

CHAPTER 2

LITERATURE REVIEW

This chapter briefly explains some theories that support the study. The theories relate to the teachers' professional development, teacher agency, and Game-Based Learning (GBL).

A. Teachers' Professional Development

Teachers' Professional Development (TPD) is a long-term and systematic process that supports teachers in developing their knowledge, skills, and teaching practices throughout their professional careers (Guskey, 2014). This perspective highlights that the primary goal of TPD is to improve the quality of teaching by enabling teachers to continuously develop pedagogical knowledge and adopt new instructional strategies. Building on this foundation, effective TPD involves collaboration, reflection, and context-based learning, suggesting that teachers learn more effectively when they engage in discussions, share experiences, and apply newly acquired knowledge directly to real classroom settings (Sapkota, 2025). Therefore, professional learning should meaningfully connect theory to practice while encouraging teachers to collaboratively address classroom challenges and improve instructional practices.

Effective professional learning should lead to meaningful improvements in teaching practices and student learning. In this regard, the primary purpose of TPD is to improve the quality of teaching and student learning outcomes (Darling-Hammond et al., 2017). Research further indicates that high-quality professional development contributes to teachers' pedagogical growth and enhances their capacity to implement innovative instructional approaches, particularly when teachers engage in continuous reflection and practice-embedded learning (Desimone, 2009). In short, TPD supports teachers' personal and professional growth while encouraging them to become more innovative and creative in responding to classroom needs. One example of this development can be seen in the implementation of GBL, which reflects teachers' efforts to adopt more engaging, interactive, and student-centered instructional strategies. In this sense, the use of GBL in the classroom may be understood as part of teachers' professional

efforts to improve teaching effectiveness and better support students' learning experiences.

In the Indonesian context, Rachmajanti et al. (2020) found that English teachers in junior high schools often feel the need to update their pedagogical knowledge and technological skills to respond to changing educational demands. Similarly, Averina et al. (2023) reported that EFL teachers are aware of the importance of professional development but continue to face challenges, particularly in balancing time, workload, and access to professional learning resources. These findings suggest that although teachers recognize the importance of TPD, various obstacles may limit their participation in continuous learning and their ability to effectively implement innovative teaching approaches, including GBL. In this regard, teachers are often required to adapt instructional strategies based on classroom realities, students' needs, and available resources, making professional development and pedagogical adaptability crucial to English language learning.

After examining the various needs and barriers to TPD, it is also important to understand the common forms through which professional development is carried out. According to Darling-Hammond et al. (2017) explain that effective TPD typically includes several key forms, such as:

1. Content-focused

Professional development that focuses on the subject matter taught by the teacher. This means that professional development helps teachers understand the content more deeply to improve the quality of their teaching.

2. Active learning

Teachers do not just listen to the material but participate in hands-on practice. Teachers learn through activities, not just theory.

3. In job-embedded contexts

Good TPD encourages teachers to work collaboratively, for example, through discussions, lesson studies, or work groups.

4. Models and modelling

Teachers are provided with examples of good teaching, such as teaching videos, model lessons, or demonstrations from mentors. By seeing real-life examples, teachers more easily understand how to implement new learning strategies.

5. Coaching and expert support

Teachers receive direct guidance from mentors, coaches, or experts and are allowed to receive input, discuss, and direct their teaching practices.

6. Feedback and reflection

Teachers are given time to reflect on their teaching experiences, evaluate what worked and did not, and receive feedback from colleagues or mentors. Reflection helps teachers improve their practice.

7. Sustained duration

Professional development should not be a one-time training session. It must include ongoing support, regular meetings, and sufficient time for teachers to truly implement changes in their teaching.

These forms of TPD are in line with the experiences of teachers who participated in this study and implemented GBL in English language learning in junior high schools. In its implementation, the first gained initial knowledge about interactive learning through seminars, which are included in the formal TPD form based on content training. However, in the early stages, she did not dare to apply for it because the classroom and school conditions were not supportive. Then, she developed their competence independently through self-directed learning, such as watching YouTube, evaluating learning videos, and adapting them to the students' conditions. This form reflects active learning and independent professional learning, which are also forms of modern TPD. She began experimenting with creating and trying out various simple games for specific materials that were appropriate based on her considerations, which demonstrated the processes of learning-by-doing and reflection on practice, two important elements in effective TPD. Over time, this teacher regained inspiration from seminars and looked for digital applications that were suitable for use in the classroom, which illustrates the

forms of digital professional development and personal exploration of new learning resources.

