and the satisfaction questionnaire. The results revealed 1) the effectiveness of the instructional package by using the play way activities for a teacher on English vocabulary "around me." Achievement scores were effective 90.44/80.28, According to the criteria of 80/80 percent 2) the learning achievement of the students learning with the instructional package by using the play way activities for the teacher on

English vocabulary “around me” higher than statically significant at the 0.01 level. 3) The satisfaction of students at prathomsuksa students two on the instructional package by using the play way activities for a teacher on English vocabulary “around me” reached a “good level.”

Cheep-Aranai and Wasanasomsithi (2016) studied the development of play-based language learning activities to enhance the oral language skills of young learners. The 12 third graders were the sample of this study. The data were collected from pre-and post-test, VDO records, oral language performance checklists, and semi-structured interviews. The results revealed that post-test scores for oral language skills increased, and the participants showed positive attitudes toward play-based language activities.

The research studies mentioned above have revealed the benefits of play-based language learning activities on children’s language skills development. Play activities were used to improve multi-language skills among learners, and those skills were significantly increased. However, most of the studies only explored play use among very young learners, and there are rarely research studies dealing with young learners. So, this study aimed to investigate a deeper understanding of play-based activities in grade 11 learners on reading comprehension skills as they are very important for their future lives. The related theories and reading instruction are emerged in the following framework.

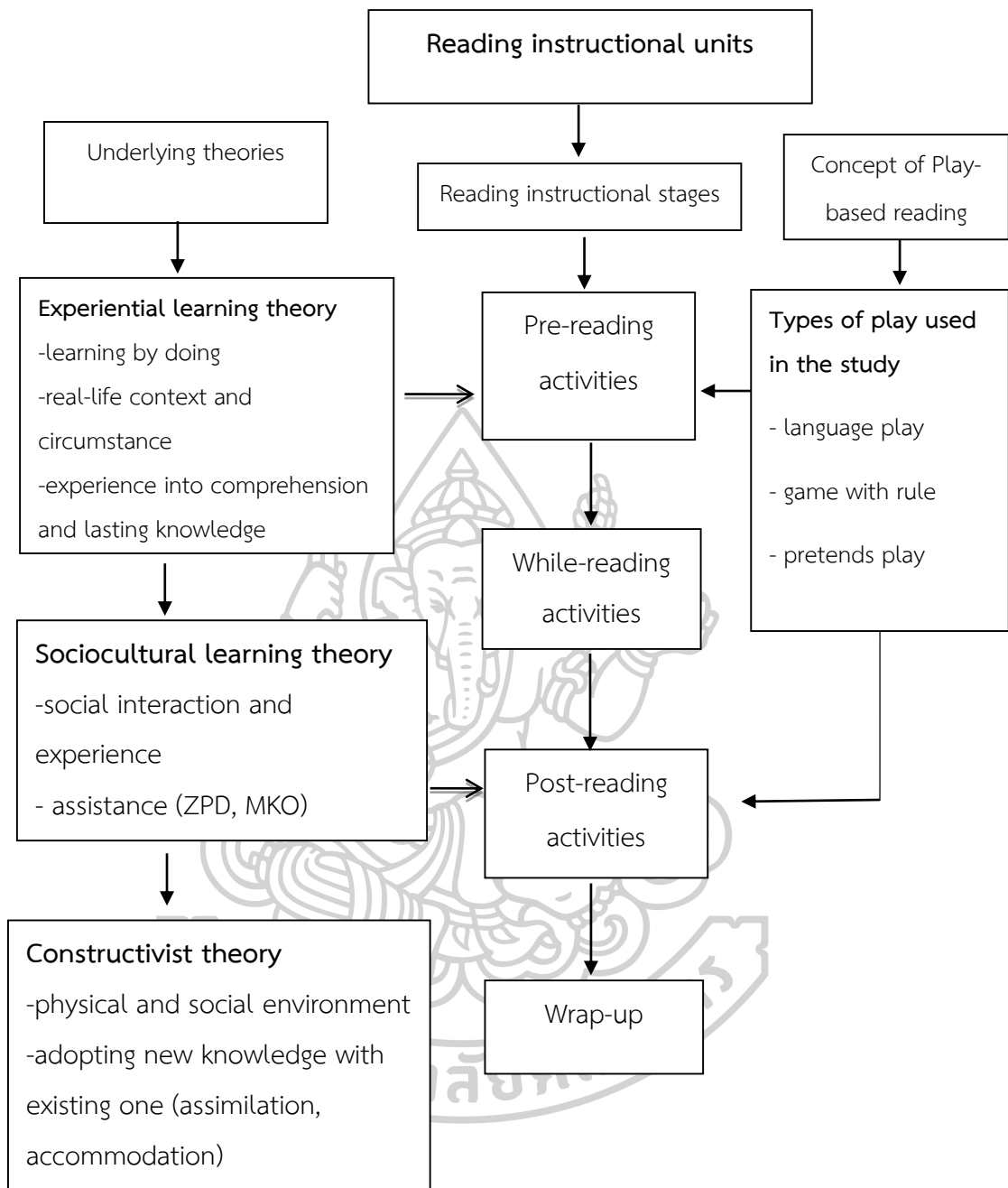


Figure 2 The conceptual framework of reading instruction integrated with Play-based activities

CHAPTER III

RESEARCH METHOD

This study employed a quasi-experimental design to investigate the effects of play-based activities to enhance grade 11 learners' reading comprehension skills. This study also explored the learners' satisfactions towards play-based activities after they were taught using play-based activities. This chapter comprises seven sections: research design, variables, research instruments, data collection, data analysis, and research validity and reliability. The discussion of each part is presented below.

3.1 Research Design and Approach

This study used a mixed-method research design; one group pre-test and post-test. As Creswell and Poth (2008: 6) states, quantitative research is educational research in which the researcher decides what to study, asks a specific, narrow question, collects quantifiable data from participants, analyzes these numbers using statistics, and conducts the inquiry in an unbiased, objective manner. whilst qualitative research is descriptive and inductive, focusing on uncovering meaning from the participants' perspective (Merriam & Tisdell, 2016). Both approaches were used to answer two research questions:

1. How do play-based activities affect grade 11 learners' reading comprehension skills?
2. What are grade 11 learners' satisfactions toward play-based activities?

The one-group pretest and posttest design usually incorporated three main steps: First, administering a pretest measuring the dependent variable, Second, applying the experimental treatment X to the subjects. Last, administering a posttest, again measuring the dependent variable. Differences attributed to the application of the experimental treatment are then evaluated by comparing the pretest and posttest scores (Ary, Jacobs, Irvine, & Walker, 2010: 303) .

Table 1 A Diagram One Group Pretest-Posttest Design

Pre-test	Treatment or intervention	Post-test
T_1	X	T_2

T_1 = Pretest

X = Treatment or intervention

T_2 = Posttest

3.2 Variables

a. Independent variable

In this study, the independent variable was play-based activities.

b. Dependent variable

Two dependent variables in the study were reading comprehension skills and the learners' satisfactions.

3.3 Sample Selection

Population and Sample

The population: The population of this study was 214 high school learners studying English as a compulsory subject at Matthayomthanbinkamphengsean School in the first semester of the academic year 2021. Their ages ranged from 16 to 17 years old (grade 11).

The sample: The study sample comprised 43 grade 11 learners, and they were selected using a purposive sampling technique in which one class or intact group was included. The consent letters were delivered to the parents of the sample to ask for permission for their children to participate in this study.

3.4 Research Instruments

The research instruments are used to measure what the researcher wants to observe. Below are the instruments used:

Reading Comprehension Test

Tests are valuable measuring instruments aiming at obtaining trustworthy results. According to Araisan and Russel (2008) says that test is a formal, systematic procedure used to gather information about students achievement or other cognitive skill. In this study, pre-and post-test were employed to investigate the effects of play-based activities. Thirty items were developed to measure reading comprehension skills, including literal, inferential, interpretive, and critical. Below are the steps for designing the pretest and posttest:

1. The researcher studied how to evaluate and assess reading comprehension skills from books and related research.
2. The researcher analyzed the lesson content and identified the course objectives.
3. The test specification was designed to measure reading comprehension subskills.
4. The researcher designed the pretest and posttest to assess reading comprehension skills. The pretest and posttests, objective tests, consist of twenty-five items with four alternatives.
5. The researcher modified the pretest and posttest regarding the given feedback from the three experts. During consideration, the three experts checked the Index of item Objective Congruence (IOC) of the pretest and posttest in the range of +1, 0, and -1.

+1 refers to an item that is certain/reliable and related to content

0 refers to an item that is questionable

-1 refers to an item that is uncertain, unreliable, and not guaranteed that related to content

The acceptable IOC results are between 0.50-1.00. The pre-posttest IOC result was 0.94, confirming that the pretest and posttest were practical.

6. The modified test items were tried with another class and revised again based on feedback. From the try-out, it was found that there were five questions needed to be adapted.

7. The researcher piloted the pretest with another group that had similar characteristics to the samples. The items with a difficulty index between 0.20-0.80 and a discrimination index of more than 0.20 were selected. The reliability was estimated using Kuder-Richardson Formula 20 (KR-20). As a result of measuring, the coefficient of the instruments was 0.72 which was good. After that, the test was used with the experimental group in the investigation. The criteria for the difficulty index and the discrimination index were set as follows (see Appendix E).

Pichitrit Jaroon (2013) discussed the method for determining the difficulty of the test. That is the difficulty of the exam (P) = Number of people who answered each question correctly.

For the difficulty index (p):

The difficulty value ranges from 0.00 to 1.00, the difficulty of the test begins from 0.20-0.80 with details as follows.

$0.80 \leq P \leq 1.00$ This is a very easy exam.

$0.60 \leq P < 0.80$, this is a fairly simple exam (good).

$0.40 \leq P < 0.60$ indicates that it is difficult, easy, moderate (very good) exam.

$0.20 \leq P < 0.40$ indicates that the exam is quite difficult (good).

