DIFFERENTIATED LEARNING STRATEGY WITH PROJECT BASED LEARNING IN DEVELOPING READING COMPREHENSION IN SMA IMMANUEL BANDAR LAMPUNG

A Postgraduate Thesis

By:

KOMMEN SOHNI SITOHANG

MASTER OF ENGLISH EDUCATION
DEPARTMENT OF LANGUAGE AND ARTS EDUCATION
FACULTY OF TEACHER TRAINING AND EDUCATION
UNIVERSITY OF LAMPUNG
2025

DIFFERENTIATED LEARNING STRATEGY WITH PROJECT BASED LEARNING IN DEVELOPING READING COMPREHENSION IN SMA IMMANUEL BANDAR LAMPUNG

By:

KOMMEN SOHNI SITOHANG

A Postgraduate Thesis

**Submitted in a Partial Fulfillment of
The Requirements for S-2 Degree**

In

**Language and Arts Education Department of
Teacher Training and Education Faculty**

**MASTER OF ENGLISH EDUCATION
DEPARTMENT OF LANGUAGE AND ARTS EDUCATION
FACULTY OF TEACHER TRAINING AND EDUCATION
UNIVERSITY OF LAMPUNG
2025**

ABSTRACT

DIFFERENTIATED LEARNING STRATEGY WITH PROJECT-BASED LEARNING IN DEVELOPING READING COMPREHENSION IN SMA IMMANUEL BANDAR LAMPUNG

By

Kommen Sohni Sitohang

This study aimed to investigate Differentiated Learning Strategy integrated with Project-Based Learning in developing students' reading comprehension of analytical exposition texts; specifically, (1) examined whether there is a significant difference in reading comprehension achievement, (2) identified which reading aspects improve significantly the most, and (3) identified which reading aspects improve significantly based on learning style after the intervention. This research employed a pre-test and post-test experimental design, involving two classes of second-grade students at SMA Immanuel Bandar Lampung, each consisting of 25 students. An Independent Sample T-test was utilized to determine whether the Differentiated Learning Strategy integrated with Project Based Learning had a significant impact on students' reading comprehension. Paired Sample T-test was employed to identify the specific reading aspects that showed the most improvement. The results showed a significant 14.96-point gain with the experimental class scoring 86.76 versus 71.80 in the control class. The significant value (sig.2-tailed) of 0.000 indicates a statistically significant result ($p<0.05$). The control class improved in making inference and vocabulary (Sig.=0.000), while the experimental class showed significant gains in all five reading aspects (Sig.=0.000). Based on learning styles, kinesthetic learners improved in all reading aspect, while auditory struggled with inference (Sig. = 0.468), and visual with main idea (0.095). Overall, the intervention contributed positively to develop students' reading comprehension of analytical exposition texts. The findings suggest that integrating Differentiated Learning Strategy with Project-Based Learning is an effective approach to improving students' reading comprehension skills.

The keywords: Differentiated Learning Strategy, Project-Based Learning, reading comprehension, learning preferences, reading aspects

ABSTRAK

STRATEGI PEMBELAJARAN BERDIFERENSIASI DENGAN PROJECT-BASED LEARNING DALAM MENGEMBANGKAN KEMAMPUAN PEMAHAMAN MEMBACA DI SMA IMMANUEL BANDAR LAMPUNG

Oleh
Kommen Sohni Sitohang

Penelitian ini bertujuan untuk menyelidiki penerapan Strategi Pembelajaran Berdiferensiasi yang diintegrasikan dengan Project-Based Learning dalam mengembangkan kemampuan pemahaman membaca siswa terhadap teks eksposisi analitis. Secara khusus, penelitian ini: (1) mengkaji apakah terdapat perbedaan signifikan dalam pencapaian kemampuan pemahaman membaca, (2) mengidentifikasi aspek membaca yang mengalami peningkatan paling signifikan, dan (3) mengidentifikasi aspek membaca yang meningkat secara signifikan berdasarkan gaya belajar setelah intervensi. Penelitian ini menggunakan desain eksperimen pre-test dan post-test yang melibatkan dua kelas siswa kelas XI di SMA Immanuel Bandar Lampung, masing-masing terdiri dari 25 siswa. Uji *Independent Sample T-test* digunakan untuk mengetahui apakah Strategi Pembelajaran Berdiferensiasi yang terintegrasi dengan Project-Based Learning memberikan pengaruh signifikan terhadap kemampuan pemahaman membaca siswa. Sementara itu, *Paired Sample T-test* digunakan untuk mengidentifikasi aspek membaca yang menunjukkan peningkatan paling signifikan. Hasil penelitian menunjukkan adanya peningkatan skor yang signifikan sebesar 14,96 poin, dengan rata-rata skor kelas eksperimen sebesar 86,76 dibandingkan 71,80 pada kelas kontrol. Nilai signifikansi (sig. 2-tailed) sebesar 0,000 menunjukkan hasil yang signifikan secara statistik ($p < 0,05$). Kelas kontrol menunjukkan peningkatan pada aspek membuat inferensi dan kosakata (Sig.=0,000), sedangkan kelas eksperimen menunjukkan peningkatan signifikan pada kelima aspek membaca (Sig.=0,000). Berdasarkan gaya belajar, siswa kinestetik mengalami peningkatan pada semua aspek membaca, sementara siswa auditori mengalami kesulitan pada aspek inferensi (Sig.=0,468), dan siswa visual pada aspek gagasan utama (Sig.=0,095). Secara keseluruhan, intervensi ini berkontribusi positif dalam mengembangkan kemampuan pemahaman membaca siswa terhadap teks eksposisi analitis. Temuan ini menunjukkan bahwa integrasi Strategi Pembelajaran Berdiferensiasi dengan Project-Based Learning merupakan pendekatan yang efektif dalam meningkatkan kemampuan pemahaman membaca siswa.

Kata kunci: Strategi Pembelajaran Terdiferensiasi, Project-Based Learning, pemahaman membaca, preferensi belajar, aspek membaca

Research Title : **DIFFERENTIATED LEARNING STRATEGY WITH PROJECT BASED LEARNING IN DEVELOPING READING COMPREHENSION IN SMA IMMANUEL BANDAR LAMPUNG**

Student's Name : **Kommen Sohni Sitohang**

Student's Number : **2223042019**

Study Program : **Master in English Language Teaching**

Department : **Language and Arts Education**

Faculty : **Teacher Training and Education**

APPROVED BY

Advisory Committee

Advisor

Co-Advisor

Prof. Dr. Cucu Sutarsyah, Dip. TESL., M.A. **Prof.Dr. Muhammad Sukirlan, M.A.**
NIP 19570404 198603 1·002   NIP NIP 19641212 199003 1 003

The Chairperson of the Department
of Language and Arts Education

The Chairperson of Master
of English Language Teaching

Dr. Sumarti, S.Pd., M.Hum.
NIP 19700318 199403 2 002

Mahpul, M. A., Ph. D.
NIP. 19650706 199403 1 002

ADMITTED BY

1. Examination Committee

   Chairperson : **Prof. Dr. Cucu Sutarsyah, Dip. TESL., M.A.** ....

   Secretary : **Prof.Dr. Muhammad Sukirlan, M.A.** ....

   Examiners : **1. Prof. Ujang Suparman, MA, Ph.D.** ....

   2. Dr. Ari Nurweni, M. A. ....

2. Dean of Teacher Training and Education Faculty

   Dr. Albet Maydiantoro, M.Pd.
   NIP 19870504 201404 1 001

3. Director of Postgraduate Program

   Prof. Dr. Ir. Murhadi, M. Si.
   NIP 196403261 19892 1 001

4. Graduated on : **May 22ⁿᵈ, 2025**

LEMBAR PERNYATAAN

Dengan ini saya menyatakan dengan sebenarnya bahwa:

1. Tesis dengan judul "Differentiated Learning Strategy with Project Based Learning in Developing Reading Comprehension in SMA Immanuel Bandar Lampung" adalah hasil karya sendiri dan tidak melakukan penjiplakan atau pengutipan karya penulis lain dengan tidak sesuai dengan tata etika ilmiah yang berlaku dalam masyarakat akademik atau yang disebut dengan plagiarism.

2. Hal intelektual atas karya ilmiah ini diserahkan sepenuhnya kepada Universitas Lampung.

Atas pernyataan ini, apabila di kemudian hari ternyata ditemukan adanya ketidakbenaran, saya bersedia menanggung akibat dan sanksi yang diberikan kepada saya, saya bersedia dan sanggup dituntut sesuai hukum yang berlaku.

Bandar Lampung, 22 Mei 2025

Yang membuat pernyataan,

Kommen Sohni Sitohang
NPM 2223042019

CURRICULUM VITAE

Kommen Sohni Sitohang was born in Sirait, on June 9th 1986, Samosir, North Sumatra. She is the fourth daughter of her father Jaludin Sitohang and Nurmi Sinaga, A.Ma.Pd. She has two older sisters, one older brother, and one younger brother. She got married with Jefri Zakat Iklas Hutapea, S. Kom. and has two children (a son and a daughter). Her children are Abercio Jefferson Sevenocto Hutapea and Hazel Bellvania Hutapea.

She began her study at SDN 2 Nainggolan, Samosir, North Sumatra. After graduating from elementary school in 1998, she continued her study at SMPN 2 Nainggolan, North Sumatra and graduated in 2001. Then, she continued her study at SMAN 1Metro, Lampung. She graduated in 2004. Furthermore, she continued her study at Teknokrat College majoring in English Literature. She got her Bachelor's degree in 2007. She has been an English teacher in Private Senior High School since 2008. She has high integrity in education; she has been chosen as National Instructor for English teacher, Core teacher, and Guru Penggerak. As a teacher, she continuously sought to deepen her knowledge and enhance her teaching skills, which led her to extend her study for her Master's degree in English Education Study Program, University of Lampung in 2022.

DEDICATION

With love and appreciation, this thesis if fully dedicated to:

Her beloved Parents,
Jaludin Sitohang and Nurmi Sinaga, A.Ma.Pd.

Her dearest husband,
Jefri Zakat Iklas Hutapea, S.Kom.

Her precious son and daughter,
Abercio Jefferrson Sevenocto Hutapea and Hazel Bellvania Hutapea

Her Almamater – University of Lampung

Her Lecturers in Master of English Education Study Program

Perguruan Kristen Methodist Immanuel Bandar Lampung

SMA Immanuel Bandar Lampung

Her friends in Master of English Education Study Program
English Teachers

MOTTO

"Commit your work to the Lord and your plans will be established (Proverb 16:3)"

"The struggle you are in today is developing the strength you need for tomorrow"

ACKNOWLEGEMENTS

Praise is only for the Almighty God, the Most Gracious and the Most Merciful, that always strengthens the writer to be resilient despite many challenges during the study and enables the writer to accomplish her graduate thesis.

This thesis, entitled Differentiated Learning Strategy with Project Based Learning in developing Reading Comprehension in SMA Immanuel Bandar Lampung, is presented to the Language and Arts Education Department of Teacher Training and Education Faculty of Lampung University as partial fulfillment of requirements for S-2 degree. Among many individuals who gave generous suggestions for improving this thesis, first of all the writer would like to express her sincere gratitude and utmost honor to:

1. Prof. Dr. Cucu Sutarsyah, Dip. TESL., M.A., as her first advisor, for his patience, encouragement, guidance, and willingness to assist the writer in accomplishing this thesis.

2. Prof. Dr. Muhammad Sukirlan, M.A., as her second advisor who has contributed and given endless support, evaluations, comments, and suggestions during the completion of this thesis.

3. Prof. Ujang Suparman, MA, Ph. D., as her first examiner, for his kindness and critical suggestions until this thesis finished.

4. Dr. Ari Nurweni, M.A., as her second examiner, for her support and thoughtful feedback which strengthened the quality of this study.

The writer acknowledges that this study is not without limitations and recognizes that it may contain certain weaknesses. Constructive feedback and suggestions are therefore welcomed to enhance the quality of future research. It is hoped that this study will contribute positively to educational development, benefits readers, and serve as a useful reference for future researchers.

Bandar Lampung, 22 May 2025

The Writer

Kommen Sohni Sitohang
2223042019

LIST OF CONTENTS

REFERENCES

APPENDICES

LIST OF TABLES

LIST OF FIGURE

LIST OF APPENDICES

I. INTRODUCTION

This chapter covers background of the research, research questions, objectives of the research, uses of the research, scope of the research, and definition of terms.

1.1. Background of the Problem

The ability to comprehend written material is a crucial skill for success in various aspects of life, including education, work, and daily activities. Reading comprehension goes beyond merely understanding words on a page; it involves grasping the context, author's message, and the text's purpose. In school, students rely on this skill to learn new information, pass exams, and complete assignments. In the workplace, employees need to read and understand job-related documents for effective performance. Moreover, in daily life, reading comprehension is essential for understanding news articles, medical instructions, and everyday communication. Beyond its practical applications, strong reading comprehension also fosters critical thinking, enabling individuals to analyze information, assess credibility, and make informed decisions. This skill becomes increasingly important in today's information-rich world, where distinguishing facts from opinions and evaluating the validity of claims is essential for making sound judgments.

The purpose of reading is comprehension, with its various skills and this is what language education pivots around in order to optimize comprehension. Jad

(2003) emphasizes that reading comprehension is the ultimate objective sought by teachers and the educational process. Reading without understanding is not reading in its proper sense. Reading comprehension is defined as the process of correct linking between the signs of a word and its meaning, finding the appropriate meaning from the context, understanding and organizing the ideas in the readable content, and remembering these ideas later for the purpose of using them later in present and future activities (Younis et al., 1998). A good reader can comprehend the text and reach the apparent or implicit meaning, near or far, and this makes reading a mental process based on thinking and related to it. Hence, the relationship between good reading and understanding is unquestionable.