Through this experience, it is evident that participants' professional development does not only occur through formal training, but also through independent learning, technological exploration, and direct practice in the classroom. This shows that TPD can be developed flexibly according to teachers' needs and can support their ability to apply innovations such as Game-Based Learning (GBL) with more confidence and direction.

B. Teacher Agency

Teacher Agency relates to how teachers take action in their teaching practices in the classroom. According to Priestley et al. (2015), teacher agency is not something teachers possess, but something they do. Additionally, Kim et al. (2023) explain that teacher agency depends on the interaction between individual factors of skills, beliefs, knowledge, and contextual conditions of school culture, structure, and resources. This shows that agency is always linked to personal and social factors, not just about the teachers themselves.

Teacher agency has three main dimensions: Iterational, practical-evaluative, and projective. According to Priestley et al. (2015), the three dimensions are as explained in Figure 1 below.

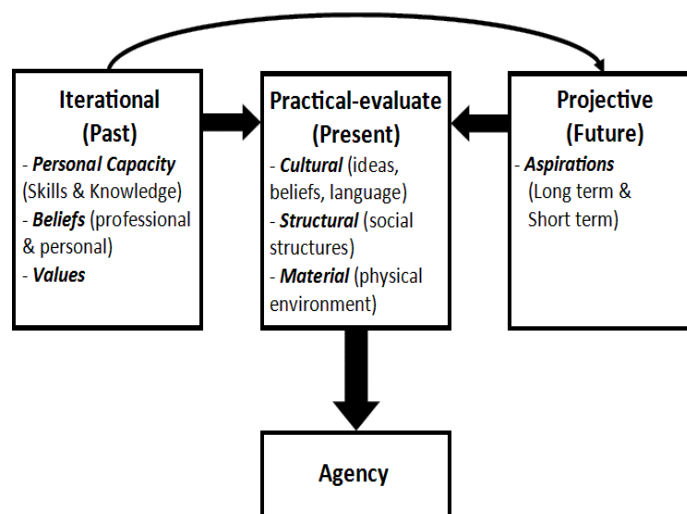


Figure 1. Teacher Agency Dimensions (adapted from Priestley et al., 2015)

1. Iterational Dimension

Teachers' previous teaching experiences play an important role in shaping how they interpret classroom situations and make instructional decisions. Past experiences, beliefs, and professional values often influence teachers' responses to curriculum changes and the selection of teaching strategies in current classroom practices. According to Ghamoushi et al. (2022), the dimension consists of teachers' personal capacities, beliefs, and values that reflect their past experiences. This means that what teachers have learned and believed in the past influences how they make decisions in teaching. In this study, a teacher who previously had experience using traditional teaching strategies then implemented GBL because they followed curriculum developments and also found it more interactive to apply GBL in the classroom.

2. Practical-Evaluate Dimension

Teachers' instructional decisions are often shaped by the realities and immediate challenges they encounter in the classroom. In many cases, teachers need to carefully evaluate contextual factors before selecting or adapting teaching strategies to ensure that learning remains effective and relevant to students' needs. This dimension involves teachers' ability to make decisions in the present by considering existing cultural, social, and material conditions (Leijen et al., 2024). In other words, it reflects teachers' capacity to act and make pedagogical decisions in response to real classroom situations. When implementing GBL, teachers need to carefully evaluate the actual classroom context, including available resources, time allocation, students' readiness, and learning needs before determining appropriate instructional actions. This process is important to ensure that learning objectives are achieved while available technological and classroom resources are utilized effectively. In the context of this study, such decision-making can be seen in how the teacher gradually adapted GBL strategies according to students' conditions and classroom realities.

3. Projective Dimension

Teachers often develop future-oriented goals when reflecting on how to

improve students' learning experiences and classroom engagement. In this regard, pedagogical decisions are not only shaped by present classroom conditions but also by teachers' aspirations to create more effective and meaningful learning environments in the future. Leijen et al. (2024) explain that the projective dimension of teacher agency is future-oriented, requiring teachers to establish both short-term and long-term goals in their decision-making process. This dimension reflects how teachers envision, plan, and adapt better instructional approaches to achieve desired learning outcomes. In the context of this study, the teacher's decision to implement GBL can be understood as part of a future-oriented effort to enhance students' motivation, engagement, and understanding in English learning. By gradually integrating more interactive and engaging learning activities, the teacher aimed to create a classroom environment that better supports students' learning needs and long-term language development.