$0.00 \leq P < 0.20$ indicates that the exam is very difficult.

If any questions were the correct answers, it means that it is very simple of $P = 1.00$. If all questions were wrong, all means that it was very difficult with $P = 0.00$.

For the discrimination index (r):

According to Pichitrit Jaroon, it was discussed the method of finding criteria for determining the discrimination (r), classification discrimination ranges from -1.00 to +1.00, a good exam was classified from 0.20 up, other values have the following meanings.

$0.40 \leq r \leq 1.00$ indicates that it is well classified as a good exam.

$0.30 \leq r \leq 0.39$ indicates that it can be classified as a reasonably good exam.

$0.20 \leq r \leq 0.29$ indicates that classification is fair.

$-1.00 \leq r \leq 0.19$ indicates unclassifiable.

Lesson Plans for Play-Based Activities

Three lesson plans based on the principle of reading instruction integrated with play-based reading activities were conducted in the study. The lesson plan consisted of three stages of reading instruction- pre, while, and post. Also, play reading activities were applied to identify its effects on reading comprehension skills. To investigate the validity and feasibility of lesson plans, they were tried out by three experts.

1. The researcher reviewed and studied the Basic Education Core Curriculum B.E. 2551 (A.D. 2008), the course descriptions, and the objectives of the English textbook.

2. The researcher studied the lesson plan construction cooperated with Play-Based Learning (PBL) theory.

3. The researcher designed and created the lesson plans based Play-Based Activities to develop learners' reading comprehension skills. There were three lesson plans, each of which was spent for two periods. The reading instruction procedures cooperated with play-based activities were presented below:

3.1 Pre-reading

3.2 While-reading

3.3 Post-reading

The samples were implemented with three sorts of play-based activities, including language play, the game with rule, and pretend play which were synthesized to reading comprehension skills and the instruction process as illustrated below:

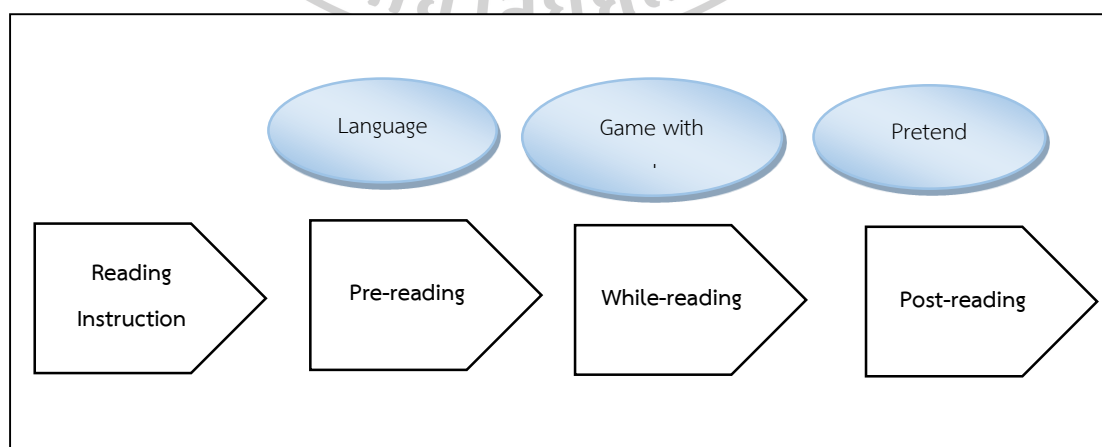


Figure 3 The Process of Reading Instruction Cooperated with Play-Based Activities

The above figure shows the relation between reading instruction and play-based activities. Pre-reading was the first step in implementing language play which elicited the students' schemata, motivated them, and got them ready. Next, the While-Reading stage was integrated with the game with rules which accessed the students' comprehension. The last was post-reading, pretend play was utilized to extend the students' comprehension and foster their creativity.

4. The researcher modified the lesson plans after feedback from three experts. During consideration, the three experts checked the Index of item Objective Congruence (IOC) of lesson plans in the range of +1, 0, and -1.

+1 refers to an item that is certain/reliable and related to content

0 refers to an item that is questionable

-1 refers to an item that is uncertain, unreliable, and not guaranteed that related to content

The acceptable IOC results were 0.50-1.00, and the result of the three lesson plans was 1.00.

5. The lesson plans were tried out with another class from grade 11 to receive feedback and revise them.

Questionnaire

The questionnaire employed in this study included closed-ended items. A closed-ended questionnaire provides the researcher with qualitative and quantitative, which can be measured on the Likert scale.

1. The researcher studied a questionnaire design from assessment books and related studies.

2. The questionnaire included 15 closed items based on the play-based lessons, play-based activities, effectiveness on reading comprehension skills, and general satisfaction.

3. Three experts in the field of language teaching evaluated and gave feedback. During evaluation, the three experts checked the Index of item Objective Congruence (IOC) of the questionnaire in the range of +1, 0, and -1.

+1 refers to an item that is certain/reliable and related to content

0 refers to an item that is questionable

-1 refers to an item that is uncertain, unreliable, and not guaranteed that related to content

4. The acceptable IOC results are between 0.50-1.00. The questionnaire IOC result was 0.98, which means the questionnaire is practical. The researcher revised the test items.

5. The students' attitude questionnaire was piloted to another class in the same grade as the samples.

6. Before the researcher collected the data from the samples after the treatment, the ambiguous questions were translated into Thai to gain accurate feedback.

3.5 Data Collection

The study was quasi-experimental research: one group pretest and posttest study. The study sample was selected using a purposive sampling technique from a single class grade 11 or intact group.

1. The study sample took the pretest which focused on reading comprehension. Then, the study group received the treatments three times a week and each lesson lasted for 50 minutes. The study was conducted for 6 periods.

2. After the study group finished learning through play-based reading activities, they rated their satisfaction with each one.

3. After finishing the whole treatment, the study group took the posttest, and the researcher evaluated their answers.

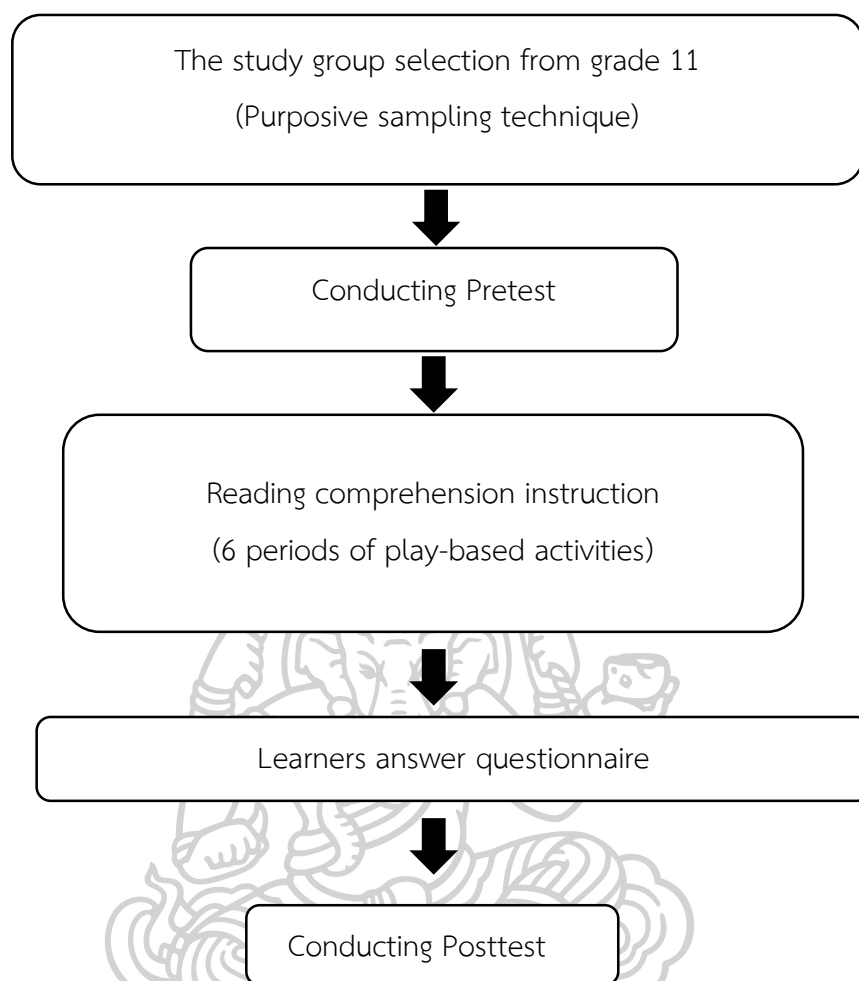


Figure 4 Flowchart of the research study

3.6 Data analysis

The collected data was investigated into three parts as follows

1. Both pretest and posttest scores were converted to mean scores and standard deviations. Afterwards, the mean scores and standard deviations were analyzed whether the scores of the pretest and posttest were significantly different by using pair t-test, measuring pair t-test of by using the Statistical Package for the Social Science (SPSS) program, to compare students' English reading comprehension before and after learning through play-based activities. The outcomes were represented the development of reading comprehension skills of grade 11 learners through play-based activities.

2. The questionnaire explored their satisfactions towards play-based activities from a 4-point Likert scale, which was analyzed by converting the data to percentages, mean, and standard deviation, then interpreted into three levels as below.

3.01 – 4.00 = High satisfaction

2.01– 3.00 = Medium satisfaction

1.00 – 2.00 = Low satisfaction

Before the experiment

The pre-test was administered prior to the treatment. The 30 multiple choice questions were developed according to the objectives of the study which meant to examine the study group's level of comprehension. The questionnaire was tried out by three experts to ensure a validity and reliability before it was delivered to the students. The participants were given 50 minutes to complete all 30 items. The individual score was analyzed using a descriptive test where the mean scores and standard deviations were computed to measure the existing reading comprehension competencies.

During the experiment

The play-based activities were used in the reading class. The participants were taught using the six-hour reading lesson plans integrated with play-based activities. Various types of play were utilized to investigate the development of students' reading comprehension skills and attitudes.