Sutarsyah (2015) states that reading as one of the language skills takes many portions of time in the teaching and learning process in the class. In improving reading skills, the students have to realize that the aims of reading are to comprehend the text and what to comprehend, such as the main idea, supporting ideas, or the information that we need in the text. In reading, there is a process of interaction between the author with his language media and the reader with his knowledge and knowledge of the world.

Through reading, the students will get much information and knowledge that is very useful for them in the learning process. Reading is a complex activity that requires perception and thought. Word recognition and comprehension are two connected processes in reading. The process of perceiving how written symbols correspond to one's spoken language is referred to as word recognition. Making an understanding of words, sentences, and connected material is the process of comprehension. This understanding is based on the interaction between the

written words and how they activate information outside of the text or message. To understand written content, readers often use background information, vocabulary, grammatical understanding, experience with reading, and other skills (Elizabeth, 2003)

Conversely, Krisnoviani & Sulistyani (2022), state that reading is a difficult task. It necessitates higher mental functions such as recall, reasoning, evaluating, organizing, applying, and problem-solving. In fact, there are several problems that individuals may face when trying to gain reading comprehension skills. One of them is lack of vocabulary. Individuals may struggle to comprehend written material if they lack sufficient vocabulary to understand the words in the text. This can make it challenging to understand the context and meaning of the text. Then, difficulty with text structure; different types of texts have different structures, such as narratives, expository, persuasive, and procedural texts. Individuals need to understand the structure of the text to identify the main idea, supporting details, and key points. Lack of prior knowledge is also a burden in comprehending the material. Prior knowledge can help individuals understand the context of the text and make connections between new information and existing knowledge. Then, poor reading habits such as reading too quickly, not paying attention, or not taking notes may make individuals struggle to comprehend the context of the text. Finally, Reading comprehension is a skill that requires practice to develop. Some individuals may struggle to gain reading comprehension skills if they are lack of practice (Esteria, 2017; Suryanto, 2017; Hakim at.al, 2022; Wiratmo at.al, 2022).

In fact, the researcher also found out this case at school where the researcher teaches English subject. Based on the preliminary research, the data was retrieved from the score of the first-semester test and found that many students in the eleventh grade of SMA Immanuel Bandar Lampung still got under-average scores in reading. There were only 12 students out of 77 students achieved a score above the criterion of minimum mastery. More than it, 65 students got score under the criterion of minimum mastery. The criterion of minimum mastery at the eleventh grade of SMA Immanuel Bandar Lampung is 75. It could be inferred that most of the students still had difficulties in their reading comprehension.

Due to the case, the researcher decided to interview students to find out what their difficulties in reading comprehension are. Then, it was found that many students still get difficulties in comprehending the text. Some of the students did not understand what they read. They read the text, but they were not able to get the meaning of the text. This problem might be caused by the students' lack of vocabulary. They said that they often find many new vocabularies for them. Furthermore, some of the texts, sometimes, were not familiar with them. Means, the students are lack of prior knowledge. More seriously, most of the students felt that reading activity was boring and not interesting. They did not have such a good motivation in reading to comprehend the text. So, most of the students became passive and lazy in reading lessons.

Teachers play a crucial role in helping students develop reading comprehension. They need to be aware of the common problems that students may face. Hence, as a researcher as well a teacher, these cases become a challenge how to overcome the students' problems in gaining reading

comprehension. It needs appropriate techniques and strategies to help them as a solution for their problems. Using a strategy in teaching reading can make the teaching-learning process more effective and encourage students more active. A strategy can be defined as a mental plan of action designed to achieve a specific purpose. Without a good strategy in the teaching-learning process, it will have a bad effect on the students, especially in learning the material. The strategy helps to improve the students' reading as well as efficiency in reading. By using a strategy, students will read in the way that expert readers do and strategies also can help readers to process the text actively, monitor their comprehension, and connect what they are reading to their own knowledge and to other parts of the text (Richard, 2002).

Drawing from the aforementioned points, the researcher posits that the acquisition of reading comprehension skills is influenced by notable distinctions among learners within a classroom, which fluctuate depending on their unique learning styles, levels of preparedness, and prior experiences. Reading, being a cognitive process, involves extracting meanings from a text, comprehending them, and engaging with the ideas presented, utilizing a blend of prior knowledge and fresh insights from the text. Consequently, an educational approach termed Diversified Learning or Differentiated Learning has gained traction, acknowledging and accommodating this diversity.

Differentiated Learning seeks to create an appropriate learning environment for all students in terms of preparations, abilities and previous experiences they have, in addition to the distinct needs, backgrounds and the learning styles they prefer. Likewise, it works to differentiate each of the contents, teaching methods,

activities and assessment methods in the selected lessons, in order to achieve the desired teaching goals, advance the level of students' academic achievement, and improve the efficiency of the educational process with the ultimate goal of achieving the mission of total quality in education (Ma'youf & Aburezeq, 2022; Attia, 2009).

Differentiated learning is the teacher's effort to adapt the learning process in the classroom to meet the individual learning needs of students. According to Tomlinson (2001) in a classroom that implements differentiated learning, a teacher makes consistent efforts to respond to student learning needs. Differentiated learning is designed based on the needs of students in one class, arranged according to the student's learning profile, student's readiness to learn, and student's interest in learning.

Further, Tomlinson (2001) has developed a framework for differentiated instruction that includes several key elements. Content refers to the subject matter being taught. Differentiated instruction involves providing different levels of content complexity to different students based on their individual readiness, interests, and learning styles. Process refers to the way in which students engage with the content. Differentiated instruction involves providing different learning activities, instructional strategies, and pacing to different students based on their individual needs. Then, product refers to the way in which students demonstrate their learning. Differentiated instruction involves providing different options for demonstrating learning, such as through written assignments, oral presentations, or project-based assessments. Lastly, learning environment refers to the classroom

environment and culture. Differentiated instruction involves creating a supportive and inclusive learning environment that recognizes and values diversity.

The research findings from some studies underscore the favorable impact of Differentiated Learning on various aspects of language learning among secondary-level English students. The positive effects were evident in Foreign Language Achievement (FLA), Foreign Language Motivation (FLM), and Learner Autonomy (LA). Both students and teachers perceived Differentiated Learning as beneficial for the learning, teaching, and practice of English. The incorporation of Differentiated Learning not only improved overall FLA but also enhanced reading comprehension achievement, reducing classroom diversity and fostering a more homogeneous learning environment. The results indicated that differentiated instruction strategies positively influenced students' reading interest and reading level, providing opportunities for a deeper understanding of the target language and boosting self-confidence. The studies suggest that implementing modified instruction, particularly through Differentiated Learning, can contribute to improved teamwork, collaboration, and proficiency development among students (Sapan & Mede, 2022; Magableh & Abdullah, 2020; & Sahril et al, 2021).

Overall, the research on differentiated learning strategies for L2 has shown promising results. These strategies have been found to be effective in improving language learning outcomes, reading comprehension, motivation, and self-esteem of L2 learners. By addressing the diverse learning needs of students, differentiated learning strategies can provide a more personalized and engaging learning experience for L2 learners, leading to better learning outcomes.

However, despite the potential benefits of implementing differentiated learning strategy, there is a very limited research on how this strategy can develop reading comprehension for Senior High School. In line with this case, the researcher considers to profit from the result and recommendations of these studies in developing reading comprehension using Differentiated Learning integrated with Project Based Learning.

Project-Based Learning has a long history dating back to the early 20th century. The roots of Project-Based Learning can be traced to the work of philosopher and educator John Dewey, who believed that learning should be experiential and rooted in real-world experiences. Dewey believed that students learned best when they were actively engaged in solving problems, making decisions, and collaborating with others.

Project-Based Learning is an instructional approach that involves students in the process of solving real-world problems or answering complex questions through project development. It is a student-centered approach to learning, where the learner takes an active role in their own education, and the teacher acts as a facilitator or guide. In a project-based learning environment, students are often given more autonomy to determine the direction of their learning, choose their own topics, and design their own projects. This approach provides students with opportunities to take ownership of their learning, collaborate with their peers, and engage in hands-on, inquiry-based learning (Hamidah et al, 2020).

Overall, Project Based Learning can be used to develop a range of language skills, depending on the specific project and goals of the learning experience. By

engaging in authentic, project-based learning experiences, students can develop their language skills in meaningful and relevant ways (Kavlu, 2015; Riswandi, 2018; Aghayani & Hajmohammadi, 2019; Praba at al., 2017). Furthermore, this paper will explore more about Project-Based Learning in improving reading comprehension.

A study by Kavlu (2015) explored the relationship between the implementation of Project-Based Learning and elementary level EFL learners' reading comprehension ability. It investigated whether learners' reading comprehension ability and vocabulary skills improve with the application of Project-Based Learning. The results confirm that the measured variables (reading and vocabulary skills) showed a significant positive progress in the experimental group. The researcher indicates that reading and acquiring required vocabulary become more efficient and enjoyable for students, when Project-Based Learning is implemented.

The Project-Based Learning method improved the students' achievement in reading notice text significantly and helped the students become active and creative in learning. Teachers are suggested to use the Project Based Learning method as a suitable method for students to learn reading, to promote students' learning and academic achievement, to increase students' intention, to make teaching reading more creative, active, and enthusiastic, to increase students' satisfaction with their learning experience (Wiratmo at al., 2022).

Despite the advantages in developing language skills, many researchers (Land & Greene, 2000; Marx et al., 1997; Grant, 2002) revealed the weaknesses of the

implementation of PBL. Applying project based learning in the classroom may be intimidating for some experienced teachers and will be even worse for beginners. Almost all examples of successful project based learning capitalize on the success of cooperative or collaborative learning. Students who have a weakness in the experiment and the collection of information will have trouble. Students who are not experienced with working in groups may have difficulty in negotiation and compromise. There is a possibility of students who are less active in group work. The last is lack of student interest in the subject, including methods of teaching.

Concerning to the previous explanation, the researcher assumes that by integrating differentiated learning into project-based learning, the weaknesses of PBL will be overcome. Differentiated learning involves tailoring instruction to meet the diverse needs, interests, and abilities of individual learners. It involves using a range of instructional methods, resources, and assessments to meet the diverse needs of learners. On the other hand, project-based learning is an approach to instruction that involves engaging students in complex, real-world projects that require critical thinking, collaboration, and problem-solving skills. For example, students may be grouped according to ability or interest, and provided with different levels of support and guidance throughout the project. Additionally, project-based learning can be used as a vehicle for differentiated instruction by providing students with opportunities to explore topics of interest and engage in authentic, real-world problem-solving. This can motivate and engage students who may be disengaged in traditional classroom settings, and provide them with opportunities to demonstrate their learning in meaningful and relevant ways.

In summary, differentiated learning and project-based learning are both student-centered approaches to instruction that can be used to promote engagement, motivation, and deeper learning. While differentiated learning involves tailoring instruction to meet the diverse needs, interests, and abilities of individual learners; project-based learning involves engaging students in complex, real-world projects that require critical thinking, collaboration, and problem-solving skills. By integrating differentiated learning strategies into project-based learning, educators can provide students with opportunities to take ownership of their learning, collaborate with their peers, and engage in hands-on, inquiry-based learning that meets their diverse needs and abilities. Integrating differentiated learning with project-based learning has the potential to enhance students' reading comprehension skills by addressing their diverse learning needs, interests, and strengths while providing them with authentic, meaningful, and engaging learning experiences.

1.2. Research Questions

In line with the matters explained in the background, the researcher specified the following research questions:

1) Is there any significant difference of students' Reading Comprehension achievement between those who are taught by using Differentiated Learning Strategy integrated into Project-Based Learning and those who are taught by using conventional Project Based Learning?

2) Which reading aspect improves the most after the students were taught using Differentiated Learning Strategy integrated with Project-Based Learning?

3) Which reading aspect improves the most based on learning styles after the students were taught using Differentiated Learning Strategy integrated with Project-Based Learning?

1.3. Objectives

Based on the research problem, the formulated research objectives are as follow:

1) To find out whether there is significant difference of students' Reading Comprehension between those who are taught by using Differentiated Learning Strategy integrated into Project Based Learning and those who are taught by using conventional Project Based Learning.

2) To find out which reading aspect improves the most after the students taught using Differentiated Learning Strategy integrated into Project Based Learning.

3) To find out which reading aspect improves the most based on learning styles after the students were taught using Differentiated Learning Strategy integrated with Project-Based Learning

1.4. Uses

The study hopefully benefits students and teacher in two dimensions, namely:

1. Theoretically, the research of this study can be worthy of supporting the existing strategy of teaching reading. Moreover, it would be a reference for the following researchers especially who are interested in Differentiated Learning and Project Based Learning. Hence, the finding of this study can be useful for them as the basis information to do deeper research.

2. Practically, the outcome of this study comes up with a new understanding of the teaching method that can enlighten English teachers, lecturers, and educators. Thus, they can implement this newly-developed method in their reading class.

1.5. Scope

The scope of this research focused on the integration of Differentiated Learning Strategy integrated into Project Based Learning. Thus, the objectives of this research are to investigate whether using Differentiated Learning Strategy integrated into Project Based Learning will see if there is significant difference in students' reading comprehension, which reading aspect improves the most after the students are taught using Differentiated Learning Strategy integrated into Project Based Learning, and which reading aspect improves the most based on learning styles (visual, auditory, and kinesthetic) after the students were taught using Differentiated Learning Strategy integrated with Project-Based Learning in the context of Analytical Exposition text.