The dimensions show that teacher agency is dynamic; it connects teachers' past, present, and future experiences to guide her actions in real contexts. The directional arrows in the teacher agency model indicate that agency is not a static trait but a dynamic process in which past experiences, present evaluations, and future goals interact continuously. In practice, a teacher's accumulated experiences (iterational dimension) influence how they assess current classroom situations and make pedagogical decisions (practical-evaluative dimension). Those decisions, in turn, shape the teacher's aspirations and planned actions for the future (projective dimension), which can lead to re-interpretation of past experiences and further refinement of practice. Thus, the cyclical nature represented by the arrows underscores that teacher agency involves ongoing negotiation between experience, reflection, and anticipation of future teaching contexts.

Teacher agency is influenced by many personal and contextual factors. Personal factors include teachers' beliefs, confidence, experience, motivation, and there are also other factors such as school culture, available resources, support from leaders, and collaboration with colleagues (Leijen et al., 2024). In Indonesia, Lestari et al. (2022) found that teacher agency is highly influenced by school culture,

leadership, and access to resources. Therefore, when teachers work in an environment that supports collaboration and innovation, they feel more confident in taking initiative and trying new strategies such as game-based learning.

C. Game-Based Learning in EFL Classroom

Game-based learning (GBL) in English Language Teaching (ELT) is a teaching method that utilizes game mechanics and elements to make learning fun and engaging for students. According to Plass et al. (2015), Game-Based Learning (GBL) refers to the redesign of learning tasks into games that are not only rule-based, responsive, and challenging, but also engaging and motivating for learners. Furthermore, they emphasize that games that are effective in an educational context are able to create meaningful learning experiences because students are actively involved in the process of problem-solving and decision-making. The concept of modern GBL was popularized by Prensky (2001), who introduced the idea of digital game-based learning as an approach that connects gameplay with a meaningful learning experience. Zakaria et al. (2024) define GBL as an educational environment that combines information and skills into games so that players can also learn while having fun. In other words, GBL combines learning objectives with play, allowing students to learn while having fun. GBL is also described as games with defined learning outcomes, indicating that games are intended to help students achieve specific learning objectives, rather than just for entertainment (Plass et al., 2015).

GBL also usually has supporting rules because it not only functions for play but also assists the learning process. According to Becker (2015), states that a good educational game must have rules, goals, adaptive challenges, interactivity, feedback, and an interesting narrative. Supporting this view, research on educational games emphasizes that rules play a crucial role in supporting learning, maintaining focus, and encouraging sustained motivation by balancing fun, the material being taught, and cognitive challenges (Plass et al., 2015). Therefore, games applied to English language learning in the classroom also have rules to make learning more meaningful, convey learning objectives, and be enjoyable by keeping students' enthusiasm and motivation.

The successful implementation of GBL depends not only on the use of games in the classroom but also on how learning activities are designed to meaningfully engage students. To create an effective and supportive learning environment, teachers need to consider several pedagogical principles that encourage active participation, motivation, and deeper understanding. According to Kucher (2021), effective GBL is based on five key principles that help make learning meaningful and engaging: interactivity, immersion, adaptive problem-solving, feedback, and freedom of exploration. These principles emphasize the importance of creating learning experiences in which students actively participate, receive meaningful responses to their progress, solve problems according to their ability levels, and explore learning materials in a more engaging and less restrictive environment.

1. Interactivity

Student engagement in GBL can be achieved through a meaningful and adequate level of interactivity. According to Kucher (2021), games that utilize playful interactions have been shown to maintain high levels of student engagement and contribute positively to their performance in exams, compared to project-based learning. In implementing this principle, teachers select games or quizzes that align with the learning objectives of English language learning. Through activities such as Snakes and Ladders games or the use of Interacty, students are encouraged to interact directly with their classmates and actively participate in the learning process.

2. Immersive

The immersive principle refers to deep and meaningful learning experiences that encourage students to become fully engaged in learning activities. Kucher (2021) explains that immersion can lead students to experience a state of flow, where they are highly focused and involved in the learning process. In English language learning, teachers can implement this principle through story-based games that involve past or future events, sentence completion tasks, or sentence construction activities. These activities help students maintain their attention and become more engaged with the learning materials.