After the experiment

After implementing the treatment, the post-test was administered in the sixth week to examine whether the treatment affected learners' reading comprehension test scores. The post-test was similar to the pretest, which reduced the difference between item difficulty and another extraneous variable. Each participant's score was compared with the pretest score by using a t-test to measure the effects of the treatment. Moreover, the questionnaire was distributed to the participants after their post-test. The questionnaire was used to determine the students' attitudes toward play-based activities. The data were quantitatively and qualitatively analyzed to obtain an insightful understanding of the students' attitudes.

CHAPTER IV

RESULTS

This research investigated the effects of play-based activities on grade 11 learners' reading comprehension skills obtained from different data collection including pretest, posttest, and questionnaire. In this chapter, the data analysis in respond to research objective were elaborated below.

4.1 Effects of Play-Based Reading Activities on Reading Comprehension Skills

Research Question 1: How do play-based activities affect the reading comprehension skills of grade 11 students?

This research question aimed at investigating the effects of play-based activities influenced the enhancement of learners' comprehension skills. The pre-test and post-test were utilized in this study.

4.1.1 Pretest and Posttest Scores on Reading Comprehension Skills

The paired-sample t-test was conducted to compare the mean scores of the reading comprehension pre-test administered before the experiment and the post-test one week after. The results were analyzed using Paired sample t-test statistics.

Table 2 Paired Samples Statistics

	n	Total scores	Mean (\bar{X})	Std. Deviation	t	df	Sig
Pretest	43	30	15.77	3.52	-24.87	42	.000
Posttest	43	30	23.28	3.26			

As shown in Table 3, the researchers used paired t-tests to compare the mean scores of the study on the pre-test and post-test. Comparison of the scores in the pair between the pretest ($M = 15.77$, $SD = 3.52$) and post-test ($M = 23.28$, $SD = 3.26$) with $t(42) = -24.87$, $p = .000$) showed a significant increase in scores in the post-test group. This significant increase confirmed that the study group improved the samples' English reading comprehension skills after implementing play-based activities.

4.2 Effects of Play-Based Activities on Learners' Satisfaction

Research Question 2: What are the learners' satisfactions toward play-based activities?

This research question investigated grade 11 learners' satisfactions towards Play-based activity. The questionnaire statements consisted of 15 closed items. The 15 closed items in the questionnaire comprised a 4-criteria Likert rating scale. At the end of implementing play-based activities, thirty-six participants answered the questionnaire.

Closes Questions

The criteria are

- 4 means Very satisfied
- 3 means Satisfied
- 2 means Unsatisfied
- 1 means Very Unsatisfied

The interpretation of mean scores

- 3.01 – 4.00 = High satisfaction
- 2.01 – 3.00 = Medium satisfaction
- 1.00 – 2.00 = Low satisfaction

Table 3 The percentage, mean scores and standard deviation of grade 11 learners' satisfactions toward play-based activities.

No.	Statements	Analysis			
		\bar{x}	S.D.	Level	Rank
Satisfactions towards play-based activity lessons					
1.	The pedagogical lesson is well-organized.	3.47	0.59	High	5
2.	The content is clearly presented.	3.53	0.55	High	4
3.	The content is suitable and appropriate for my level.	3.65	0.48	High	1
4.	The content is current and updated.	3.60	0.54	High	2
5.	The content corresponds to the objectives of the study.	3.58	0.63	High	3

Table 3 The percentage, mean scores and standard deviation of grade 11 learners' satisfactions toward play-based activities. (continue)

No.	Statements	Analysis			
		\bar{x}	S.D.	Level	Rank
Satisfactions toward play-based activities					
6.	Play-based activities arouse and match my interest.	3.63	0.54	High	3
7.	Play-based activities are hands-on, fun, and engaging for me.	3.65	0.53	High	2
8.	Play-based activities promote collaboration and critical thinking.	3.47	0.59	High	4
9.	Play-based activities encourage me to learn more about current situations.	3.47	0.55	High	5
10.	Play-based activities help me express my opinions during the class without the fear of making mistakes.	3.67	0.47	High	1
Satisfactions towards reading comprehension skills					
11.	Play-based activities can be useful and effective for reading instruction.	3.56	0.63	High	3
12.	Play-based activities improve and extend my reading comprehension abilities.	3.51	0.59	High	4
13.	Play-based activities help me grasp more vocabulary and its functions in the passage.	3.58	0.63	High	2
14.	Play-based activities foster skimming, scanning, context clues, and predicting strategies.	3.60	0.54	High	1
15.	Play-based activities help me arrive at the answer easily.	3.49	0.59	High	5
Average Total		3.35	0.54	High	

Table 5 depicts the percentage, mean scores, and standard deviation of grade 11 learners' attitudes toward play-based activities. The questionnaire statements consisted of three sections. As for the first section: satisfactions towards play-based activity lessons, the average point was 3.65, which mentioned "The content is suitable and appropriate for my level.". The second section was about satisfactions toward play-based activities, the most average point was 3.67, which stated that "Play-based activities help me express my opinions during class without the fear of making mistakes." The last section was about satisfactions toward English reading comprehension skills, the most average point was 3.60 that mentioned "Play-based activities foster reading strategies such as skimming, scanning, context clues, and predicting." The overall average scores were 3.35 (S.D. = 0.54) that revealed the participants had satisfactions in a high toward play-based activities.

To conclude, the fourth chapter revealed the results of pretest and posttest and questionnaires that disclosed grade 11 students' English reading comprehension skills that were increased after implementing play-based reading activities. Moreover, the questionnaire section indicated that the students were highly satisfied with play-based activities.



CHAPTER V

DISCUSSIONS AND CONCLUSIONS

This chapter summarizes the present study. It reviews the overall picture of the study, consisting of a summary of the research method, research findings, and discussions. In addition, suggestions for implementing play-based activities for improving learners' reading comprehension skills and recommendations for further research studies are included.

5.1 Summary

This research investigated the effects of play-based activities on the reading proficiency of grade 11 learners who demonstrated low proficiency in reading as a result of using traditional reading strategies. The sample consisted of 36 learners majoring in English and Chinese programs. Their ages ranged from 17-18 years. Play-based activities were incorporated into classroom lessons in which the study group engaged in other activities such as listening, speaking, and writing. However, this research mainly focused on the development of reading comprehension skills.

The research utilized the mixed-method design; one group pre-test and post-test with quantitative and qualitative approaches. At the end of the study, the learners' test scores from pre and post-test were compared to examine whether there was a difference between the two tests and whether such a difference was statistically significant. Additionally, the learners' satisfactions elicited from the questionnaire were analyzed to determine their satisfactions toward the instructional procedure used in the study.

Implementing play-based activities included three stages: pre-reading, while-reading, and post-reading. Before the classroom instruction began, the pretest was delivered to the participants. Then the learners were exposed to 3 lessons based on play-based activities to investigate the development of reading comprehension skills. After that, the questionnaire was delivered to the students in the middle of the study, and the posttest followed.

5.2 Findings

5.2.1. Findings related to the pre and post-tests of reading comprehension

As discussed above, the independent samples t-test, used to compare the mean difference between the pre and post-test, revealed that the post-test scores for the reading comprehension test were higher than the pre-test at 0.05, which was significantly enhanced.

5.2.2. Findings related to the attitudinal questionnaire

A closed questionnaire investigated the learners' attitudes toward play-based activities. Analysis of the sample's responses indicated they had positive attitudes towards play-based reading activities and instruction as they found reading activities interactive and engaging.

5.3 Discussions

5.3.1. Discussion related to the first research question

As described above, this study investigated whether the play-based reading activities helped grade 11 students improve their reading comprehension skills and examined their attitudes toward play-based reading activities. The researcher's first research question was, "How do play-based activities affect the reading comprehension skills of grade 11 students?" After the study group was instructed using play-based activities for grade 11 learners, their reading comprehension skills improved significantly because the finding revealed that the mean score difference between the pre and post-tests was 7.51 while the t-value was 24.87 ($p < .05$). Given this significant statistical difference, it could be concluded that the participants improved their reading comprehension skills. The results of the current study support Antokhin (2006), Kuh (2010), Bergen (2002), Ali, Aziz, and Majzub (2011), and Verner (1964) studies in several ways, which are discussed below.

Improving the learners' reading comprehension skills can be credited to the following factors. The learners exposed to play-based activities had more opportunities to engage in the reading activities in the three phases of the reading lesson. In other words, in the pre-reading stage, the learners could identify the linguistic elements included in the reading text (vocabulary, grammar, and context

clues). These features help learners thoroughly understand a text. Antokhin (2006) has observed that play-based activities help children learn the proper use of language in formal and informal settings by allowing learners to use language appropriately in various settings. In addition, play-based activities can activate the learners' previous experience and background knowledge to make the text easy to read and understand. Background knowledge plays an important role in reading. Not only does it help stimulate readers' brain cells, but also it helps them guess unknown information based on their own experience. This idea is consistent with Kuh (2010) and Verner (1964), who assert that experiences seem influential in learning and contribute to learners' development in higher education. Moreover, during the while-reading stage, the learners work in a group to accomplish the activities through games with the rules. To get the activities done, collaborating with peers helps learners grasp important information or the essence of reading text. This view is congruent with Lev Semenovich Vygotsky and Cole (1978) assumption that human development is inherently a socially situated activity. Thus, the source of learning and development is found in social interaction rather than solely in an individual's mind. So, working as a team in a game and following the rules effectively develops learners' reading skills. Furthermore, in the post-reading stage, the learners can express themselves and create roles through imaginary plays. Even though imaginary plays might seem merely for fun and enjoyment, they truly connect to cognitive development and social skills. This idea is supported by the study of Bergen (2002), who states that high-quality imaginary plays can facilitate learners' perspective of abstract thoughts that lead to higher-level cognition and that there are clear links between imaginary plays and social and linguistic competence. Moreover, Ali et al. (2011) research showed that teaching and learning through play enhanced learners' reading abilities. The results indicated that teaching and learning through play-based activities sustain children's attention span and develop their reading skills. Undoubtedly, plays include several advantages for children in fostering reading ability and sustaining their interest in reading and literacy. Based on the studies above and my own, it can be concluded that play-based activities enhance students' language literacy, especially reading comprehension skills.