1.6. Definition of Terms

In order to provide a clear understanding of the topics under discussion, below are some key terms and their definition.

1. Reading is defined as a cognitive process that involves decoding symbols to arrive at meaning. Reading is an active process of constructing meanings of words. Reading with a purpose helps the reader to direct information towards a goal and focuses their attention.

2. Differentiated Learning is a strategy in which all students pursue the same learning objectives, but teachers adjust their instructional methods, task complexity, and learning supports to address individual differences; in this study, focusing on learning style preferences, in order to optimize engagement and achievement.

3. Project-Based Learning is an instructional approach that involves students in the process of solving real-world problems or answering complex questions through project development. It is a student-centered approach to learning, where the learner takes an active role in their own education, and the teacher acts as a facilitator or guide.

4. Analytical Exposition is a text that elaborates the writer's idea about the phenomenon surrounding. Its social function is to persuade the reader that the idea is important matter, and to analyze the topic that the thesis/opinion is correct by developing an argument to support it.

The components above including background, research questions, objectives, uses, scope and definition of terms serve as the foundational framework of this study. A more detailed discussion of the underlying concepts will be presented in the next chapter.

II. LITERATURE REVIEW

This chapter presents literature review related to the teaching of reading skill in the research. Theoretical review is divided into sub headings; reading comprehension, aspects of reading, teaching reading, factors influencing reading comprehension, purposes of reading, reading comprehension level and skills, concept of genre text, analytical exposition text, project based learning, differentiated learning strategy, differentiated learning procedure, teaching reading using conventional project based learning, teaching reading using differentiated learning strategy integrated into project based learning, advantages of integrating   differentiated learning strategy integrated into project based learning, theoretical assumption, and hypothesis.

2.1. Reading Comprehension

According to Ahmadi et al. (2013), reading comprehension is a complex process involving a combination of text and readers. In addition, Aloqaili (2012) viewed that reading comprehension can be defined as the meaning constructed as a result of the complex and interactive process relating a reader's critical thinking, prior knowledge, and inference-making. Reading comprehension is assumed to involve the construction of meaning of a passage from written text. Another definition is viewed by Gilakjani and Sabouri (2016). They viewed that reading comprehension is a complicated subject that includes many levels of a text. Based

on those definitions as mentioned above, it can be sum up that reading comprehension is a complex and interactive process involving the construction of meaning from many levels of written text that is relating a reader's critical thinking, prior knowledge, and inference-making.

2.2 Aspects of Reading Comprehension

There are five aspects of reading comprehension in which the students can understand a text well, such as determining the main idea, locating reference, making inference, detail information, and understanding vocabulary (Nuttal, 2000).

1. Determining Main Idea

The main idea is statement telling the author's point about the subject. A key to understanding a paragraph or short collection is to find the main idea (Longan, 2002). Indentifying the main idea is crucial for comprehending and summarizing a text effectively, as it helps readers or listeners comprehend the key focus or message of the content. As stated by Suparman (2011), the main idea is the most important idea stated in the topic sentence and developed by supporting sentences in a single paragraph. Main idea also takes a role as a guiding thread that connects the various details, arguments, or supporting information in the material, allowing the audience to grasp the overall meaning and significance of the text.

2. Reference

Reference is the words or expressions used in the reading material, either preceding or following the reference point. They prevent unnecessary repetition of words and phrases. Sometimes, a pronoun is an antecedent of reference. The

antecedent may be a word or sentence refers to by a pronoun (Sharpe, 2005). The students are required to know in defining context what the pronouns within the sentences are use for, like the pronouns accustom to represent persons, location or circumstance.

3. Vocabulary

While reading a passage, the students extend their knowledge of vocabulary, such as by discovering new words' meanings in the dictionary and guessing the meaning from context. Context helps students make a general significance judgment (Sharpe, 2005). It means that predicting from the context can helps students understand the meaning of a passage without stopping in a dictionary to look up any new word. One of the difficulties readers have with understanding material is that lack vocabulary.

4. Inference

The students are expected to consider the text while drawing inferences to find the meaning of the claims in the text. To make inferences readers need to practice integrating hints from the text with their context information (Kopitski, 2007). It means the hints in the text are going to helps students create hypotheses, and draw conclusions and they will be able to answer questions.

5. Specific Information

Specific information refers to the precise and concrete details of facts presented within the text. It is the information that can be explicitly identified and located in the text, often through keywords or direct statements. It is essential for gaining a comprehensive understanding of the content and for addressing specific questions (McWhother & Kathleen, 1986)

Those five aspects of reading comprehension serve as fundamental component in understanding a text effectively. Each aspect provides a distinct contribution to the overall comprehension process and together they form an integrated framework for assessing reading skills.

2.3. Teaching Reading

Reading is in an interactive process that goes on between the reader and the text, resulting in comprehension. The text presents letters, word, sentences, and paragraph that encode of meaning. The reader use knowledge, skills, and strategies to determine what the meaning is. Teaching is a dynamic process and not only gives the students the teacher's knowledge. Several activities can be done in classroom, particularly during the teaching and learning process. Teaching is not easy task but it's a vital one and can be very satisfying when the teacher sees students improve and realize that teacher helps make it happen (Harmer, 2008).

Some students at times can indeed be challenging and frustrating, but it is also worth nothing that best teaching can be also be highly enjoyable. Drawing upon various definitions of teachings, the researcher sums up that teaching encompasses the facilitation of learning through the organization of instructional activities and the systematic management of the learning environment, thereby enabling students to achieve intended educational oectives. Thus, it can be logically inferred that it is important to improve the ability of the students to learn the reading strategy according to their intent as the main objective of teaching reading.

Unlike conventional texts, contemporary reading tasks require three-phase

procedures in teaching reading: Pre - reading, while -reading, and post – reading (Alyousef, 2005). The pre – reading stage helps to trigger the respective schema. For example, while previewing the text, the teacher may ask the students questions which arouse their interest. The aim of the while – reading stage (or interactive process) is to develop the ability of the students to tackle text by improving their knowledge of language and schema. Post – reading includes activities which use exercises to improve comprehension of learning.

Teaching aims to improve the ability of students to read English text effectively and efficiently. When teaching reading the teacher should provide the students with a reading strategy particularly before reading to stimulate the interest of the students and the background knowledge of the students to read and communicate with different types of texts, i.e. in function and monologue.

Furthermore, there are seven strategies which can be applied in teaching reading comprehension (Brown, 2000):

1. Identifying the purpose in reading. By knowing the purpose of what the reader reads, the reader can throw the unwanted distraction or information where the reader know what information they want to know in reading the texts.

2. Using graphemes rules and patterns to aid in bottom up decoding (especially for the beginning level learners). At the beginning levels of learning English, one of the difficulties that students encounter in reading is making the correspondences between spoken and written English. Here teacher also need to teach how to read the sound words with sort vowel

sound such as (bat, leg, wish, etc.) and the sound words with final silent "e" such as (late, time, bite, etc.).

3. Using efficient silent reading techniques for relatively rapid comprehension (for intermediate to advanced levels). In advanced learner, teacher can apply reading fast to reduce time consuming in reading. Readers do not need to pronounce every word and do not need to know the meaning of every word but the comprehension of the text is more important.

4. Skimming the text for the main ideas. Skimming is the one of the most valuable reading strategies for learners. Skimming consist of quickly running one's eyes across a whole text (such as an essay, article, or chapter) to find out what the text tells about or to find out the main idea of the text. Skimming gives the readers advantages of being able to guess the purpose of the passage, the main topic, or message, and possibly some of the developing or supporting ideas.

5. Scanning the text for specific information. Scanning is quickly searching for some particular piece or pieces of information that the reader needs in reading a text. Scanning exercises may ask students to look for names or dates, to find a definition of a key concept, or to list a certain number of supporting details.

6. Using semantic mapping or clustering. Readers can resume the long string of ideas or events by grouping the important key of the word that get from reading. The strategy of semantic mapping, or grouping ideas into meaningful clusters, helps the reader to remember the contents of the text.

7. Guessing when you are not certain. Guessing is an extremely broad category. Learners can use guessing to their advantages to: - Guessing the meaning of a word. - Guessing grammatical relationship (e.g., a pronoun reference). - Guessing a discourse relationship. - Inferring implied meaning ("between the lines"). - Guessing about a cultural reference, and - Guessing content messages.

In short, those practicable strategies should be implemented in teaching based on the target of reading to obtain the understanding for five aspects of macro-reading comprehension that the teacher needs to recognize as a target, such as determining the main ideas, identifying supporting details/specific information, identifying references, making inferences and understanding vocabularies.

2.4 Factors Influencing Reading Comprehension

According to Shehu (2015), there are two factors that influence students' reading comprehension; the internal factor and the external factor. Particularly, the internal factor which can be defined as the factor that comes from the reader himself which consists of motivation and interest.

Motivation is very important in analyzing a text. It also plays an important role in comprehending it. Brown (2001) categorized motivation into two types; intrinsic and extrinsic motivation. He described intrinsic motivation as engaging in activities solely for the enjoyment and satisfaction they provide, without any external rewards. Individuals participate in such activities for their own fulfillment, aiming to achieve a sense of competence and self-determination. In

contrast, extrinsic motivation refers to behaviors driven by the expectation of external rewards, such as money prizes, grades, or positive feedback from others.

Apart from motivation, another important internal factor is interest. Interest is being one of the important factors that influence in increasing the students' comprehension achievement in reading (Shehu, 2015). Due to the fact, if the readers, in this case are students, interested in reading a text, they can get a satisfied achievement. In contrast, if they have no interest to read a text, they can get an unsatisfied achievement. Thus, it can be assumed that motivation and interest are influencing students' achievement in reading comprehension, either satisfying or unsatisfying.

On the opposite of internal factor is external factor that can be defined as the influence which comes outside the reader himself. There are three aspects in external factor; those are reading material, teacher of reading, and questioning strategies.

The first external factor is reading material. One of the students' achievements in reading is influenced by the level of difficulty of the text. Additionally, Shehu (2015) stated that some texts are considered to be more difficult, such as texts which lack of organization, have plenty of new words, scientific text, etc. As a result, students cannot understand what they read if the text given is more difficult than the students' level of understanding difficulty.

Another thing considered as the external factor of reading comprehension is the teachers of reading. The teachers should be careful to select the reading material and kind of the comprehension. Moreover, they need to have an appropriate technique to teach their student properly. Question strategy is a crucial

external factor in teaching reading comprehension. Teachers should know how to select a strategy of questioning the text, so that their students can be motivated by it. According to Brown (2001), the most important key to create an interactive learning is the initiation of interaction from the teacher by using question.

Furthermore, he continued stating the appropriate questioning can fulfill a number of different functions, such as:

1. Teacher questions give students the opportunity to produce language comfortably without having to risk initiating language themselves. It is very scary for the students to have to initiate conversation or topics for discussion.

2. Teacher questions can serve to initiate a chain reaction of students' interaction among themselves.

3. Teacher questions give immediate feedback about students' comprehension.

4. Teacher questions provide students with opportunities to find out what they think. As they are nudged into responding to questions about, say, a reading, they can discover what their own opinions and reactions are.

Shehu (2015) emphasized that self-discovery is particularly valuable in pre reading activities, and without essential elements, the results may be unsatisfactory. He highlighted that effective questioning plays crucial role in language learning by creating a safe space for students to communicate, fostering per interaction, providing teachers with instant feedback on comprehension, and encouraging students to explore their own thoughts and opinions.

2.5 The Purposes of Reading

Everyone has their own purpose. Even though doing the same thing, the purpose can be different. It also occurs in purpose of reading. Somehow, when people read a text, it indicates that they have a purpose towards what they read. Although they read some fictions, such as novel, short story, and any kind of similar text for pleasure, they also have a purpose, at least to get the information of the story in a text which they read.

There are many experts who define the purpose of reading. Mostly, their definition state that reading has two main purposes: reading for pleasure and reading for getting information (Indrayani, 2014). Furthermore, Smith (2020) stated the purposes of reading, such as reading novel or magazine, is usually done for pleasure. Meanwhile, when reading academic texts, the general purposes are to get information (facts, data, etc.), to understand ideas or theories, to understand the author's viewpoint, to support your own views (using citations).

To sum up, if the students have purpose in reading a text, it will lead them to achieve what they are looking for, such as ideas and information. Whatever the purpose of reading, the students will get something from what they read. Additionally, for maximizing the comprehension, the students need an appropriate technique in their reading

2.6 Reading Comprehension Levels and Skills

There are many divisions of reading comprehension skills varied according to different perspectives among experts. Some divided them according to the size of the reading unit, while other classified them according to the type and size of the

cognitive message implied in the reading text. Others divided them according to level of non-tangible mental processes inferred by their behavioral outcomes, such as literal understanding, interpretive understanding, implications (reading between the lines) and critical understanding (Saad, 2006).

Hijazi (2008) also indicated that the goal of determining the levels of reading comprehension skills lies in helping the teacher to prepare reading goals and facilitate attaining them. This can be done by choosing appropriate educational strategies to be used in developing students' ability to understand the reading material, determining students' skills and their ability to comprehend, determining the type of knowledge and experiences that teachers should provide to students to improve their reading comprehension ability, correcting and formulating the appropriate questions of the reading material with view of achieving the results that teachers want students to obtain.