3. Adaptive problem-solving.

Adaptive problem-solving is a principle that emphasizes providing students with challenges that are appropriate to their level of ability. Kucher (2021) states that involving students in solving real-life problems that match their developmental level can positively affect their learning outcomes. In GBL, teachers apply this principle by adjusting the difficulty level of games according to students' abilities and learning needs. As a result, students can solve problems more effectively while remaining motivated and actively involved in the learning process.

4. Feedback

As with any type of learning, quality feedback helps teachers evaluate students' progress in English language learning, provides motivation to learn, and identifies what should be maintained and what needs to be improved. Feedback is also important for the implementation of methods such as Game-Based Learning (GBL). According to Charles et al. (2008), quality feedback provides motivation for learning, supports students' development, and helps teachers determine what aspects of learning should be maintained or improved. In the context of GBL, teachers can observe students' performance during learning activities and provide feedback through rewards, scores, or words of encouragement. Furthermore, teachers may ask students to share their feelings and experiences during game-based learning activities, which can serve as valuable information for evaluating and improving future learning processes.

5. Freedom of exploration

In a well-designed GBL environment, freedom of exploration is a principle that encourages students to explore, take risks, and try different approaches during the learning process. According to Devonshire et al. (2014), which states a well-designed GBL environment allows players to solve problems without fear of failure or making mistakes. In implementing this principle, teachers provide students with opportunities to experiment with different strategies, learn from their mistakes, and revise their responses without the risk of punishment. As a result, students can develop confidence, creativity, and problem-solving skills

while actively engaging in English language learning activities.

In English as a Foreign Language (EFL) classes, GBL is used to make language learning, especially vocabulary, grammar, reading, listening, and speaking, more interesting and increase student motivation and enthusiasm. Some studies show that game-based activities help create a more engaging learning environment, making students more active and motivated in learning English (Zakaria et al., 2024). In this present study, teachers implemented several games, such as Snakes and Ladders, for teaching grammar and vocabulary practice. Furthermore, a study from Sugiyati & Sujarwati (2025) shows that the Snakes and Ladders game can significantly improve students' vocabulary mastery in classroom experiments. Additionally, Melika et al. (2023) stated that storytelling for teaching descriptive text significantly improved students' understanding of texts, especially descriptive and narrative texts.

In the specific context of grammar or sentence completion, digital tools such as Quizizz are often used by teachers for timed grammar and reading exercises. In addition to being a regular learning platform, this platform is also often used for formative assessment or interactive exercises (Dzikrullah & Syafi'I, 2021). And the Interacty app for vocabulary, listening, and speaking activities. Although empirical studies focusing specifically on Interacty are still limited, its pedagogical characteristics resemble other widely researched digital GBL platforms used in EFL classrooms. Previous studies have shown that digital game-based tools such as Kahoot, Quizizz, and Wordwall effectively promote student motivation and enthusiastic active participation by providing instant feedback, competitive or collaborative tasks, and visually stimulating learning environments (Wang & Tahir, 2020; Zhao, 2019). By using this type of game, teacher transform conventional lessons into interactive experiences where students move pieces, roll dice, answer questions, receive instant feedback, and compete or collaborate in groups. This practice not only makes language tasks more interesting but also supports student motivation and enthusiasm.

Several studies have suggested that GBL has many positive impacts and benefits for learning, including English language learning. It helps motivate

students to learn, participate actively in learning, and remember lessons better (Dorji, 2022; Zakaria et al., 2024). However, several challenges remain. Teachers need adequate technology, time, and knowledge to design or adapt games effectively (Ponnaiah et al., 2022). Therefore, while GBL offers meaningful advantages for improving learning, its success still depends on the teachers' readiness and available support.

D. Teachers Experiences

Teachers' experiences in implementing game-based learning (GBL) play an important role in the learning process. Every teaching activity provides teachers with new experiences that help them reflect on, improve, and adjust their teaching practices in the classroom. According to research on reflective practices, teachers develop professionally when they take the time to analyze their actions, learn from their experiences, and refine their teaching methods (Machost & Stains, 2023). Additionally, Maharani et al. (2025) demonstrate that experience is not merely looking back on past actions that have already occurred, but actively reorganizing one's pedagogical approach in response to classroom realities. This means that reflective experience is not only about looking back on past actions, but also about learning from the experiences in the classroom to make better teaching decisions in the future.