5.3.2. Discussion related to the second research question

The second research question investigated learners' satisfactions towards play-based activities. A questionnaire circulated among the study group attempted to examine their insightful satisfactions. The questionnaire included three parts: 1. Satisfactions toward play-based activity lessons 2. Satisfactions toward play-based activities 3. Satisfactions towards English reading comprehension skills. Descriptive test results indicated that the average mean score was 3.35 (S.D. = 0.54), at a high satisfaction level toward play-based activity. As a result, it can be concluded that students had high satisfaction towards play-based activities. These results are congruent with Henderson (2022), Cheep-Aranai and Wasanasomsithi (2016) and Phisutsakulrat (2014).

Concerning the first statement, the learners expressed that the content was suitable and appropriate for their level ($M = 3.65$, $SD = 0.48$). In this study, the researcher used texts drawn from different sources, and they were at appropriate difficulty levels and in line with the curriculum. Texts must be carefully selected for effective teaching of reading skills (Readingrocket.org).

Regarding the second statement, the students expressed that play-based reading activities helped them use different reading strategies such as skimming, scanning, context clues, inferencing, and predicting (Mean = 3.67, SD = 0.47).

The third statement inquired about the learners' satisfactions toward reading comprehension skills. The students confirmed that play-based activities fostered their reading comprehension ability to a satisfactory level (Mean = 3.60, SD = 0.54). The study group said that play-based activities helped them identify and use the organizational structure of a text to comprehend, learn, and remember content clearly. In addition, learners could learn reading comprehension strategies and apply them in reading texts where they needed to focus on the main idea, a text summary, and answering comprehension questions.

Given the learners' high satisfaction towards play-based activities, the following studies are congruent with the current study. A study by Henderson (2022) reports on a study conducted with a group of first-year students studying a cinema studies course at an Australian university. The researcher observed that play-based

learning fostered resilience, creativity, and motivation to read texts among tertiary-level cinema studies students. Cheep-Aranai and Wasanasomsithi (2016) studied the development of play-based language learning activities to enhance the oral language skills of young learners. The results revealed that the participants showed positive attitudes toward play-based language activities since the participants found the play-based reading activities fun and engaging.

Another empirical evidence can be cited from the study by Phisutsakulrat (2014), who studied the development of the instructional package by using play-based activities to teach English vocabulary to students in a Thai school. Her results showed that students' satisfaction reached a "good level," like the participants in the current study, in which they voiced "high satisfaction."

5.4 Conclusion

This study used a quasi-experimental research design to investigate the effects of play-based activities on grade 11 learners' reading comprehension skills. A questionnaire was included to explore learners' satisfactions towards play-based activities. The findings revealed that the grade 11 learners enhanced their reading comprehension skills after they were instructed with play-based activities. Apart from reading comprehension, the learners' satisfactions were explored. They expressed that they had high satisfaction towards the play-based activity lessons.

5.5 Limitation of the study

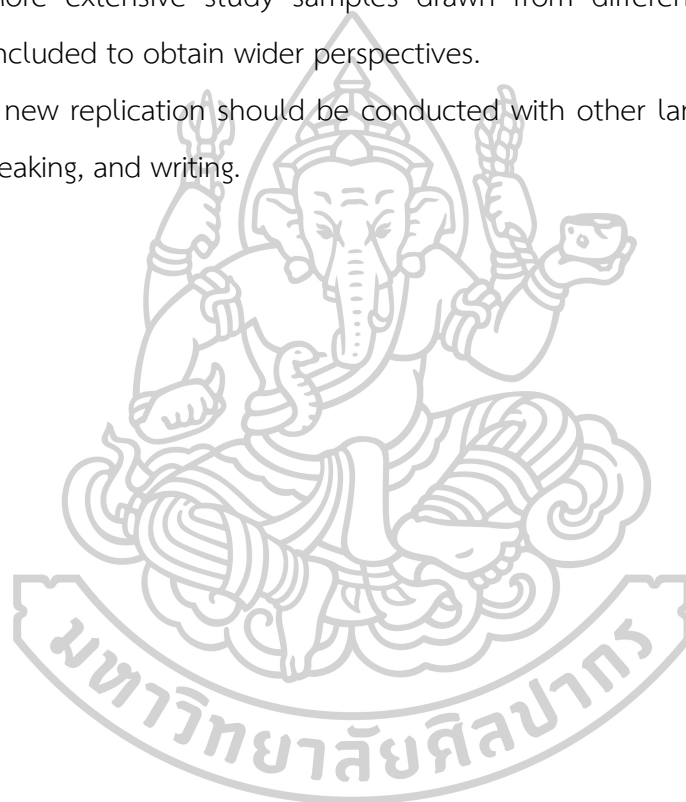
This study has potential limitations. The first can be ascribed to the research setting. This study was intentionally designed in an actual classroom setting for play activities. However, Covid-19 accidentally disrupted and changed the teaching mode from on-site to online. As a result, the study group students could not properly handle devices like computers, tabs, smartphones, and the internet to support their learning. That caused online instructions from the teacher to be unclear during class. The second limitation can be credited to the instructional activities, which were limited, and students could not engage in group or pair work as they were supposed

to do on-site. Since a few group activities were left for the students, this might not be sufficient to promote collaboration and group discussion.

5.6 Recommendations for further studies

To overcome shortcomings inherent in this study, the researchers firstly would like to recommend as follows:

1. It is worth investigating hybrid learning with more play-based activities.
2. More extensive study samples drawn from different teaching contexts should be included to obtain wider perspectives.
3. A new replication should be conducted with other language skills such as listening, speaking, and writing.



REFERENCES

- Ali, A., Aziz, Z., & Majzub, R. (2011). Teaching and learning reading through play. *World Applied Sciences Journal*, 14(4), 15-20.
- Anderson, J. (2008). Towards an integrated second-language pedagogy for foreign and community/heritage languages in multilingual Britain. *Language Learning Journal*, 36(1), 79-89.
- Antokhin, N. (2006). Language play. *Applied Language Learning*, 16(2), 86.
- Araisan, W., & Russel, K. (2008). Classroom Assessment: Concept and Application. In: McGraw-Hill Companies: Singapore.
- Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2010). *Introduction to research in education*: Cengage Learning.
- Basaraba, D., Yovanoff, P., Alonzo, J., & Tindal, G. (2013). Examining the structure of reading comprehension: Do literal, inferential, and evaluative comprehension truly exist? *Reading and writing*, 26, 349-379.
- Bergen, D. (2002). The role of pretend play in children's cognitive development. *Early Childhood Research & Practice*, 4(1), n1.
- Berk, L. E., & Meyers, A. B. (2013). The role of make-believe play in the development of executive function: Status of research and future directions. *American Journal of Play*, 6(1), 98-110.
- Brooker, L. (2011). Taking play seriously' in Rogers, S.(Ed.) Rethinking play and pedagogy in early childhood education: Concepts, contexts and cultures. Oxon. In: Routledge.
- Cheep-Aranai, R., & Wasanasomsithi, P. (2016). Children's Voices and Positive Affective Outcomes Regarding Play-Based Language Learning. *PASAA: Journal of Language Teaching and Learning in Thailand*, 52, 133-167.
- Creswell, J. W., & Poth, C. N. (2008). *Qualitative inquiry and research design: Choosing among five approaches*: Sage publications.
- Curriculum, N. C. f., & Assessment. (2009). Aistear: The early childhood curriculum framework. In: NCCA Dublin.

- Dewar, G. (2008). The cognitive benefits of play: effects on the learning brain. In Dewey, J. (1900). *The school and society & the child and the curriculum* (Vol. 1): Courier Corporation.
- Dewey, J. (1920). *Reconstruction in Philosophy*. London: Beacon Press.
- Dewey, J. (1993). *How We Think. A Restatement of the Relation of Reflective Thinking to the Educative Process*, Boston etc.(DC Heath and Company) 1933.
- Dewey, J. (1998). *Experience and education* (ed.). West Lafayette, Ind.: Kappa Delta Pi.
- Douglas, H., & BROWN, L. (2001). *Teaching by principles: An interactive approach to language pedagogy*: P ED AUSTRALIA.
- Education and Early Childhood Development. (2019). Investing in Priority Early Learning Programs. *Preparation continues for Full- Day Kindergarten*.
- Education, O. M. o. (2010). *The Full-day Early Learning–Kindergarten Program: 2010-11*: Ministry of Education.
- Farha, N. A., & Rohani, R. (2019). *Improving Students' Reading Comprehension of Report Text with KWL Strategy*. Paper presented at the ELT Forum: Journal of English Language Teaching.
- Fesseha, E., & Pyle, A. (2016). Conceptualising play-based learning from kindergarten teachers' perspectives. *International Journal of Early Years Education*, 24(3), 361-377.
- Fiorelli, J. A. (2011). *Pretend play, coping, and subjective well-being in children: A follow-up study*. Case Western Reserve University,
- First, E. (2015). EF EPI: EF English Proficiency Index. Retrieved from www.ef.edu/epi/downloads.
- Fromkin, V., Rodman, R., & Hyams, N. (2011). *An Introduction to Language* Wadsworth CENGAGE Learning. *A tribute to YE Budiyaana*, 49.
- Glăveanu, V. P. (2011). Children and creativity: A most (un) likely pair? *Thinking skills and creativity*, 6(2), 122-131.
- Grabe, W., & Stoller, F. L. (2002). *Teaching reading*. Essex: Pearson Education.
- Gray, P. (2013). *Free to learn: Why unleashing the instinct to play will make our children happier, more self-reliant, and better students for life*: Basic Books.
- Grieshaber, S., & McArdle, F. (2010). *EBOOK: The Trouble With Play*: McGraw-Hill

Education (UK).