Bari (2010) and Attia (2016) categorized the levels of reading comprehension and the sub-skills they fall under as follows:

1. Literal, direct or superficial understanding level. This represents the student's ability to literally understand the meanings of words, structures, sentences, information and events contained in the read text, through direct understanding and not beyond that. This level includes the following sub-skills:

   a. Determining the appropriate meaning of the word from the context.

   b. Determining two or more different meanings for the word.

   c. Determining the synonym of the word.

   d. Determining the opposite word.

    e. Determining the general central idea of the text.

    f. Determining the main idea of the text paragraphs.

    g. Identifying sub-ideas and their supporting details in the text.

    h. Determining the temporal and spatial order of the events of the story

2. The level of deductive or explanatory understanding. This level represents the student's ability to know and understand the implicit meanings that the writer does not declare in the text, by going beyond the direct meanings. This level includes the following sub-skills:

    a. Finding similarities and differences in the text.

    b. Interpreting cause-and-effect relationships for the events of a topic or story.

    c. Deducing the writer's purposes and motives.

    d. Deducing the characteristics of the writer's style of reading.

    e. Deducing common values and trends in the read text.

    f. Inferring the ideas and meanings implicit in the reading text.

3. The level of critical understanding. This represents the student's ability to make judgments related to the readable text in terms of language, semantics and function, and then evaluate them in terms of their accuracy, quality, and the strength of their impact on the reader, according to exact and appropriate criteria. This level includes the following sub-skills:

    a. Distinguishing between main ideas and sub-ideas.

    b. Distinguishing between facts and opinions in what is read.

    c. Distinguishing between ideas belonging to and not belonging to the subject being read.

d. Distinguishing between reasonable and unreasonable ideas.

e. Distinguishing between a common and an innovative idea.

f. Expressing opinion on the ideas and issues raised in the reading.

g. Judging the logicality of the ideas and their sequence.

h. Judging the originality and contemporariness of the content.

i. Judging the author's credibility.

4. The level of taste understanding. This sub-skill represents the student's ability to sense the writer's feelings prevailing in the general atmosphere of the text, and his possession of an expressive linguistic style to express them from his point of view, and his ability to elicit the suggestive expressions that the writer aims at and the specific emotional directions that they carry, and to elicit the secrets of beauty in expression, etc. popularized in the text as of trends and values.

This level includes the following sub-skills:

a. Arranging the verses according to the strength of the meaning.

b. Realizing the suggestive significance and the aesthetic value in expressions and words.

c. Being aware of the mood and emotional state in the atmosphere of the literary text.

d. Realizing the interrelationship between the two sides of thought and conscience.

e. Determining the appropriateness of the words to the writer's feelings and emotions.

5. The level of creative understanding. It represents the student's ability to present innovative and new ideas, and to suggest a new intellectual path or direction, whereby the student starts from facts and information that are known to him, while he sees unconventional and new uses for them, or sees distinct relationships between them. This level includes the following sub-skills:

    a. Creatively rearranging the events, ideas or characters of the text.

    b. Suggesting alternative solutions to some of the problems mentioned in the text.

    c. Reaching expectations for some events based on certain assumptions.

    d. Predicting the events of the story and plot them before reading it fully.

    e. Suggesting an end to a story or topic, for which an end has not been determined (Bari, 2010; Al-Khaza'leh et al., 2011; Attia, 2016).

2.7. Concept of Genre Text

According to Emilia (2015), the term text comes from Latin, which means weaving. And then, the word text is related to the word textile. Text is defined as words or sentences that are woven to create a unified whole. It means the text is a word arranged into a single unified whole. And then, genre can be defined as how we get things done through language – the ways we exchange information and knowledge and interact socially. There are many kinds of text in reading ability such as recount, descriptive, report, explanation, exposition, discussion, procedure, narrative, news story, and others. It has different text, definition, function, and generic structure also.

The classification of the genre can be categorized as the following:

1) Recount

   Recount text is a type of text that retells events or experiences that have passed. Recount text is usually based on direct experience from the author but can also be imaginative or outside the author's experience.

2) Descriptive

   Descriptive aims to identify several characteristics of an object or phenomenon that describe each feature in rotation. Descriptive texts provide information about the topics discussed. This description section can be sorted from the most important to the least important.

3) Report

   Report text is a type of text that presents information clearly and concisely. Report text classifies and illustrates a phenomenon in the world. Reports tell a group as a whole or in general.

4) Explanation

   Explanation text is a kind of text for how or why things are as they are. An explanation sets out the logical steps in a process.

5) Exposition

   Exposition is a critical evaluation of an idea. Exposition aims to express arguments about an issue and justify it. Expositions are usually found in essays, editorials, political debates, and commentaries.

6) Discussion

   Discussion is an issue in the light of some kind of "frame" or position to provide more than one point of view on an issue.

7) Procedure

Procedure is a text we often encounter in everyday life, in manuals and recipes. Text procedures aim to show how things are done or show the reader how to do things or actions in a particular order.

8) Narrative

Narrative is a text to amuse, entertain, and deal with actual or vicarious experiences differently.

9) News item

News Item is a text to inform readers, listeners or viewers about events of the day which are considered newsworthy or important.

Thus, in this research, the researcher chooses Analytical Exposition text as the material for reading comprehension based on curriculum Merdeka at SMA Immanuel Bandar Lampung.

2.8 Analytical Exposition Text

Analytical Exposition is a text that elaborates the writer's idea about the phenomenon surrounding. Its social function is to persuade the reader that the idea is important matter, and to analyze the topic that the thesis/opinion is correct by developing an argument to support it. The purpose of exposition text is to convince the reader that the topics presented is an important topic to be discussed or gained attention by way of providing arguments or opinions that support the main idea or topic.

Generic Structure of Exposition Text is explained as the following:

a. Thesis:

It introduces the topic and indicates the writer's point of view.

b. Argument

It explains the reasons to support the writer's position. The number of arguments may vary, but each argument must be supported by evidence and explanation.

c. Reiteration

In reiteration, the writer restates his/her point of view to strengthen the thesis.

The Characteristics / Language Feature of Analytical Exposition Text:

a. Using internal conjunction

b. Using Simple Present Tense

c. Using compound and complex sentence.

d. Use word that link argument, such as firstly, secondly, and reasoning through causal conjunction, such as in addition, furthermore, however, therefore, etc.

Example of Exposition Text entitled Cars should be banned in the city.

Thesis	Cars should be banned in the city. As we all know, cars create pollution, and cause a lot of road deaths and other accidents.
Arguments	Firstly, cars, as we all know, contribute to most of the pollution in the world. Cars emit a deadly gas that causes illnesses such as bronchitis, lung cancer, and 'triggers' of asthma. Some of these illnesses are so bad that people can die from them.
	Secondly, the city is very busy. Pedestrians wander everywhere and cars commonly hit pedestrians in the city, which causes them to die. Cars today are our roads biggest killers.
	Thirdly, cars are very noisy. If you live in the city, you may find it hard to sleep at night, or concentrate on your homework, and especially talk to someone.
Reiteration	In conclusion, cars should be banned from the city for the reasons listed.

2.9 Project Based Learning

The project-based learning is a teaching model that puts emphasis on assigning tasks, particularly in the form of projects that can lead students to experience an inquiry process. Hence, it is expected that students will be able to develop knowledge, skills and attitudes as the assessment basis for teachers (Thomas, 2000).

Stages of Project Based Learning (Hamidah et.al, 2020)

a. Choosing Project Topic

The first thing to do by teachers is choosing a topic. This stage aims to help students to understand the learning topic and objective.

b. Pre-communicative activities

The stages of the pre-communicative activities aim to enable students to communicate in the target language and to support them in completing the project. Pre-communicative activities are carried out by the teacher at the beginning of the learning activities, including the introduction of new vocabulary and the language features required by students in working on the project.

c. Asking essential questions

Essential questions are the main questions asked by the teacher that must be completed and answered by students through a project to make students understand the focus of the project, determine the type of project and direct the investigation process.

d. Designing project plan

The project designing activities aim to facilitate students in developing their critical thinking skills through the process of the type of project selection, problem solving as well as the skills to plan activities in the inquiry process.

e. Creating project timeline

The goal of creating project timeline is to make students have skills in time management, self-management and teamwork.

f. Finishing the project

Finishing the project stage is the main of project implementation. Students create a project, starting from the inquiry process until finishing the project. The purpose of this stage is to develop students' skills in processing data and information, solving the problems, improving independence, teamwork and communication skills between the groups and the society involved in the projects.

g. Assessing the project results

Assessing the project results aim to ensure that all group members are responsible for their project results. The teacher can also evaluate students' performance and project results as a formative assessment.

h. Evaluating the project

Evaluating the project is an activity where the teacher reflects the activity by providing feedbacks for the project results, while the students reflect on the learning activities. This stage aims to make students share their difficulties during the project and measure their ability to do the project.

These theoretical foundations serve as the basis for the present study, which aims to explore the implementation and impact of Project Based Learning within a

specific educational context. It provides a comprehensive framework for fostering active, inquiry-based learning where students engage in meaningful projects to develop both academic knowledge and essential life skills.

2.10 Differentiated Learning Strategy

Differentiated Learning is an educational method based on diversity in terms of the presence of individual differences between students in the same class. The teacher's reliance on one method of teaching does not necessarily achieve the learning among all students with the same quality and quantity. The teacher's provision of differentiated learning depends on the need to know each student in the class and on the teacher's choice of appropriate strategies to teach each student, as differentiated learning takes into account the individual characteristics of the learners and their previous experiences, with the aim of raising the level of all learners (Obeidat & Al-Sameed, 2007).

2.10.1 Philosophy of Differentiation

Differentiation works best in classrooms where certain beliefs motivate why, what, and how teachers' approach planning for and responding to student differences (Tomlinson, 2001). Four tenets about the capabilities and potential of all students, and about the role and responsibility of all teachers, represent assumptions of the teacher of a differentiated classroom.

a. Diversity is normal and valuable.

The teacher of a differentiated classroom understands and embraces the reality that students represent a rich range of diverse experiences and characteristics.

Differences are something to celebrate, rather than something to ignore or to fix; they are assets, not liabilities, to the classroom community. The teacher honors who students are, as individuals and as a group, based on shared and unique traits.

b. Every child has hidden and extensive capacity to learn.

The teacher of a differentiated classroom knows that traditional measures of ability such standardized test scores and grades, do not tell the whole story of who a student is or what a student can do. The teacher assumes that every student can learn and that a student's greatest strengths may be under the surface and require the teacher to dig deep to uncover what will help the students learn and grow.

c. It is the teacher's responsibility to be the engineer of student success.

The teacher of a differentiated classroom defines student success as growth toward and beyond goals, as well as growth relative to oneself (e.g., where you started compared to where you ended up). This growth does not happen by accident; it is the result of the teacher taking ownership of and intentionally planning for all students' learning. Such teachers do not dismiss or minimize a student's chances for success based on (for example) student's English language skills, IEP, or home life. They commit to doing what they can with the time they have to make sure every child grows.

d. Educators should be the champions of every student who enters the schoolhouse doors.

The teacher of a differentiated classroom believes that educators are champions for all students and is an advocate of every child in his/her charge. This includes children who are easy to miss and those who are hard to ignore;

children who are academically far behind and those far ahead; and children who have many advantages and those who have very few advantages.

These four beliefs lay a philosophical groundwork for differentiation to take root. It is easy to picture differentiation being implemented in the classroom of a teacher who holds these convictions. It is hard, by contrast, to picture differentiation being implemented in the classroom of a teacher who believes that diversity is undesirable or a nuisance; that some children can learn but others cannot; that student success is determined by factors beyond the teacher's control; or that some children are not reachable or teachable.

2.10.2 Practices and Principles of Differentiation

Differentiating instruction involves making proactive adjustments to what students learn (i.e., content), how they learn it (i.e., process), and how they show what they learn (i.e., product), according to students' individual and shared characteristics. This model is comprised of practices and principles that involves proactive adjustments to content, process, and product based on students' readiness, interests, and learning profiles. Teachers implement differentiation by aligning instructional strategies with learning goals, utilizing pre and formative assessments, and incorporating interest surveys to tailor instruction. This approach is supported by flexile grouping, and structured classroom routines and effective management techniques within a collaborative and growth-oriented learning environment.

In this model, content refers to the knowledge, skills, and concepts students engage with to achieve learning objectives. Process encompasses the activities

that help students absorb and interpret key ideas, while product represents how they demonstrate their understanding and growth. Readiness indicates a student's proximity to learning goals, interest reflects their personal motivations and passions, and learning profile considers their preferred ways of processing information, shaped by factors such as thinking style, intelligence preference, culture, and gender.

2.10.3 Differentiation based on Learning Profile

A learning profile refers to how students seem learn to best, how they process what they need to learn, or how they think about, remember, and prefer to use what they learn (Sousa & Tomlinson, 2011). Learning profile is best thought of as a set of preferences, not as inherent characteristics or traits of a student. Learning profile has several dimensions; intelligence preference, culture- and gender-influenced preference, and learning style.

Intelligence preference refers to models of human intelligence and ways of thinking that are related to individual learning preferences. The theories view intelligence as multi-faceted, complex, and malleable, and these theories advocate leveraging students' intelligence preference strengths as well as growing in areas of relative weakness. Then, although a person's culture or gender does not dictate how an individual will learn, research indicates that culture and gender may influence individual preferences in learning. Learning style theories and models contend that people learn in different ways and that they will learn better or more efficiently when the circumstances or demands of learning match their preferred approach. The idea isn't to label a student as x or y kind of learner, and most

individuals can and do learn in a variety of ways. Rather, the spirit of learning style is to help students find pathways and conditions for learning that work best for them in a given situation (Hockett, 2018). Furthermore, learning style dimension will be the focus of the differentiation in this research.

2.10.4 Types of Learning Style

Dunn (2014) stated that learning style is how each learner begins to concentrate on the process, absorb and retain new and difficult information. It means that learning style is how every learner absorbs and perceives the information in their own way.

According Chislett and Champman (2005), there are three kind of learning styles; visual, auditory and kinesthetic learning styles.

1. Visual Learning Style

Visual learning is a learning style in which learners learn by seeing the object. DePorter in Sofiyan & Siwi (2018) states that each learning style could be explained that visual learning style access visual images created not remembered, color, spatial relations, mental portraits and images stand out in this learning style. It means that visual learning is a learner who needs visual sense to absorb information. It means that visual learning style focuses on the media display or object related to the lesson.

2. Auditory Learning Style

Auditory learning is a learning style in which a person learns through listening. According to Chieke (2017), auditory learning style is a process by which individuals learn via listening to tapes, radios and lectures. It means that auditory learner processes and absorbs information through

listening to the media. Furthermore, auditory learners discover information through listening and interpreting information by means of pitch, emphasis and speed. It means that this learning style puts hearing as the primary tool for absorbing information or knowledge.

3. Kinesthetic Learning Style

Kinesthetic learning style is the way people absorb information through their physical movement to understand and learn the world around them. It is the learning style through moving, touching, and doing. It means that kinesthetic is a learner who will show a preference and physical activity involving bodily movement. It can be concluded that kinesthetic learning style is the way students comprehend the information or to understand what they read through body movement like playing coin in their pocket or playing fidget spinner and etc.

Learning Profile Strategy focusing on Visual, Auditory, Kinesthetic-Tactile (VAK) describes three modes for taking in, processing, and absorbing information. Input associated with each one follows:

a. Visual: text, numbers, images, graphics, models, videos, flowcharts, diagrams, tables, reenactments.

b. Auditory: voice, audio and video recordings, speeches, lectures, interviews, music, rhymes/chants.

c. Kinesthetic-Tactile: skits, mimes, games, experiences, demonstrations, manipulation, hand-on models/materials, movement.

For the differentiation connection to content, process, and product, it can be done as follows:

a. Differentiation of Content.

Content is adjusted for VAK preferences (e.g., presented incorporate materials or options that are associated with visuals, through voice [teacher's, someone else's], and/or through a hands-on through listening, or through a hands-on activity.

b. Differentiation of Process.

Instructional delivery or tasks incorporate materials or questions that ask students to evaluate through looking, through listening, or through doing, feeling, or experiencing.

c. Differentiation of Product.

Tasks provide product options that are associated with VAK preferences. For example, students are asked to express what they have learned through visuals, audio recording or acting it out.

Every student has a unique way of learning, whether through seeing (visual), hearing (auditory), or doing (kinesthetic). Understanding these learning styles helps teachers to give better support and create more effective lessons. These ideas are important for this study, as it focuses on how using the VAK strategy can help students learn better. By recognizing different learning styles, this research aims to find out how learning becomes more meaningful and suitable for each student in the classroom.

2.11 Differentiated Learning Procedures

There are number of steps that must be taken into account when applying Differentiated Learning, and they are defined by Obeidat & Al-Sameed (2007), Attia (2009), and Al-Shukairat (2009) as follows:

a. Conducting an evaluation process that aims to determine the abilities and skills of each learner before applying the differentiated learning strategy (what does each learner know? What does he need?)

b. Classifying the learners into groups according to the commonalities among the members of each group, which were reached in the light of the pre-evaluation results.

c. Developing a plan to implement the lesson according to specific educational goals, based on work methods and activities appropriate for the three levels of outstanding, average and weak students, taking into account the diversity of learning goals according to Bloom's levels of knowledge, diversifying teaching methods and strategies according to the interests of learners, and diversifying the expected outcomes from learners.

d. Selecting the necessary means and tools for learning and the appropriate learning resources.

e. Organizing the educational environment in a way that accommodates the requirements of all groups.

f. Choosing the educational strategies and methods that suit each learner or group, while introducing the modifications necessary to make the strategy fit this diversity.

g. Determining the various tasks and activities to be assigned to the learners to achieve the learning objectives.

h. Conducting an evaluation process after implementing the lesson plan to measure learning outcomes, for the purpose of identifying and addressing weaknesses of the learners.

These steps assist to adjust methods, material, and classroom environment to support students at all levels. By using varied strategies, teachers can create more inclusive and effective learning experiences.

2.12 Teaching reading using Conventional Project Based Learning

Project-Based Learning can be a powerful method for improving reading comprehension in students. When using Project-Based Learning to teach reading, it means integrating reading skills into real-world projects and activities. Here are the steps to implement Project-Based Learning for reading comprehension improvement adapted from Hamidah et.al. (2020)

1. Identifying Learning Objectives: Determine the specific reading comprehension skills as the target (e.g., summarizing, making inferences, understanding main ideas, or analyzing text).

2. Choosing a Real-World Project: Select a project that is engaging, relevant, and meaningful to students. It should require research, reading, and critical thinking. Ensure the project aligns with the curriculum and standards.

3. Planning the Project: Outline the project's scope, timeline, and deliverables. Create a project plan that includes the reading materials and resources students will need. Design assessment tools to evaluate reading comprehension and project outcomes.

4. Introducing the Project: Present the project to students, explaining its purpose, relevance, and potential impact. Generate enthusiasm by emphasizing the real-world connections and their ability to make a difference.

5. Providing Reading Materials: Select appropriate reading materials, such as books, articles, research papers, or multimedia resources. Ensure the materials align with the project's objectives and complexity level.

6. Teaching Reading Strategies: Before diving into the project, provide explicit instruction on relevant reading strategies. This may include techniques for summarizing, making predictions, and analyzing text. Model how to apply these strategies to the chosen reading materials.

7. Scaffolding Reading: Support students in their reading by providing guidance, breaking down complex texts, and helping them build essential reading skills. Encourage them to ask questions and seek clarification as needed.

8. Independent Reading and Research: Allow students to engage in independent reading and research related to the project. They should collect information and data from the chosen texts.

9. Collaborative Learning: Encourage collaboration among students by working in groups or pairs. Promote discussions about what they've read, share findings, and explore different perspectives.

10. Creating Project Artifacts: Students should create artifacts (e.g., reports, presentations, infographics) that reflect their understanding of the reading materials. Ensure the artifacts are tied to the project's goals and learning objectives.

11. Reflecting and Revising: Encourage students to reflect on their reading experiences and the project's progress. Allow them to revise their work based on feedback and self-assessment.

12. Presenting and Sharing: Provide opportunities for students to present their project artifacts and findings to the class or a broader audience. This builds communication skills and reinforces their understanding of the reading materials.

13. Evaluating and Assessing: Assess students' reading comprehension skills based on the project's learning objectives and their project artifacts. Evaluate their collaboration, critical thinking, and problem-solving abilities.

The outlined steps serve as a foundation for the research to be conducted, guiding the implementation process in a systematic and measurable way. The steps will be applied to observe how each stage contributes to students' reading comprehension achievement.

2.13 Teaching reading using Differentiated Learning Strategy integrated into Project Based Learning

Integrating Differentiated Learning Strategies with Project-Based Learning can be highly effective in improving reading comprehension, as it tailors instruction to meet the diverse needs of students. Adapted from Tomlinson (2001), here are the steps to implement this approach:

1. Identifying Learning Objectives: Determine the specific reading comprehension skills as the target. Define the project's overall goals and objectives.

2. Selecting a Real-World Project: Choose a project that is engaging, relevant, and meaningful to students. Ensure it aligns with the curriculum and standards.

3. Planning the Project: Develop a project plan that includes the reading materials and resources students will need. Design assessment tools to evaluate reading comprehension and project outcomes.

4. Differentiating Instruction: Identify the diverse needs of students, including their reading levels, interests, and learning styles. Adapt instruction and assignments to meet these varied needs.

5. Introducing the Project: Present the project to students, emphasizing its real-world relevance and significance. Explain how students with different learning needs will be supported.

6. Providing Reading Materials: Select a variety of reading materials, including different reading levels, formats, and content. Ensure that the materials align with the project's objectives.

7. Teaching Reading Strategies: Offer explicit instruction on relevant reading strategies. Model how to apply these strategies to the chosen reading materials.

8. Scaffolding Reading: Support students in their reading by providing guidance and assistance tailored to their needs. Encourage questions and clarification, especially for struggling readers.

9. Independent Reading and Research: Allow students to engage in independent reading and research tailored to their reading levels and interests. Provide individualized support as necessary.

10. Collaborative Learning: Encourage collaboration among students, but group them based on their reading levels or learning needs. Promote discussions that consider different perspectives and abilities.

11. Creating Differentiated Project Artifacts: Assign project tasks and expectations based on individual students' abilities and readiness. Ensure that project artifacts are adapted to meet the needs of each student.

12. Reflecting and Revising: Encourage all students to reflect on their reading experiences and the project's progress. Allow for individual revisions based on feedback and self-assessment.

13. Presenting and Sharing: Provide opportunities for students to present their differentiated project artifacts. Consider various presentation formats to accommodate different learning styles.

14. Evaluating and Assessing: Assess students' reading comprehension skills and project work based on their individual learning objectives. Evaluate their collaboration, critical thinking, and problem-solving abilities in the context of their abilities and needs.

15. Providing Feedback: Offer constructive feedback that recognizes the progress and efforts of each student. Tailor feedback to their individual learning goals.

16. Reflecting on the Project: Reflect on the project's success in differentiating instruction to meet diverse student needs. Discuss how reading comprehension skills were applied and improved for each student.

17. Iterating and Planning Future Projects: Use insights from this differentiated Project Based Learning experience to plan future projects that continue to enhance students' reading comprehension, addressing their varied needs and abilities.

The detailed steps outlined above provide comprehensive roadmap for implementing Differentiated Learning Strategy with Project Based Learning to improve reading comprehension. The research explores how each stage supports the student growth, engagement, and comprehension, offering insights into the practical application and impact of Differentiated Learning Strategy with Project Based Learning.

2.14 Advantages of integrating Differentiated Learning into Project-Based Learning

There are several benefits of integrating Differentiated Learning with Project-Based Learning, including:

a. Engaged learning: both promote active and engaged learning, where students take ownership of their learning and develop skills such as critical thinking, problem-solving, and collaboration.

b. Personalized learning: Differentiated learning focuses on providing instruction that meets the individual needs of students, while Project-Based Learning allows students to choose their own topics and explore their interests. This personalized approach to learning can increase student motivation and engagement.

c. Higher-order thinking: both emphasize higher-order thinking skills, such as analysis, evaluation, and synthesis. Here, students are challenged to think critically and deeply about complex problems and ideas.

d. Flexibility: Differentiated learning provides flexibility in instruction, while Project-Based Learning provides flexibility in the type of projects students

can undertake. Together, they offer a variety of options for students to demonstrate their understanding and showcase their learning.

e. Collaboration: both emphasize collaboration and teamwork, which helps students develop important social and emotional skills such as communication, conflict resolution, and leadership.

f. Authentic assessment: both promote authentic assessment, where students are evaluated based on their ability to apply their learning to real-world situations. This type of assessment provides a more meaningful and relevant measure of student learning

The benefits – ranging from higher order thinking and authentic assessment to flexibility and collaboration – highlight the powerful synergy of this approach. The integration of Differentiated Learning Strategy with Project Based Learning creates dynamic and students-centered educational experience that supports both academic and personal development.

2.15 Theoretical Assumption

To address the research questions, it is important to establish a theoretical framework underlying hypothetical assumptions that will be tested and proven quantitatively.

Reading is an important skill in our life since from reading activity we can get information and knowledge. Teaching reading should be done carefully and effectively. However, the students still have the difficulties to tell some information from their reading text; most of them do not have some ideas or opinion to clarify the information in the reading text. There are many strategies

that can be used in teaching reading. One alternative technique that can be used in teaching reading is Differentiated Learning Strategy.

Differentiated learning is the teacher's effort to adapt the learning process in the classroom to meet the individual learning needs of students. Differentiated learning is designed based on the needs of students in one class, arranged according to the student's learning profile, student's readiness to learn, and student's interest in learning. Furthermore, the strategy will be integrated into Project Based Learning. Project-based learning (PBL) is an instructional approach that involves students in the process of solving real-world problems or answering complex questions through project development. It is a student-centered approach to learning, where the learner takes an active role in their own education, and the teacher acts as a facilitator or guide.

As mentioned before, this research wants to know the difference of students reading comprehension before and after using Differentiated Learning Strategy integrated into Project Based Learning. The researcher assumes that integrating Differentiated Learning with Project-Based Learning has the potential to enhance students' reading comprehension skills by addressing their diverse learning profile, readiness to learn, and interest in learning while providing them with authentic, meaningful, and engaging learning experiences.

So far, there are no researchers who have ever tried to implement Differentiated Learning Strategy integrated into Project Based Learning. Hence, the researcher will conduct a research with deeper investigation to the students' learning profile to enhance students' reading comprehension.

2.16 Hypothesis

In quantitative research, hypothesis must be developed based on the issue identified in the first chapter. According to the concern mentioned in the previous chapter, this research offers hypothesis as follows:

H_0 : There is no significant difference in students' reading comprehension between those who are taught using Differentiated Learning Strategy integrated into Project Based Learning and those who are taught using conventional Project Based Learning.

H_1 : There is significant difference in students' reading comprehension between those who are taught using Differentiated Learning Strategy integrated into Project Based Learning and those who are taught using conventional Project Based Learning.