Harmer, J. (1998). *How to teach English*. Boston: Addison Wesley Longman.

Henderson, L. (2022). Learning to Play with Film: Play-Based Learning in a Tertiary Film Studies Classroom. *Film Education Journal*, 5(2), 93-101.

Hyvönen, P. T. (2011). Play in the school context? The perspectives of Finnish teachers. *Australian journal of teacher education*, 36(8), 65-83.

Isnawati, I. (2012). *English instructional evaluation*. Tulungagung: State of Islamic College (STAIN) Tulungagung.

Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational researcher*, 38(5), 365-379.

Khoiriyah. (2010). *Reading 1*. Kediri: English Department Nusantara PGRI Kediri University Press.

Kolb, D. A. (1984). The process of experiential learning. *Experiential learning: experience as the source of learning and development*. In: (pp. 20-38): Prentice-Hall, Inc.

Kuh, G. D. (2010). *Student Success in College: Creating Conditions That Matter*. San Francisco: CA: Jossey-Bass.

Lave, J. W., E. . (1991). *Situated Learning*. Cambridge: Cambridge Press.

Lewis, L. H., & Williams, C. J. (1994). Experiential learning: Past and present. *New directions for adult and continuing education*, 1994(62), 5-16.

Lillard, A. S., Lerner, M. D., Hopkins, E. J., Dore, R. A., Smith, E. D., & Palmquist, C. M. (2013). The impact of pretend play on children's development: a review of the evidence. *Psychological bulletin*, 139(1), 1.

Limberg, L., & Alexandersson, M. (2010). Learning and information seeking. In *Encyclopedia of library and information sciences* (pp. 3252-3262): CRC Press.

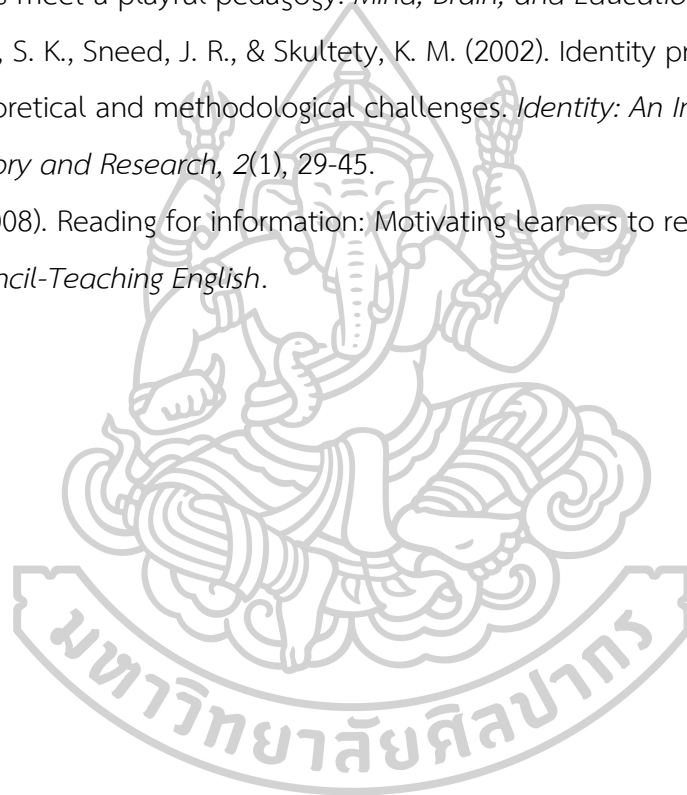
Marfo, K., & Biersteker, L. (2011). Exploring culture, play, and early childhood education practice in African contexts. *Rethinking play and pedagogy in early childhood education: Concepts, contexts and cultures*, 73-85.

Merriam, S., & Tisdell, E. (2016). Basic qualitative research. *Qualitative research: A guide to design and implementation*. 4th ed. San Francisco, CA: Jossey-Bass.

- Mikulecky, B. S. (2011). *A short course in teaching reading: Practical technique for building reading power*. United States: Pearson Longman.
- Mikulecky, B. S., & Jeffries, L. (2007). *Advanced reading power: Extensive reading, vocabulary building, comprehension skills, reading faster*. White Plains, N. Y: Pearson.
- Moedt, K., & Holmes, R. M. (2020). The effects of purposeful play after shared storybook readings on kindergarten children's reading comprehension, creativity, and language skills and abilities. *Early Child Development and Care, 190*(6), 839-854.
- Moon, K., & Reifel, S. (2008). Play and literacy learning in a diverse language pre-kindergarten classroom. *Contemporary Issues in Early Childhood, 9*(1), 49-65.
- Moyles, J. (2005). *The excellence of play*. New York: Open Press University.
- Moyles, J. (2012). *EBOOK: AZ of Play in Early Childhood*: McGraw-Hill Education (UK).
- Moyles, J. R. (1989). *Just playing?: The role and status of play in early childhood education*: Open University Press.
- Neha, M., & Rule, P. N. (2018). Imaginative play and reading development among Grade R learners in KwaZulu-Natal: An ethnographic case study. *South African Journal of Childhood Education, 8*(1), 1-8.
- Phisutsakulrat, P. (2014). *The development of the instructional package by using the play way activities for teacher on English vocabulary "around me" for prathomsuksa students 2 in Prathomthanbin Kamphaengsean school*. (Master of Education Thesis Program in Education Technology Graduate School). Silpakorn University,
- Piaget, J. (1950). *The psychology of intelligence*. London: Routledge & Kegan Paul.
- Piaget, J. (1962). *Play, Dreams, and Imitation in Childhood*. New York: W.W. Norton & Co.
- Piaget, J. (1973). *The child and reality: Problems of genetic psychology*. (Trans. Arnold Rosin): Grossman.
- Piaget, J., & Cook, M. (1952). *The origins of intelligence in children* (Vol. 8): International Universities Press New York.
- Pyle, A., & Danniels, E. (2017). A continuum of play-based learning: The role of the

- teacher in play-based pedagogy and the fear of hijacking play. *Early education and development*, 28(3), 274-289.
- Pyle, A., Poliszczuk, D., & Danniels, E. (2018). The challenges of promoting literacy integration within a play-based learning kindergarten program: Teacher perspectives and implementation. *Journal of research in childhood education*, 32(2), 219-233.
- Rogers, S. (2010). *Rethinking play and pedagogy in early childhood education: Concepts, contexts and cultures*: Routledge.
- Roskos, K., & Christie, J. (2011). The Play-Literacy Nexus and the Importance of Evidence-Based Techniques in the Classroom. *American Journal of Play*, 4(2), 204-224.
- Russ, S. W. (2003). Play and creativity: Developmental issues. *Scandinavian journal of educational research*, 47(3), 291-303.
- Sawangsamutchai, Y., & Rattavich, S. (2016). A Comparison of Seventh Grade Thai Students' Reading Comprehension and Motivation to Read English through Applied Instruction Based on the Genre-Based Approach and the Teacher's Manual. *English Language Teaching*, 9(4), 54-63.
- Seyler, D. U. (2000). *The Reading Context: developing college reading skills*: Allyn & Bacon.
- Silverman, I. W. (2016). In defense of the play-creativity hypothesis. *Creativity Research Journal*, 28(2), 136-143.
- Smith, P. K. P., A. (Writers). . (2008). *Learning Through Play*. Encyclopedia on Early Childhood Development: Centre of Excellence for Early Childhood Development.
- Ültanir, E. (2012). An epistemological glance at the constructivist approach: Constructivist learning in Dewey, Piaget, and Montessori. *International journal of instruction*, 5(2).
- Verner, C. (1964). *Adult education*: Center for Applied Research in Education.
- Vygotsky, L. (1986). *Thought and Language*. London: The MIT Press.
- Vygotsky, L. S. (1979). Consciousness as a problem in the psychology of behavior. *Soviet psychology*, 17(4), 3-35.

- Vygotsky, L. S. (1980). *Mind in society*. The development of higher psychological processes: Harvard university press.
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*: Harvard university press.
- Wang, Y., & Chiew, V. (2010). On the cognitive process of human problem solving. *Cognitive systems research*, 11(1), 81-92.
- Weisberg, D. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2013). Guided play: Where curricular goals meet a playful pedagogy. *Mind, Brain, and Education*, 7(2), 104-112.
- Whitbourne, S. K., Sneed, J. R., & Skultety, K. M. (2002). Identity processes in adulthood: Theoretical and methodological challenges. *Identity: An International Journal of Theory and Research*, 2(1), 29-45.
- Willis, D. (2008). Reading for information: Motivating learners to read efficiently. *British Council-Teaching English*.





APPENDICES

Appendix A

List of experts validating instruments

Assistant Professor Lalana Pathomchaiwat

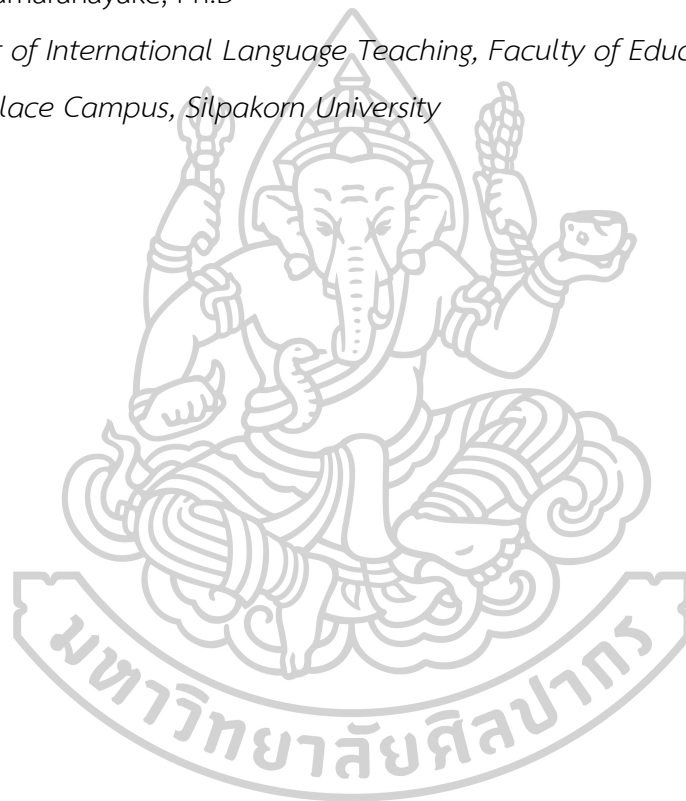
Faculty of Humanities and Social Sciences, Nakhon Pathom Rajabhat University

Assistant Professor Intrira kulavichian

Faculty of Humanities and Social Sciences, Nakhon Pathom Rajabhat University

Sarath W. Samaranayake, Ph.D

*Department of International Language Teaching, Faculty of Education, Sanam
Chandra Palace Campus, Silpakorn University*



APPENDIX B

The Item-Objective Congruence Index of the Lesson Plan A, B, C

The Item-Objective Congruence Index of the Lesson Plan A

Item	Expert 1	Expert 2	Expert 3	Total Score	The IOC Index Mean of Expert Scores
Content					
1.The lesson content corresponds to the learning objective.	+1	+1	+1	3	1
2.The lesson content corresponds appropriately to the activities.	+1	+1	+1	3	1
3.The lesson content is present in a clear step of teaching and learning.	+1	+1	+1	3	1
4.The lesson content is arranged properly to the estimated time.	+1	+1	+1	3	1
5.Language content is appropriate to the students' level of proficiency.	+1	+1	+1	3	1
Teaching methods and activities					
6.They provide opportunity for students to initiate and control their learning.	+1	+1	+1	3	1
7.They create joyful learning environment.	+1	+1	0	2	0.67

Item	Expert 1	Expert 2	Expert 3	Total Score	The IOC Index Mean of Expert Scores
8.They encourage students to learn how to socialize and share knowledge with others.	+1	+1	+1	3	1
9.They extricate students from fear of mistakes, risks, or failure.	+1	0	+1	2	0.67
10.They encourage learning experience in a meaningful context.	0	1	+1	2	0.67
Instructional materials					
11.They correspond to the learning objective.	+1	+1	+1	3	1
12.They correspond to the activities.	+1	+1	+1	3	1
13.They are appropriate to the students' level.	+1	+1	+1	3	1
Assessment					
14.It evaluates students' can-do performance effectively.	+1	+1	+1	3	1
15.It is relevant to the learning objectives.	+1	+1	+1	3	1

The Item-Objective Congruence Index of the Lesson plans B

Item	Expert 1	Expert 2	Expert 3	Total Score	The IOC Index Mean of Expert Scores
Content					
1.The lesson content corresponds to the learning objective.	+1	+1	+1	3	1
2.The lesson content corresponds appropriately to the activities.	+1	+1	+1	3	1
3.The lesson content is present in a clear step of teaching and learning.	+1	+1	+1	3	1
4.The lesson content is arranged properly to the estimated time.	+1	+1	+1	3	1
5.Language content is appropriate to the students' level of proficiency.	+1	+1	+1	3	1
Teaching methods and activities					
6.They provide opportunity for students to initiate and control their learning.	+1	+1	+1	3	1
7.They create joyful learning environment.	+1	+1	+1	3	1
8.They encourage students to learn how to socialize and share knowledge with others.	0	+1	+1	2	0.67

Item	Expert 1	Expert 2	Expert 3	Total Score	The IOC Index Mean of Expert Scores
9.They extricate students from fear of mistakes, risks, or failure.	+1	+1	+1	3	1
10.They encourage learning experience in a meaningful context.	+1	+1	+1	3	1
Instructional materials					
11.They correspond to the learning objective.	+1	+1	+1	3	1
12.They correspond to the activities.	+1	+1	+1	3	1
13.They are appropriate to the students' level.	+1	+1	+1	3	1
Assessment					
14.It evaluates students' can-do performance effectively.	+1	+1	0	2	0.67
15.It is relevant to the learning objectives.	+1	+1	+1	3	1

The Item-Objective Congruence Index of the Lesson Plans C

Item	Expert 1	Expert 2	Expert 3	Total Score	The IOC Index Mean of Expert Scores
Content					
1.The lesson content corresponds to the learning objective.	+1	+1	+1	3	1
2.The lesson content corresponds appropriately to the activities.	+1	0	+1	2	0.67
3.The lesson content is present in a clear step of teaching and learning.	+1	+1	+1	3	1
4.The lesson content is arranged properly to the estimated time.	+1	+1	+1	3	1
5.Language content is appropriate to the students' level of proficiency.	+1	+1	+1	3	1
Teaching methods and activities					
6.They provide opportunity for students to initiate and control their learning.	+1	+1	+1	3	1
7.They create joyful learning environment.	+1	+1	+1	3	1
8.They encourage students to learn how to socialize and share knowledge with others.	+1	+1	+1	3	1

Item	Expert 1	Expert 2	Expert 3	Total Score	The IOC Index Mean of Expert Scores
9.They extricate students from fear of mistakes, risks, or failure.	+1	+1	+1	3	1
10.They encourage learning experience in a meaningful context.	+1	+1	+1	3	1
Instructional materials					
11.They correspond to the learning objective.	+1	+1	+1	3	1
12.They correspond to the activities.	+1	+1	+1	3	1
13.They are appropriate to the students' level.	+1	+1	+1	3	1
Assessment					
14.It evaluates students' can-do performance effectively.	+1	+1	+1	3	1
15.It is relevant to the learning objectives.	+1	+1	+1	3	1

APPENDIX C

The lesson plans for play-based activities

Lesson plan 1

Unit: 5	Topic: Superstitions	Date planned to teach:
Topic: Superstitions	Time: 2 hours	Class level: 43 Children (grade 11)
Standard F1.2:	Endowment with language communication skills for exchange of data and information; efficient expression of feelings and opinions	
Indicator F1.2 (4)	Speak and write appropriately to ask for and give data and express opinions about what has been heard or read.	
Standard F3.1:	Usage of foreign languages to link knowledge with other learning areas, as foundation for further development and to seek knowledge and widen one's world view	
Indicator F3.1 (1)	Search for, collect and summarise the data/facts related to other learning areas from learning sources, and present them through speaking/writing.	

Objective: The students will be able to:	
<ul style="list-style-type: none"> - specify the meaning of given words to talk about superstitions. - describe the beliefs towards the given pictures. - exchange some information and answer the questions from the given passage. - express their opinions towards superstitions. 	
Pre-reading	<ul style="list-style-type: none"> - specify the meaning of given words to talk about superstitions. - describe the beliefs towards the given pictures.




While-reading	- exchange some information and answer the questions from the given passage.
Post-reading	- express their opinions towards superstitions.

Language Focus:

Vocabulary: superstition, death, elevator button, license plate, offensive, hypothermia, geese, witches, itchy, windfall, scratch, newborn, penny

Function: Present simple tense

Materials: VDO clip, computer, PowerPoint, Worksheet, Bingo, Vonder Go

Phase	Content	Classroom activity	Materials	Class Organization Interaction
Pre-reading	Vocabulary review and superstition background	Language play: - T lets Ss watch the video clip about superstitions around the world and asks what they have watched from the video clip.	Video clips of superstitions and PowerPoint	W T-Ss Ss-Ss
		 <p>- T asks Ss to share what superstitions they have known. - T says a word about superstition. Then, Ss find it out and show it to the teacher. Ex. joss stick, candle, black cat - Ss guess what the passage is all about.</p>		
While – reading	Reading passage and answering the questions	Game with rules: - T presents difficult vocabulary. - Ss are divided into group of five to read the given passage. - Ss are asked to play “Kahoot” to check comprehension. Inquiry play:	PowerPoint, Kahoot, and live worksheet	T-Ss Ss-Ss

Post- reading	Expressing opinions towards superstitions	Pretend play: - Ss work in group to find out an interesting local or international superstition with a description and reasons behind. - Ss work in group and choose one of the <u>member</u> to take role as a Miss Grand Thailand representing the local superstitions in a very creative way.	Video clip, a spin wheel	Ss-Ss
---------------	--	---	--------------------------	-------

Remark:

The video clip retrieved from https://www.youtube.com/watch?v=dmV1_NpfLEo



APPENDIX D

The Item-Objective Congruence Index of the pre-test and the post-test

Item	Experts			Total	The IOC Index Mean of Expert Scores
	1	2	3		
1	+1	+1	+1	3	1
2	+1	+1	+1	3	1
3	+1	+1	+1	3	1
4	+1	+1	+1	3	1
5	+1	+1	+1	3	1
6	+1	+1	+1	3	1
7	+1	+1	+1	3	1
8	+1	+1	+1	3	1
9	+1	+1	+1	3	1
10	+1	+1	+1	3	1
11	0	+1	+1	2	0.67
12	+1	+1	+1	3	1
13	+1	0	+1	2	0.67
14	0	+1	+1	2	0.67
15	+1	+1	+1	3	1
16	+1	+1	+1	3	1
17	+1	+1	+1	3	1
18	0	+1	+1	2	0.67
19	+1	+1	+1	3	1
20	+1	+1	+1	3	1
21	0	+1	+1	2	0.67
22	+1	+1	+1	3	1
23	+1	+1	+1	3	1
24	+1	+1	+1	3	1
25	+1	+1	+1	3	1

Item	Experts			Total	The IOC Index Mean of Expert Scores
	1	2	3		
26	+1	+1	+1	3	1
27	+1	+1	+1	3	1
28	+1	+1	+1	3	1
29	+1	+1	+1	3	1
30	+1	+1	+1	3	1



APPENDIX E

The Difficulty and Discrimination Test

Item	Difficulty	Discrimination	Item	Difficulty	Discrimination
1	0.73	0.40	16	0.77	0.47
2	0.83	0.20	17	0.73	0.27
3	0.57	0.33	18	0.47	0.63
4	0.47	0.40	19	0.80	0.40
5	0.77	0.33	20	0.67	0.27
6	0.43	0.60	21	0.57	0.20
7	0.67	0.27	22	0.63	0.47
8	0.63	0.47	23	0.67	0.40
9	0.43	0.60	24	0.73	0.27
10	0.73	0.27	25	0.67	0.40
11	0.33	0.40	26	0.50	0.20
12	0.73	0.13	27	0.73	0.13
13	0.70	0.47	28	0.67	0.2
14	0.77	0.07	29	0.63	0.33
15	0.47	0.53	30	0.63	0.47

APPENDIX F

The Reading Comprehension Test

E32102 Reading and Writing in English Grade: 11 Marks: 30 Time: 50 minutes

Instructions: Read the following paragraphs. Then choose the best alternative to answer the question.