The theories of reading comprehension, aspects of reading, teaching reading, factors influencing reading comprehension, purposes of reading, reading comprehension level and skills form the foundational basis of this study. Additional concept of genre text, analytical exposition text, Project based learning, differentiated learning strategy, and its procedures are also explored. Furthermore, the integration of differentiated learning strategy into project based learning, along with its instructional advantages, theoretical assumption, and hypothesis support the accomplishment of the research.

III. METHODS

Research method must be constructed thoroughly to answer the research question and achieve the objective of the research. The research method consists of research design, variables of the research, setting, population and sample of the research, sampling technique, instruments, criteria of good test, data collecting procedure, data analysis, and hypothesis testing.

3.1. Design

Using a quantitative approach, this research employed experimental design to see the significant difference of students' reading performance after being taught using Differentiated Learning integrated into Project Based Learning. *Independent Group T-test* was used to analyze the data of the first research question as this study is aimed to compare the result from control group and experimental group after receiving treatment. Thus, the two classes studied using different methods in which the control group did a learning process using Project Based Learning while the experimental group had the process of Differentiated Learning Strategy that had been integrated with Project Based Learning. On the other hand, to obtain the answer of the second and the third research questions, *Paired Sample T-test* was run using SPSS.

Furthermore, to gather the data, the researcher administered test two kinds of test namely pretest and posttest. In the first meeting, the students did a pretest.

After that, the students received treatment for around three meetings. Then, the students were given posttest at the end of the treatment.

G1: T1 X1 T2

G2: T1 X2 T2

Where:

G1   : Group 1 (Experimental Group)
G2   : Group 2 (Control Group)
T1   : Pretest
X1   : Treatment (Differentiated Learning Strategy integrated into Project Based Learning)
X2   : Treatment (Conventional Project Based Learning)
T2   : Posttest

In addition to the test instruments, the researcher utilized a non-test instrument in the form of a learning style questionnaire to gather data on students' individual learning styles preferences.

3.2. Variables

The variables in this research were divided into two: independent variable (X) and dependent variable (Y). The Differentiated Learning Strategy with Project Based Learning is the independent variable. Meanwhile, the dependent variable in this research is the students' reading comprehension achievement. It refers to the test scores and progress that were obtained by the students on the ability to comprehend analytical exposition text in reading before and after being taught using Differentiated Learning Strategy integrated into Project Based Learning. It was measured to find out the significant effect on learning effectiveness of the

students' reading comprehension achievement through Differentiated Learning Strategy integrated into Project Based Learning.

3.3. Data Sources

In doing a research, it is important to describe the context in which the study was conducted, including the setting and the participants involved. This section outlines the location of the research, the reasons behind the selection of the site, and the characteristics of the population and sample in the study. The following subsections explain the setting and the participant details in more depth.

3.3.1 Setting

The research was conducted at SMA Immanuel Bandar Lampung which is located in Teluk Betung Utara, Bandar Lampung. It is one of private schools in Lampung that has been established for around 28 years. Moreover, the researcher collected the data from grade eleventh students in SMA Immanuel Bandar Lampung on May 2024. The researcher chose this school because it related to the problem of the students' reading comprehension based on an English teacher who teaches there.

3.3.2 Population and sample

The population of this research is the eleventh-grade students of SMA Immanuel Bandar Lampung. There are four classes of the eleventh grade in that school. There are 24-25 students in each class. Meanwhile, as the sample of this study, the researcher took two classes as control class and experimental class. The researcher chose class of XI.2 as the experimental group. On the other hand, the control group was XI.3 as they share similar characteristics to the experimental

group. The students in control class were taught through conventional Project Based Learning technique, meanwhile students in experimental class were taught through Differentiated Learning Strategy with Project Based Learning. In determining the sample, the researcher used purposive sampling based on teacher's recommendation. It is aimed to choose two classes which have same ability in reading.

3.4 Data Collecting Technique

In conducting this research, the researcher used test and non-test to collect the data. To assess abilities or knowledge in reading comprehension, the researcher used two kinds of tests; pre-test and post-test. Meanwhile, questionnaire was used to find out the learning styles in the experimental class.

3.4.1   Pre-test

The pre-test was given for both control and experimental classes before the treatment. They were XI.2 and XI.3. The aim was to know students' basic reading comprehension before running the treatments. The pre-test consisted of 45 multiple-choice questions with several analytical exposition passages in which the students needed to answer the questions based on the passage. Moreover, the tests contained five aspects of reading: main idea, specific information, inference, reference, and vocabulary in multiple-choice test.

3.4.2   Post-test

Post-test was administered in class XI.2 and XI.3. The post-test had the same instructions as pre-test. It was conducted to determine whether there was any significant difference in students' reading comprehension as the effect of teaching

reading comprehension using Differentiated Learning Strategies integrated into Project Based Learning.

3.4.3 Questionnaire

The questionnaire was given before treatment in experimental group. The questionnaire was about the students' learning style (visual, auditory, or tactile). The questionnaire was adopted from University of Texas Learning Center (2006). The questionnaire used was in Likert Scale Form; a scale with a number of points or spaces. The questionnaire consisted of 24 items; there were 8 items for each kind of learning styles.

Table 3.1 Learning Style Questionnaire Blue Print

No	Learning Style Indicator	Item	Total
1	Visual	2,3,7,10,14,16,19,22	8
2	Auditory	1,5,8,11,13,18,21,24	8
3	Kinesthetic	4,6,9,12,15,17,20,23	8
TOTAL ITEMS			24

3.5 Validity

To measure whether the test had good validity, the researcher used the content validity and construct validity of the test. Therefore, the purpose of the instrument was to provide the data on students' reading comprehension before and after the treatments. There are two types of validity; content validity and construct validity.

3.5.1 Content Validity

Content validity is concerned whether the test is sufficiently representative and comprehensive for the test. In the content validity, the material was given suitable with the curriculum. Content validity is the extent to which a test

measures a representative sample of the subject meter content, the focus of content validity is adequacy of the sample and simply on the appearance of the test (Hatch & Farhady, 1982).

To demonstrate content validity, the researcher investigated the degree to which a test is a representative sample of the content of whatever objectives or specifications the test is originally designed to measure. To investigate the degree of match, the researcher enlisted the data from the syllabus to make judgments about the degree to which the test items matched the test objectives or specifications of a text. In this research, the researcher examined the test based on the learning objectives stated on the syllabus made by the teacher in order to compose the material and activity. Moreover, the test given to the students were made based on the indicators on the syllabus.

The topic chosen was analytical exposition text. It was the representative of reading materials of Curriculum Merdeka as a matter of tailoring the lesson to students' need. To know whether the test had good content validity, the items of the test were discussed with the English experts, Prof. Dr. Cucu Sutarsyah, Dip. TESL., M.A. and Dr. Muhammad Sukirlan, M.A.

Table 3.2 Content Validity of Reading Comprehension Test (Try Out)

Aspect of Reading	Item	Total	Percentage (%)
Determining Main Idea	4,9,11,20,23,30,36,37,42,47	9	18%
Identifying Supporting Details/Specific Information	2,6,12,15,19,23,27,29,33,39,44	11	22%
Identifying Reference	5,7,8,14,18,28,31,37,45,49	10	20%
Making Inference	1,2,10,13,21,26,30,38,43,50	10	20%
Understanding Vocabulary	16,17,20,24,32,35,36,41,46,48	10	20%
TOTAL		50	100

Table 3.3 Content Validity of Reading Comprehension Test (After Validation)

Aspect of Reading	Pre-Test	Total	Percentage (%)	Post-Test	Total	Percentage (%)
	Item			Item		
Determining Main Idea	4,9,11,20,23, 30,36,37,42	9	20	4,9,11,17,23, 31,35,37,42	9	20
Identifying Supporting Details/Specific Information	2,6,12,14,18,21, 24,25,29,35,39	11	24	1,7,12,14,18,21, 24,25,30,34,39	11	24
Identifying Reference	5,7,8,13,17, 27,33,40,44	9	20	2,3,10,13,20, 27,33,40,44	9	20
Making Inference	1,3,10,19, 26,34,38,45	8	18	5,6,8,22, 26,29,38,45	8	18
Understanding Vocabulary	15,16,22,28, 31,32,41,43	8	18	15,16,19,28, 32,36,41,43	8	18
TOTAL		45	100		45	100

3.5.2   Construct Validity

It is concerning to whether the test is actually based on the theory of which it means to know the language that is being measured (Nurweni, 2018). In this research, the researcher focused on reading comprehension in the form of exposition texts. Nuttall (1985) in Patria (2015) states that the relation validity of the instrument refers to construct validity in which the question represents five of sort reading skills, i.e. determining main idea, finding detail information, reference, inference and vocabulary mastery. Skills of reading in the test are a part of the construct validity and the item numbers are a part of the content validity.

Furthermore, in order to evaluate whether the reading comprehension test had construct validity or not, the researcher's advisors; Prof. Dr. Cucu Sutarsyah, Dip. TESL., M.A. and Dr. Muhammad Sukirlan, M.A. as raters checked the items of the test that were presented in the table specification below:

Table 3.4 Construct Validity of Reading Comprehension Test (Try Out)

No	Questions	1st Rater		2nd Rater	
		Yes	No	Yes	No
1	Do the items 4,9,11,22,25,34,40,42,47 measure the determining main idea?	√		√	
2	Do the items 2,6,12,15,19,23,27,29,33,39,44 measure the identifying supporting detail?	√		√	
3	Do the items 1,3,10,13,21,28,30,40,43,50 measure the identifying reference?	√		√	
4	Do the items 5,7,8,14,18,28,31,37,41,49 measure the making inference?	√		√	
5	Do the items 16,17,20,24,32,34,35,41,46,48 measure the understanding vocabulary?	√		√	

(Appendix 9)

After the validation from the experts, the fifty items of try out were administered; then, the result was analyzed based on the level of difficulty and the discrimination power. Five items were categorized difficult and poor; so, they had to be dropped. Meanwhile, the rest were used for pre-test and post-test. They are described as the following:

Table 3.5 Construct Validity of Reading Comprehension Test (After Validation)

No	Questions	1st Rater		2nd Rater	
		Yes	No	Yes	No
1	Do the items 4,9,11,20,23,30,36,37,42 measure the determining main idea?	√		√	
2	Do the items 2,6,12,14,18,21,24,25,29,35,39 measure the identifying supporting detail?	√		√	
3	Do the items 5, 7, 8, 13, 17, 27, 33, 40, 44 measure the identifying reference?	√		√	
4	Do the items 1, 3, 10, 19, 26, 34, 38, 45 measure the making inference?	√		√	
5	Do the items 15, 16, 22, 28, 31, 32, 41, 43 measure the understanding vocabulary?	√		√	

3.6 Reliability of the Test

To ensure the consistency of the test, it was applied to the sample that consisted of 50 eleventh-grade students of SMA Immanuel Bandar Lampung. Reliability of the test could be defined as the extent to which a test produced consistent result when administrated under similar conditions (Hatch and Farhady, 1982).

Split-half technique was used to estimate the reliability of the test and to measure the coefficient of the reliability between odd and even numbers which was computed by using SPSS 24.0 program. The researcher analyzed the data using Cornbach's Alpa. In this case, the researcher used the standard of reliability by Setiyadi (2018) as follows:

1. Reliability range from 0.800 up to 1.000 is very high
2. Reliability range from 0.600 up to 0.800 is high
3. Reliability range from 0.400 up to 0.600 is fair
4. Reliability range from 0.200 up to 0.400 is low
5. Reliability range from 0.000 up to 0.200 is very low

The result of the reliability testing by using SPSS 24.0 can be seen from the table:

Table 3.6 Reliability Statistics of the Reading Comprehension Test

Cronbach's Alpha		Value	0.918
	Part 1	N of Items	25[a]
		Value	0.907
	Part 2	N of Items	25[b]
	Total N of Items		50
Correlation Between Forms			0.916
		Equal Length	0.956
Spearman-Brown Coefficient		Unequal Length	0.956
Guttman Split-Half Coefficient			0.955

a. The items are: Q1, Q3, Q5, Q7, Q9, Q11, Q13, Q15, Q17, Q19, Q21, Q23, Q25, Q27, Q29, Q31, Q33, Q35, Q37, Q39, Q41, Q43, Q45, Q47, Q49.

b. The items are: Q2, Q4, Q6, Q8, Q10, Q12, Q14, Q16, Q18, Q20, Q22, Q24, Q26, Q28, Q30, Q32, Q34, Q36, Q38, Q40, Q42, Q44, Q46, Q48, Q50.

(Appendix 10)

The result of the computation showed that the reliability coefficient of the test was 0.955. Referring to the criteria Cronbach's Alpha, the reading test instrument belonged to the category of very reliable. Therefore, it can be concluded that the test instrument was very reliable and applicable when it was used to take the data.

3.7 Normality and Homogeneity Testing

It is essential to ensure that the data meets the assumptions required for parametric analysis. Normality and homogeneity tests were carried out to determine whether the data were normally distributed and has equal variances. The following subsections describe the procedures and criteria used for both the normality and homogeneity tests in this research.

3.7.1 Normality Testing

Normality testing was conducted by the researcher to determine whether the gotten data is normally distributed or not. The computation of normality testing in this research used SPSS 24.0. To determine the value, the researcher utilized the Saphiro Wilk to analyze the data. Below is the formula:

H_0: The distribution of the data is normal.

H_I: The distribution of the data is not normal.

The level of significance used is 0.05. H_0 is accepted if the result of the normality test is higher than 0.05 (sign > 0.05).

Table 3.7 Result of Normality Test

Tests of Normality

	Group	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Control class	Pretest	.099	25	.200*	.953	25	.296
	posttest	.123	25	.200*	.968	25	.596
Experimental Class	pretest	.161	25	.095	.928	25	.079
	posttest	.128	25	.200*	.929	25	.083

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

(Appendix 11)

The test of normality indicated that both the pre-test and post-test data followed a normal distribution. According to the Kolmogorov-Smirnov test, the significance values for datasets were 0.200 (for Control Class pre-test & post-test; and for Experimental Class post-test) and 0.095 for Experimental Class pre-test, which were greater than the threshold of 0.05, confirming normality. Similarly, the Shapiro-Wilk test results showed significance values of 0.079 for the pre-test and 0.083 for the post-test, in experimental class both above 0.05. Then in control class, test results showed significance values of 0.296 for pre-test and 0.596 for the post-test, which supported the assumption of normality.

3.7.2 Homogeneity Testing

After getting the conclusion of normality test, the researcher determined the homogeneity test in order to know whether the data were homogenous or not. In this research, the researcher used statistical computation by using SPSS 24.0. The test of homogeneity employed Levene's test. The criteria of acceptance or rejection of homogeneity test were as follows:

H_0 is accepted if sig $\geq \alpha = 0.05$

Ha is accepted if sig $< \alpha = 0.05$

The hypotheses for the homogeneity test were formulated as follows:

H_0 = the variances of the data are homogenous

Ha = the variances of the data are not homogenous

Table 3.8 Statistical Correlation of homogeneity

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Gain	Based on Mean	.337	1	48	.564
	Based on Median	.230	1	48	.634
	Based on Median and with adjusted df	.230	1	47.810	.634
	Based on trimmed mean	.334	1	48	.566

(Appendix 12)

Based on the table above, it can be seen that the significant level of homogeneity test between students score in control and experimental classes is 0.566. It can be stated that the data from control and experimental classes is in the same variances, which is homogeneous.

3.8 Item Analysis

The analysis Level of Difficulty (LD) is to find out whether the test items are easy or not from the students' point of view who take the test. To see the level of difficulty, the researcher used the following formula:

$$LD = \frac{U + L}{N}$$

Note:
LD   : Level of Difficulty
U   : the number of correct answers in the upper group
L   : the number of correct answers in the lower group

N   : the number of student who join the test

The criteria are:
         < 0.30   : Difficult
         0.31 – 0.70   : Average
         > 0.70   : Easy

<div align="right">(Shohamy, 1985)</div>

Table 3.9 Result of Item Analysis

No	Category	Items
1	Difficult	13,23,26,28,36
2	Average	1,2,3,4,5,6,7,8,9,10,11,12,14,15,16,17,18,19,20,21,22,24,25,27,28,29,30,31,32,33,34,35,37,38,39,40,41,42,43,44,45,46,47,48,49,50
3	Easy	-

<div align="right">(Appendix 13)</div>

The table shows that out of 50 test items, 5 items were categorized as difficult, 45 items were classified as average, and no items were categorized as easy. The dominance of average-level items indicated that the test was generally well-balanced and appropriate for measuring students' abilities. Therefore, they were administered for pre-test and post-test.   However, the items which were considered difficult were dropped out.

3.9 Discrimination Power

Discrimination Power refers to the extent to which the items are able to differentiate between high and low level students on the test. Discrimination power is used to differentiate between the students who have high ability and

those who have low ability. The discrimination power is calculated by this following formula:

$$DP = \frac{U - L}{\frac{1}{2}N}$$

Note:

DP	: Discrimination Power
U	: The proportion of the upper group students
L	: The proportion of the lower group students
N	: Total number of the students

The criteria:

0.00 – 0.19	: Poor
0.20 – 0.39	: Enough
0.40 – 0.69	: Good
0.70 – 1.00	: Excellent

(Arikunto, 2007)

Table 3.10 Discrimination Power of Instrument

No	Category	Items
1	Poor	13,23,26,28,36
2	Enough	-
3	Good	16,21,35,41,48,49
4	Excellent	1,2,3,4,5,6,7,8,9,10,11,12,14,15,17,18,19,20,22,24,25,27,28,29,30,31,32, 33,34,37,38,39,40,42,43,44,45,46,47,50

(Appendix 14)

Based on the result of discrimination power, the researcher found that there were 5 items that were considered poor, 6 items that were considered good and 39 items that were considered excellent. Therefore, 5 items which were considered poor had to be dropped and 45 which were considered good and excellent used for pre-test and post-test.

3.10 Data Collecting Procedure

In collecting the data, the researcher used the following steps:

1. Selecting and determining the population and sample of the research.

   The population of this research was the eleventh-grade students in SMA Immanuel Bandar Lampung. The researcher chose two classes of four classes to be experimental and control groups.

2. Selecting the materials.

   Selecting the reading materials was determined by the levels of the students. Therefore, the researcher used the learning outcome for the eleventh grade of SMA Immanuel Bandar Lampung. In this session, Analytical Exposition was chosen as the material taken from the syllabus that is related to the basic competence based on Curriculum Merdeka. The material should cover the goal of teaching analytical exposition text as the target of the achievement.

3. Determining the instrument of the research

   The instrument in this research was reading comprehension test. The researcher began by drafting an instrument related to analytical exposition text informed by syllabus and relevant literature, as the material was one of the focus in the second year curriculum. This draft was, then, validated by English experts, aiming to assess its validity in terms of construct, face, content and criteria-related aspects. Then, for the experimental group, in addition to the reading comprehension test, questionnaire was given to know the learning profile focused on learning style of the students (visual, auditory, and tactile). The purpose of this activity was in order to know how to

differentiate the instruction in the treatment regarding to the content, process and product.

4. Conducting try out of the reading comprehension test. This activity was aimed to find whether the instruments were valid and reliable. If the result showed that the instruments were valid and reliable, it meant that the instruments could be used to gather the data. Try out of the reading comprehension test was given to the class which did not involve as experimental or control groups. It was administered before the pre-test.

5. Administering the pre-test.

   The pre-test was given for both of experimental class and control class before the treatment. The aim of this activity was to find out the students' reading comprehension. Knowing the students' reading comprehension would help the researcher to see the difference of students' reading comprehension clearly before and after the treatment.

6. Distributing the questionnaire.
   To find out the learning styles of the students, the questionnaire was administered in the experimental group. It was about the students' learning style, adopted from University of Texas Learning Center (2006). It used Likert Scale Form; a scale with a number of points or spaces. The questionnaire consisted of 24 items; there were 8 items for each kind of learning styles.

7. Administering the treatment.

   The treatment was given for students in experimental and control group. During the treatment, differentiated learning strategy integrated into Project Based Learning was implemented to experimental group while conventional Project Based Learning was implemented to control group.

8. Administering the post-test for both experimental and control groups.

The post-test was given for both of experimental group and control group after the treatment. The aim of this activity was to find out the students' reading comprehension. Knowing the students' reading comprehension would help the researcher to see the difference of students' reading comprehension clearly before and after the treatment clearly.

9. Analyzing the data

The researcher scored the results of pre-test and post-test from the experimental group and control group. Then, the researcher drew conclusion from the results of the pre-test and the post-test that administered by the students.

Those are the steps of doing this research to ease the researcher in conducting the research.

3.11 Data Analysis

Employing quantitative methods, the researcher meticulously gathered the data and conducted a rigorous analysis. In this research, the researcher undertook a comprehensive analysis of the data derived from reading comprehension test. The steps were as follows.

a. First Research Question

To answer the first research question, the researcher analyzed the data by the following steps:

1. The researcher analyzed the scores of pre-test and post-test in the experimental group and control group. The scores were calculated by using the formula:

$$S = \frac{R}{N} \times 100$$

Where:

S	: Score of the test.
R	: The total of right answer.
N	: The total.

2. The researcher made a distribution table of students' scores of pre-test and post-test in order to measure the difference between the result of pre-test and post-test based on the class that has been created.

3. The researcher tabulated the mean score of the students' reading comprehension test into SPSS version 24 and analyzed them using *Independent Groups T-test.*

4. Based on the result of the analysis, the researcher drew a conclusion whether the difference in the students' reading comprehension test achievement of experimental group and control group is significant.

b. Second Research Question

The researcher analyzed the data by the following steps below to answer the second research question:

1. The researcher grouped the test items of each reading aspects.

2. The researcher tabulated the students' answers into SPSS 24.0 and analyzed them to see the frequency of the correct answer of each reading aspect.

3. The researcher tabulated the percentage of the correct answer of each test item from experimental and control group into a table and compared them to see the differences.

4. The researcher compared the difference of each aspect of reading and identified the highest percentage among them.

c. Third Research Question

The researcher analyzed the data by the following steps below to answer the third research question:

1. The researcher grouped the test items of each reading aspects based on learning styles.

2. The researcher tabulated the students' answers (pre-test & post-test) into SPSS 24.0 and analyzed them to see the frequency of the correct answer of each reading aspect.

3. The researcher tabulated the percentage of the correct answer of each test item from experimental group into a table and compared them to see the differences.

4. The researcher compared the difference of each aspect of reading and identified the highest percentage among them.

3.12 Hypothesis Testing

The hypothesis is a temporary answer to the research question. Setiyadi (2018) explains that a hypothesis in research is a statement of variable distribution or the relation between two variables that will be investigated. There were two hypotheses in this research namely null hypothesis (Ho) and alternative hypothesis (H1). The formula for testing the hypotheses of this research is:

$$H_1 = \text{Sig.} < 0.05$$

Related to the first research question, the hypothesis that was tested in this study as the following:

H_0 : There is no significant difference in students' reading comprehension between those who are taught using Differentiated Learning Strategy integrated into Project Based Learning and those who are taught using conventional Project Based Learning.

H_1 : There is significant difference in students' reading comprehension between those who are taught using Differentiated Learning Strategy integrated into Project Based Learning and those who are taught using conventional Project Based Learning.

The research method consisted of research design, variables of the research, data sources, data collecting techniques, validity, reliability of the test, normality and homogeneity testing, item analysis, discrimination power, data collecting procedure, data analysis, and hypothesis testing.

V. CONCLUSIONS AND SUGGESTIONS

This chapter discusses the conclusions of this research based on the provided research questions and the suggestions for teachers and other researchers.

5.1 Conclusions

It can be concluded that the results of conducting conventional Project Based Learning and Differentiated Learning Strategy with Project Based Learning enabled the students to develop their reading comprehension.

There is a significant difference of students' reading comprehension between those who were taught through conventional Project Based Learning and those who were taught through Differentiated Learning with Project Based Learning. However, Differentiated Learning Strategy with Project Based Learning is more effective than conventional Project Based Learning in developing students' reading comprehension. The significant difference in achievement can be attributed to the personalized approach, which considers students' learning preferences, provides tailored reading materials, and incorporates scaffolding and continuous feedback. These factors enhance engagement, motivation, and cognitive processing, leading to higher comprehension levels. Ultimately, this approach offers a more student-centered

and structured framework, serving as a model for future instructional strategies aimed at enhancing reading comprehension.

Differentiated Learning Strategy with Project Based Learning leads to significant improvements across all five aspects of reading comprehension – identifying main idea, specific information, making inference, and understanding vocabulary. While convention Project Based Learning also contributed to improvements, particularly in making inference and understanding vocabulary, the experimental class benefited from a more tailored approach that addressed diverse learning preferences, provided structured reading strategies, and fostered active engagement through differentiated activities.

5.2 Suggestions

Based on the discussions, conclusions, and limitations stated previously, the researcher recommends some suggestions as follows;
1. For teachers

    -   Based on the result, the researcher suggests teachers to use the Differentiated Learning Strategy with Project Based Learning for teaching English particularly in developing reading comprehension due to its effectiveness help students to be more active in the learning process.

    -   The teachers should prepare well before implementing the strategy in the class. It should be well-organized in order to complete the process properly and get the best possible outcome. It is important to manage the time allocation and classroom management wisely.

    -   Introducing differentiated instruction gradually can help students adjust. Providing guided practice, scaffolding, and continuous support ensures

that students develop autonomy in their learning without feeling overwhelmed.

2. For other researchers

- Future studies can explore how Differentiated Learning Strategy with Project Based Learning affects reading comprehension in other text genres.

- Conducting long-term research can provide deeper insights into the sustained impact of this approach on students' reading comprehension over time.

- Future researcher can examine the effectiveness of this strategy in different educational settings, including students with varying proficient levels or learning needs.

- Research on effective teacher training programs for implementing Differentiated Learning Strategy with Project Based Learning can help improve classroom practices and overcome instructional challenges.

This chapter has explained the conclusion of this research and also the suggestion for teachers and other researchers.

REFERENCES

Aghayani, B. & Hajmohammadi, E. (2019). Project Based Learning: Promoting EFL Learners' Writing Skill. LLT Journal: *A Journal on Language and Language Teaching*. 22(1) https://doi.org/10.24071/llt.2019.220108

Ahmadi, M. R., Ismail, H. N., & Abdullah, M. K. K. (2013). The importance of metacognitive reading strategy awareness in reading comprehension. *English Language Teaching*, 6(10), 2-3 http://dx.doi.org/10.5539/elt.v6n10p235

Aldossari, A. T. (2018). The Challenges of Using the Differentiated Instruction Strategy: A Case Study in the General Education Stages in Saudi Arabia. *International Education Studies.* https://doi.org/10.5539/ies.v11n4p74

Aloqaili, A. S. (2012). The relationship between reading comprehension and critical thinking: A theoretical study. *Journal of King Saud University - Languages and Translation.* doi:10.1016/j.jksult.2011.01.001

Al-Shukairat, M. (2009). Teaching Strategies and Assessment: Essays in Teaching Development. *Amman: Dar AlFurqan.*

Alrwele, N. S. (2017). Effects of infographics on student achievement and students' perceptions of the impacts of infographics. *Journal of Education and Human Development*, *6*(3), 104–117. https://doi.org/10.15640/jehd.v6n3a12

Alyousef, H.S. (2005). Teaching reading comprehension to ESL/EFL learners.*The Reading Matrix.*5(2)

Arikunto. (2006). *Prosedur Penelitian Suatu Pendekatan Praktek.* Jakarta: PT. Rineka Cipta

Attia, M.A. (2009). *Comprehensive quality and new in teaching*. Amman: Dar Safaa.