Passage I: Tihar: Festival of Lights

Tihar is one of the most important festivals for Hindus in Nepal. Nepal is a small country between India and China. It has a population of about 23 million people, most of whom are Hindu. The festival of Tihar **takes place** in late autumn and lasts for five days. This festival is also called the festival of lights. It is a time when all the houses light oil lamps, and the country is full of lights and decorations. During Tihar, the people **worship** different animals such as the crow, the dog, and the cow. The people also worship their brothers and sisters and the goddess of wealth, Laxmi.

On the first day of the festival, people worship crows. Every family cooks a delicious meal in the morning. Before they eat, each member of the family puts some food on a plate of leaves and places it outside for the crows to eat. People believe crows are the messengers of the Lord of Death. They worship crows to keep sadness away.

The second day, people worship dogs. They decorate dogs with garlands of flowers around their necks. They give dogs delicious food and put a red **tika** (a special powder) on their foreheads. They even do this to **stray** dogs. It is a day to respect all dogs. They pray for the dogs to guard their homes. Dogs with garlands of flowers can be seen everywhere.

Passage I: Tihar: Festival of Lights (continue)

The third day is the most important day of the festival. Early in the morning, people start to worship the cow. The cow is the symbol of wealth and is the most **holy** animal for Hindus. They put tika on the cows' foreheads and a garland of flowers around their necks. They give the cows nice things to eat. People place the cows' manure in different parts their houses. Later, in the evening, they worship the goddess, Laxmi. If people please the goddess, she will give them wealth.

People clean and decorate their houses. They put oil lamps in every door and window. A female member of the family performs a special ceremony or **puja**. She then puts a red **mud** footprint on the floor entering the home and makes a **trail** to the room where the family worships the goddess. In this room, there are pictures and icon of the goddess. There is also a money box where each year the family puts money away for the goddess. In the evening, girl go from door of their neighbors' homes and sing songs of the goddess. They receive gifts in return.

On the fourth day, people can worship different things, but most people worship the ox. The fifth day is the day of brothers and sisters. Sisters wish their brothers long life and prosperity. Then **they** put garlands around their brothers and give them special gifts of food. Brothers in return honor their sisters; they put garlands around their necks and give them gifts of clothes and money.

On the fourth day, people can worship different things, but most people worship the ox. They put tika on the oxen and a garland around their necks. They also give them delicious food. Hindus, who follow the god Krishna, worship the cow. They make a small hill out of cow manure, put some grass on it, and perform a special ceremony, or puja, on it. The Newar community, an ethnic group in Nepal, worship themselves.

Passage I: Tihar: Festival of Lights (continue)

The fifth day is the day of brothers and sisters. Sisters wish their brothers long life and prosperity. If you do not have a brother or sister, you can make one of your relatives or friends a brother or a sister. On this day, sisters will perform a puja and apply a special tika on their brothers. Then they put garlands around their brothers and give them special gifts of food. Brothers in return honor their sisters; they put garlands around their necks and give them gifts of clothes and money.

Tihar finally ends after five days of cooking, decorating, eating, singing, dancing, shopping, relaxing, gift giving, and worshipping. There is no doubt that Tihar is the most popular festival in Nepal.

Instructions: Choose the best to answer no. 1-15 by reading the above passage.

1. What is the festival of Tihar all about?

- a. celebrating the flowers and foods of autumn
- b. being kind to people and farm animals
- c. worshipping animals, people, and the goddess of wealth
- d. honoring the goddesses of light and wealth

2. Where does the festival of lights take place?

- a. India
- b. Nepal
- c. China
- d. Korea

3. What does the word 'take place' mean?

- a. occur
- b. build
- c. light
- d. pray

4. On the first day, which of the following is NOT mentioned?

- a. celebrating the flowers and foods of autumn
- b. being kind to people and farm animals
- c. worshipping animals, people, and the goddess of wealth
- d. honoring the goddesses of light and wealth

5. What does the word 'worship' mean?

- a. sing a song b. showing respect c. richness d. with no home

6. Which choice is incorrect?

- a. During Tihar, the people worship the cow.
b. The people worship their parents.
c. They worship their brothers and sister.
d. The people worship the goddess Laxmi.

7. Tihar festival is a religious _____ holiday.

- a. Hindu b. Islam c. Buddhism d. Christian

8. How long is the festival?

- a. 3 days b. 5 days c. 7 days d. 9 days

9. Who is the goddess of wealth?

- a. Vishnu b. Kali c. Shiva d. Laxmi

10. The most important of Tihar festival is on the _____ day.

- a. first b. second c. third d. fifth

11. What does the word "they" in the paragraph refer to?

- a. sisters b. brothers c. people d. sister and brother

12. On the third day of the festival, people worship _____ .

- a. cow and crow's manure b. dog and crow
c. dog and cow d. cow and the goddess.

13. If people _____ the goddess, she will give them wealth.

- a. prepare b. please c. propose d. press

14. The cow is a _____ animal for Hindus.

- a. iconic b. pleased c. muddy d. holy

15. On The fifth day of the festival, what don't they do?

- a. Sisters wish their brothers long life and prosperity.
b. Sisters will perform puja and apply a special tika on their brothers.
c. Brothers put in garlands and give gifts of clothes and money.
d. Brothers worship the goddess.

Passage II: Changing Living Things?

People use biotechnology to change living things. People have used biotechnology for thousands of years. In the past, they have used it to create new plants, animals, and microbes that make cheese, yogurt, bread, beer, and P wine. Biotechnology advanced very quickly when DNA was discovered in 1953. Every living **cell** has DNA. DNA is made up of genes. Today, scientists who work in biotechnology can change genes and change living cells.

Farmers have been changing the genes of crops like corn, wheat, and rice for thousands of years, and today we grow better and better crops. In the 1960s, scientists made new kinds of crops. These crops grew faster, bigger, and were more ant to disease. In 1992, an American company changed the gene cotton plants. The change made the leaves poisonous to certain kinds of insects that eat cotton plants. In this way, farmers grow more crops and do not need to use harmful insecticides.

Our fruits and vegetables are also changing. When we go to the supermarket today, we may see many kinds of tomatoes. They have different colors and sizes. Some tomatoes are long-life types, meaning they stay fresh longer. They are red and have a perfect shape, but they don't get soft. Scientists have changed the genes of these tomatoes. We do not know if changing the genes of plants we eat will be good for our health. Likewise, we do not know what will happen to other natural plants that grow near these plants.

At the same time, we have improved breeds 2 of animals over many years. Example, we have created faster horses for horse racing and cow more milk. Scientists now use the process of biotechnology to continue to create nails that are useful to humans. In 1994, scientists in Australia invented a removing the wool from sheep without cutting it off. They gave the sheep a special hormone and wrapped a hairnet³ around the sheep. After three weeks, they could peel the wool off by hand.

Passage II: Changing Living Things? (continue)

Scientists have used pigs to help humans receive heart transplants. Pigs and humans have different genes. However, the heart of a pig is similar to the human heart in size and shape. Scientists put human genes into pigs. This makes it possible for the human body to accept the heart of a pig in a transplant operation. Scientists are also using biotechnology to clean up dangerous places. When oil ships or factories spill into the sea, it is poisonous. The poison plants and animals in the area. The poisons can also be passed on to the food we eat. In laboratories, scientists now grow microbes that can digest or break up the oil. In 1999, scientists in the United States developed a new microbe that eats waste material at nuclear sites and makes the sites less harmful. Sometimes there is too much arsenic, a poison, in the ground. A little arsenic is fine, but too much is dangerous to plants, animals, and people. Scientists have now created a plant that sucks up arsenic from the ground.

There are many bio-inventions, and there will be many more in the future. But will they be good or bad for us?

Instructions: Choose the best to answer no. 16-25 by reading the above passage.

16. What is all passage mainly about?

- a. microbes b. biotechnology c. inventions d. scientists

17. What happened in 1953?

- a. Scientists can change genes and living cells.
b. The discovery of DNA was found.
c. People use biotechnology to change a living thing.
d. Biotechnology creates new plants, animals, and microbes.

18. What does the word cell mean?

- a. cover something b. not harmed by
c. the smallest parts of animals or plants d. let the liquid fall by mistake

19. What does the word “they” in line 13 refer to?

- a. people b. supermarkets c. tornadoes d. tomatoes

20. Which of the following is NOT the crop mentioned in the passage?

- a. cereal b. corn c. wheat d. rice

21. Which sentence is NOT correct?

- a. People use biotechnology to change living things and human’s life.
b. Biotechnology have been used for thousands of years.
c. Biotechnology advanced very quickly when DNA was discovered in 1953.
d. Genes is made up of DNA.

22. What do scientists use to develop living cells?

- a. DNA b. genes c. crops d. insects

23. What crops have been changing the genes from the past to the present?

- a. grapes, watermelon, papaya b. orange, lemon, oat
c. sheep, horse, cow d. corn, wheat, rice

24. What kind of animals has NOT been improved?

- a. horse and cow b. elephant and eagle c. sheep and dog d. pig and fish

25. Scientists grow microbes that can _____.

- a. make more oil b. put arsenic into the ground
c. create nuclear materials d. clean up dangerous materials

Passage III: The Mystery Goes On

For years, a few famous crystal skulls have been a source of mystery and discussion. Even now, no one knows exactly who made them, and no one can say when.

Some people believe the Mesoamerican people made the skulls thousands of years ago. Some stories say they have special powers, such as the ability to make sick people well. Moviemakers love these stories. In the 2008 movie *Indiana Jones and the Kingdom of the Crystal Skull*, the skulls had great power. In the movie, a crystal skull is actually the head of an alien.

Passage III: The Mystery Goes On (continue)

However, most scientists don't believe these stories. They think the skulls are more modern. Scientists have found marks on the skulls that they believe only more modern technology could make. Because of this, scientists are certain that the skulls are not thousands of years old. Instead, **they** think the skulls are from the 19th century. Scientists also **point to** the British museum's excavations. The museum's archeologists have found many Mesoamerican objects but never found a crystal skull. Scientists say this is more evidence to show they are fake and not Mesoamerican. Until we know more about the skulls, the mystery and the debate will keep going.

Instructions: Choose the best to answer no. 26-30 by reading the above passage.

26. What does the passage mainly discuss?

- a. the power of the crystal skulls
- b. the invention of the crystal skulls
- c. the debate about the skulls
- d. the origin of skulls' powers

27. According to the passage, all of the following are true except....

- a. the skulls help people get better.
- b. the scientists believe in the power of the skulls.
- c. the story of skulls is still mysterious.
- d. the skulls are not Mesoamerican.

28. What does the word "they" in line 11 refer to?

- a. skulls
- b. scientists
- c. technologies
- d. objects

29. The phrase “point to” in 12 lines can be best replaced by

- a. mark a sign
- b. use your finger to show
- c. choose something
- d. give an example

30. According to the passage, it can be concluded that

- a. the skulls can make other people sick.
- b. the debate about the skulls still goes on.
- c. the skulls were invented by humans.
- d. the scientists believe in the skulls.



APPENDIX G

The Item-Objective Congruence Index of the Questionnaire

Learners' satisfactions toward play-based activities.

Item	Expert 1	Expert 2	Expert 3	Total Score	The IOC Index Mean of Expert Scores
Satisfactions toward play-based activity lessons					
1.The pedagogical lesson is well-organized.	+1	+1	+1	3	1
2.The content is clearly presented.	+1	+1	+1	3	1
3.The content is suitable and appropriate for my level.	+1	+1	+1	3	1
4.The content is current and updated.	+1	+1	+1	3	1
5.The content corresponds to the objectives of the study.	+1	+1	+1	3	1
Satisfactions toward play-based activity					
6.Play-based activities arouse and match my interest.	+1	+1	+1	3	1
7.Play-based activities are hands-on, fun, and engaging for me.	+1	+1	+1	3	1
8.Play-based activities promote collaboration and critical thinking.	+1	+1	+1	3	1
9.Play-based activities encourage me to learn more about current situations.	+1	+1	+1	3	1

Item	Expert 1	Expert 2	Expert 3	Total Score	The IOC Index Mean of Expert Scores
10. Play-based activities help me express my opinions during class without the fear of making mistakes.	0	+1	+1	2	0.66
Satisfactions toward reading comprehension					
11. Play-based activities can be useful and effective for reading instructions.	+1	+1	+1	3	1
12. Play-based activities improve and extend my reading comprehension skills.	+1	+1	+1	3	1
13. Play-based activities help me grasp more vocabulary and its function in the passage.	+1	+1	+1	3	1
14. Play-based activities foster strategies such as skimming, scanning, context clues, and predicting.	+1	+1	+1	3	1
15. Play-based activities help me arrive at the answers easily.	+1	+1	+1	3	1

APPENDIX H

An attitudinal questionnaire toward Play-based activities (for Expert)

Evaluation Form of Questionnaire

Instructions: Use the following criteria to evaluate the questionnaire items, and mark ✓ the item that applies to you.

1 = clearly measuring

0 = degree to which it measures the content area is unclear

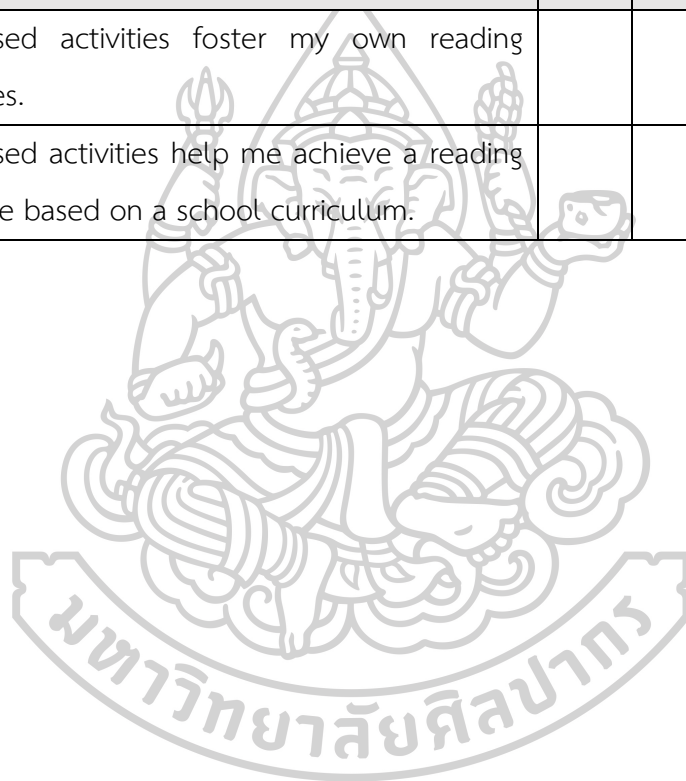
-1 = clearly not measuring

Note: Please provide a comment if the item is not clearly measuring (-1).

Learners' satisfactions towards play-based activities.

Statement	1	0	-1	Comment
Satisfactions toward play-based activity lessons				
1. The pedagogical lesson is well-organized.				
2. The content is clearly presented.				
3. The content is suitable and appropriate for my level.				
4. The content is current and updated.				
5. The content corresponds to the objectives of the study.				
Satisfactions toward play-based activity				
6. Play-based activities arouse my interest.				
7. Play-based activities are hands-on, fun, and active for me.				
8. Play-based activities promote collaboration and critical thinking.				
9. Play-based activities expose me to real-life situations.				
10. Play-based activities are enjoyable and engaging.				

Statement	1	0	-1	Comment
11. Play-based activities can be useful and effective for reading instruction.				
12. Play-based activities improve and extend my reading comprehension abilities.				
13. Play-based activities help me understand reading better.				
Satisfactions toward reading comprehension skills				
14. Play-based activities foster my own reading strategies.				
15. Play-based activities help me achieve a reading outcome based on a school curriculum.				



APPENDIX I

An attitudinal questionnaire toward Play-based activities (for students)

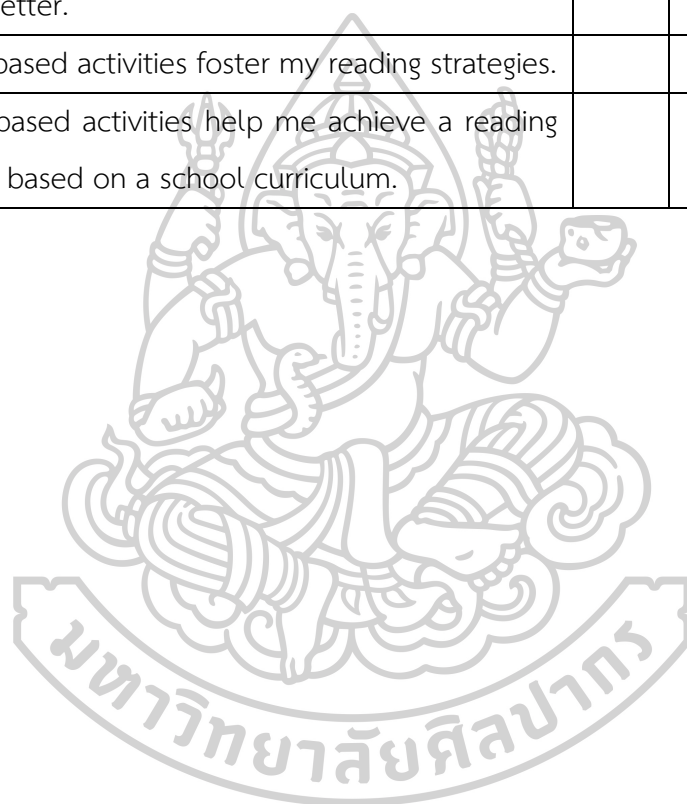
Part 1: Learners' satisfactions towards play-based activities.

Instruction: Please put a tick (✓) in the box below which most describes your attitudes toward play-based reading activities.

The criteria are 4 means Strongly agree
 3 means Agree
 2 means Disagree
 1 means Strongly disagree

Statement	4	3	2	1
Satisfactions toward play-based activity lessons				
1. The pedagogical lesson is well-organized.				
2. The content is clearly presented.				
3. The content is suitable and appropriate for my level.				
4. The content is current and updated.				
5. The content corresponds to the objectives of the study.				
Attitudes toward play-based activity				
6. Play-based activities arouse my interest.				
7. Play-based activities are hands-on, fun, and active for me.				
8. Play-based activities promote collaboration and critical thinking.				
9. Play-based activities expose me to real-life situations.				
10. Play-based activities are enjoyable and engaging.				

Statement	4	3	2	1
Attitudes toward reading comprehension skills				
11. Play-based activities can be useful and effective for reading instruction.				
12. Play-based activities improve and extend my reading comprehension abilities.				
13. Play-based activities help me understand reading better.				
14. Play-based activities foster my reading strategies.				
15. Play-based activities help me achieve a reading outcome based on a school curriculum.				



VITA

NAME Noparit Kuahouikhwang
DATE OF BIRTH 18 October 1993
PLACE OF BIRTH Thailand
INSTITUTIONS ATTENDED Silpakorn University
HOME ADDRESS 92 Samngam, Dontum district, Nakhon Pathom, Thailand