Bari, A. & Maher, S. (2010). *Reading comprehension strategies: theoretical foundations and practical applications*. Amman: Dar Al Masirah.

Brown, J. D. (2000). What is construct validity?.*JALT Testing and Evaluation SIG Newsletter*.

Brown, H. D. (2001). *Teaching by Principle and Interactive Approach to Language Pedagogy*.New York: Longman Inc.

Chen, J.-H., & Chen, Y.-C. (2018). Differentiated Instruction in a Calculus Curriculum for College Students in Taiwan. *Journal of Education and Learning*. 7(1), 88–95. https://doi.org/10.5539/jel.v7n1p88

Chieke, J,C. (2017). Determination of Auditory and Visual Learning Styles of
    Adult Learners in Adult Literacy Centers in Anambra State, Nigeria, *IOSR-
    JRME,* 7(3)

Chislett, V. M, & Chapman, A. (2005). *VAK test questionnaire.* From
    www.businessballs.com

Creswell, J. W. (2012). *Educational research: planning, conducting, evaluating,
    quantitative and qualitative research (Fourth Edition).* United State of
    America: Pearson Education Inc

Dajani, M. (1999). The Language Learning Styles of Palestinian Foreign
    Language Learners at the Grade. *Unpublished Master's Thesis, Al-Quds
    University, Al-Quds, Palestine.*

Dunn, R., & Dunn, K. (1993). *Teaching secondary students through their
    individual learning styles: Practical approaches for grades 7–12.* Allyn &
    Bacon.

Elizabeth, S. P. (2003). *Teaching reading, Chicago: International Academy of
    Education Every First Sentence In Paragraph, Vocabulary, end Of Chapter
    Question, Summary) Teaching Strategy To Improve Students' Reading
    Comprehension At The Second Grade Students Of Sman 1 Bulukumba.*
    Unpublish Thesis. Alauddin State Islamic University Of Makassar.

Emilia. E. (2015) *Pendekatan Berbasis Text Dalam Pengajaran Bahasa Inggris*,
    (Kiblat Buku Utama: Bandung).

Esteria, A. (2017). The Role of PQRST Strategy to Improve Reading
    Comprehension in Indonesia. *Graduate School Conference, State University
    of Malang*, 2-3

Fleming, N. D., & Baume, D. (2006). Learning styles again: VARKing up the
    right tree! *Educational Developments*, *7*(4).

Gilakan, A.P. (2012). Visual, auditory, kinaesthetic learning styles and their
    impacts on English language teaching.*Journal of Studies in Education*,2(1),
    104-113. https://doi.org/10.5296/jse.v2i1.1007

Gilakjani, A. P., & Sabouri, N. B. (2016). A study of factors affecting EFL
    learners' reading comprehension skill and the strategies for improvement.
    International Journal of English Lingustics.

Ginja, T. G., & Chen, X. (2020). Teacher educators' perspectives and experiences
    towards differentiated instruction. *International Journal of Instruction,*
    13(4), 781–798. https://doi.org/10.29333/iji.2020.13448a

Grant, M. M. (2002). Getting a grip on PBL: Theory, cases and recommendations.
    *Meridian: A Middle School Computer Technologies Journal A Service of NC
    State University,
    Raleigh*.http://www.ncsu.edu/meridian/win2002/514/projectbased.pdf.

Hakim, I.A., Tanuatmadja A.P., & Hodairiyah. (2022). Dealing with Common
    Challenges in Improving Reading Comprehension Skills for Indonesian
    Secondary School Students. *ELS Journal on Interdisciplinary Studies in
    Humanities.* https://doi.org/10.34050/elsjish.v5i2.21042

Hamidah,H., Rabbani,T.A, Fauziah,S., Puspita, R.A., Gasalba, R.A., &
    Nirwansyah.(2020).*HOTS-Oriented Module:Project-Based
    Learning*.Jakarta:SEAMEO QITEP in Language.

Harmer, J. (1998). *How to Teach English*. London: Longman.

Hatch, E., and Farhady, H. (1982). *Research Design and Statistics for Applied Linguistics*. Rowley, Mass. : Newbury House.

Hijazi, Ayman Youssef. (2008). The effectiveness of using metacognitive strategies in developing reading comprehension skills and reading tendencies among sixth graders in Palestine. *Unpublished Master's Thesis, Ain Shams University, Cairo, Egypt.*

Hocket, J.A. (2018). *Differentiation Strategies and Examples: Grades 6-12*. Tennessee: Tennessee Department of Education.

Hwang, G. J., Hung, C. M., & Chen, N. S. (2014). Improving learning achievements, motivations, and problem-solving skills through a peer assessment-based game development approach. *Educational Technology Research and Development*, *62*(2), 129–145. https://doi.org/10.1007/s11423-013-9320-7

Indrayani, S. A. (2014). *The effectiveness of using mind mapping in improving students' reading comprehension of narrative text*. Unpublished Undergraduate Thesis: Lampung University.

Imbaquingo, A. & Cardenas, J (2023). Project Based Learning as a Methodology to Improve and Comprehension Skills in the English Language. MDPI:*Education* Sciences 13(6) 587 https://doi.org/10.3390/educsci13060587

Jad, M. L. (2003). The effectiveness of a proposed strategy in developing some reading comprehension skills for the second preparatory grade students. *Reading and Knowledge Magazine.*

Kavlu, A. (2015). The effect of Project-Based Learning on Undergraduate EFL Students' EFL Students' Reading Comprehension Ability. *Journal of Education in Black Sea Region.*

Kopitski, M. (2007). *Exploring the Teaching of Inference Skills*. Minnesota:Hamline University

Krisnoviani, R., & Sulistyani, S. (2022). Using Project-Based Learning Model to Promote Students' Listening Comprehension at Vocational High School. *Edukatif : Jurnal Ilmu Pendidikan,* 4(4) https://doi.org/10.31004/edukatif.v4i4 .2805

Land, S. & Greene, B. A. (2000). PBL with the world wide web: A qualitative study of resource integration. *Educational Technology Research and Development.* http://link.springer.com/article/10.1007/BF02313485

Longan, J. 2002. Reading and Study Skill, Seventh Edition. Atlanta cape Community College. New York:McGraw-Hill Companies.

Magableh, I.S.I. & Abdullah, A. (2020). Effectiveness of Diferentiated Instruction on Primary School Students' English Reading Comprehension Achievement. *International Journal of Learning, Teaching and Educational Research*.19(3). https://doi.org/10.26803/ijlter.19.3.2

Marx, R. W., Blumenfeld, P. C., Krajcik, J. S., & Soloway, E. (1997). Enacting Project-Based Science. *The Elementary School Journal.*

Mayer, R. E. (2001). *Multimedia learning*. Cambridge University Press.

Ma'youf, N.A. & Aburezeq, I.M. (2022). The Effectivess of Differentiated Teaching Strategy in Developing Reading Comprehension Skills of Fourth Grade Students in the United Arab Emirates. *Theory and Practice in Language Studies*.12(1) https://doi.org/10.17507/tpls.1201.03

McWother, K.T. & Kathleen, T. (1986). *College Reading and Study Skills.* Boston: Little Brownand co. Limited.

Mirawati I.G.A, Suwastini, N. K. A., Haryanti N.D, & Jayantini, I. G. A. S. R. (2022). Differentiated Instructions: Relevant Studies on Its Implementation.*Prasi: Jurnal Bahasa, Seni, dan Pengajarannya* https://doi.org/10.23887/prasi.v17i1.41867

Nasr, M. S. (2014). *The effectiveness of using the differentiated Teaching strategy in developing the reading and writing skills of second grade students in the Arabic language course.* Unpublished Master's Thesis, the Islamic University of Gaza, Gaza, Palestine.

Nurweni, A. (2018). *English Teaching Assessment; Artificial and Authentic Assessment.* Yogyakarta: GrahaIlmu.

Nuttal, C. (2000). *Teaching Reading Skill in a Foreign Language.* London: Heinermann Educational Books.

Obeidat, T. & Al-Sameed, A. (2007). *Teaching strategies in the twenty-first century - a guide for the teacher and educational supervisor.* Amman: Dar Al-Fikr.

Ozdamli,F. & Ozdal,H.(2018).Developing an instructional design for the design of infographics and the evaluation of infographic usage in teaching based on teacher and student opinions.*Eurasia Journal of Mathematics, Scienc and Technology Education,*14(4). https://doi.org/10.29333/ejmste/81868

Patria, Rachma, Sukirlan, M., & Simanjuntak, E. G. (2015). *Increasing students' reading comprehension through mind mapping technique from narrative text.* http://digilib.unila.ac.id/6952

Potot at al. (2023). Differentiated Instruction as Strategy in Improving Reading Comprehension. *Journal of English Teaching and Applied Linguistics*, 123-125 doi: 10.32996/jeltal.2023.5.4.12

Praba, L.T., Artini, L.P., & Ramendra, D.P. (2017). Project Based Learning and Writing Skill in EFL: are they related?. *EDP Sciences.* https://doi.org/10.1051/shsconf/20184200059

Richard, J. C. & Wily, A. R. (2002). *Methodology in Language Teaching: An Anthology of Current Practice.* Cambridge University.

Riswandi, D. (2018). The Implementation of Project-Based Leearning to Improve students' Speaking Skill. *International Journal of Language Teaching and Education*

Sapan, M. & Mede, E. (2022). The Effects of Differentiated Instruction (DI) on Achievement, Motivation, and Autonomy among English Learners. *Iranian Journal of Language Teaching Research*, 10(1), 127-144. doi: 10.30466/ijltr.2022.121125

Saad, M. A. (2006). *Weakness in reading and learning styles.* Cairo: The world of books.

Sahril. Aulianti, S.N. & Nur, M.S. (2021). *The Impact of Differentiated Instruction on Students' Performance in Critical Reading. Eralingua: Jurnal Pendidikan Bahasa Asing dan Sastra.* 5(1) https://ojs.unm.ac.id/eralingua

Setiyadi, A. B. (2018). *Metode penelitian untuk pengajaran bahasa asing: Pendekatan kuantitatif dan kualitatif* (2nd ed.). Graha Ilmu.

Sharpe, J. P. (2005). *How to Prepare the TOEFL Test.* 1st Edition: Ohio

Shehu, I. (2015). Factors that influence students' reading comprehension achievement in the foreign language. *Anglisticum Journal (IJLLIS),* 4(3)

Shohamy, E. (1985). *Rater reliability of the oral interview speaking test.* Foreign Language Annals.

Smith, S. (2020). Establishing a purpose. *In EAP Foundation.* *https://www.eapfoundation.com/reading/skills/purpose*

Sofiyan, R. & Siwi, M. K. (2018). *The impact of visual auditory and kinesthetic learning styles on economics education teaching.* Advances in economics business and management research, 57

Sousa, D.A., & Tomlinson, C.A. (2011).*Differentiation and the Brain: How Neuroscience Supports the Learner-Friendly Classroom*. Bloomington, IN: Solution Tree Press.

Sugiyono. (2011). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung:Afabeta

Sulistiyani, E. (2014). *The effectiveness of using mind mapping technique on students achievement of reading narrative text in the second grade students of MTS Negeri Bandung in academic year 2013/2014*. Unpublished Undergraduate Thesis: IAIN Tulung Agung Institution.

Suparman, U. (2001). *Developing Reading Comprehension Skills and Strategies.*Tangerang: Mata Baca

Suryanto. (2017). An Investigation On English Reading Comprehension Problems In Indonesian Cultural Contexts. *The 1st International Conference on Education, Science, Art and Technology (the 1st ICESAT) Universitas Negeri Makassar*

Sutarsyah, C. (2015). *Reading theory and practice*. Yogyakarta : Graha Ilmu

Thomas, J.W. (2000). *A Review of Research on Project-Based Learning.*San Rafael, CA: Autodesk Foundation

Tomlinson, C. A. (2001). *How to Differentiate Instruction in Mixed-Ability Classrrom.* Alexandria: Association for Supervision and Curriculum Development

Vandergrift, L. & Goh, C. C. M. (2012). *Teaching and learning second language listening: Metacognition in action*. Routledge.https://doi.org/10.4324/9780203843376

Wiratmo, S., Wirawati, B., & Sulistyawati, E. (2022). Improving Students' Reading Comprehension Using Project-Based Learning at VIII F Grade of SMPN 43 Surabaya. *Edumaspul-Jurnal Pendidikan.* 4(5), 1373-1376

Yanti, R. (2017). *The effectiveness of using short story as the media towards the students' vocabulary achievement of X-MIA 3 at MAN 2 Tulungagung*. Unpublished Undergraduate Thesis: State Islamic Institute (IAIN) of Tulungagung. Yunus, M. M., & C

Younis, Fathi & El Naga, Mahmoud & Madkour, Ali. (1998). *The basics of teaching Arabic and Islamic education*. Cairo: House of Culture.