In this sense, teacher narratives become a meaningful way to understand the teacher experiences of the learning process in implementing GBL. According to Golombek & Johnson (2017), telling stories about teaching helps teachers explore their own practices and develop professionally through reflection. Similarly, Ambler et al. (2024) found that teacher narratives show how they reflect on, interpret, and reconstruct their professional knowledge. Therefore, the narratives in this study reveal how teacher process their teaching practices, challenges, benefits, and lessons learned to seek ways to improve the quality of teaching.

Teachers' experiences are closely related to Experiential Learning, as professional knowledge is often developed through a continuous process of experiencing, reflecting, and adapting teaching practices. Through classroom interactions, teachers encounter various situations that require them to evaluate

their actions and make appropriate instructional decisions. These experiences contribute to professional growth by enabling teachers to build new understandings based on prior experiences and reflections. Therefore, experiential learning provides a useful theoretical framework for understanding how teachers develop their pedagogical knowledge and practices over time.

E. Experiential Learning

The Experiential Learning Theory views learning as a process in which knowledge is both created and developed through experience. In experiential learning theory, the emphasis is on active engagement, reflection, conceptual understanding, and the application of knowledge in practice. This theory was developed by Kolb (1984) Based on the contributions of several influential scholars, such as John Dewey, Kurt Lewin, and Jean Piaget, whose ideas regarding experience, reflection, learning, and cognitive development form the foundation of experiential learning. Therefore, understanding these experts' perspectives is important for explaining the development of ELT and its relevance to teachers' professional learning experiences.

John Dewey is widely recognized as one of the founding figures of experience-based learning. Dewey (2008) argued that education must be grounded in experience because meaningful learning arises through active engagement in educational activities, not merely through the passive absorption of knowledge. However, he emphasized that not all experiences hold the same educational value; some experiences can actually hinder learning and further development. Therefore, the educational value of an experience depends on its quality and its ability to support future growth and learning.

Another key concept is the principle of the continuity of experience, which states that every experience influences future experiences and contributes to ongoing development. According to Dewey (2008), effective educational experiences must not only engage learners in the present but also create opportunities for meaningful learning in subsequent or ongoing situations. From this perspective, learning is a process of continuous growth in which individuals build new understanding based on prior experiences. Dewey's emphasis on

experience, growth, and continuity became one of the main foundations of Kolb's Experiential Learning Theory.

Building on Dewey's emphasis on experience and reflection, Kurt Lewin further contributed to the development of experience-based learning by explaining how learning occurs through a cyclical process of experience, reflection, and action. Lewin emphasized the importance of linking theory and practice through real-world problem-solving and active engagement in experiences. According to Kolb (2015) Lewin viewed learning as a continuous cycle involving concrete experiences, observation and reflection, concept formation, and testing of concepts in new situations. Through this process, teachers develop understanding from experience and apply their new knowledge in practice. This view of the learning cycle later became one of the main foundations of Kolb's Experiential Learning Theory and his four-stage learning cycle.

In addition to Dewey's emphasis on experience and Lewin's cyclical view of learning, Jean Piaget contributed a cognitive perspective that explains how individuals construct knowledge through their interactions with the environment. Jean Piaget's constructivist perspective made a significant contribution to the development of Experiential Learning Theory. Piaget viewed learning as an active process in which individuals construct knowledge through their interactions with the environment. According to (Nurhasnah et al. 2024) Cognitive development occurs through adaptation, which involves the processes of assimilation and accommodation. Assimilation refers to the integration of new experiences into existing cognitive structures, whereas accommodation occurs when individuals modify existing understandings to incorporate new experiences. Through these processes, learners continually reorganize their knowledge and develop more complex ways of thinking. Kolb (2015) Recognizes Piaget as one of the foundational scholars of experiential learning, as his emphasis on knowledge construction and adaptation highlights how learning develops through the transformation of experience into understanding.

The contributions of John Dewey, Kurt Lewin, and Jean Piaget served as the foundation for David Kolb's development of the Experiential Learning Theory

(ELT) as a comprehensive framework for understanding how learning occurs through experience. Kolb (2015) consolidated the key ideas of these experts, including the importance of experience, reflection, knowledge construction, and active engagement in learning. According to Kolb, learning is a continuous process in which knowledge is created through the transformation of experience. This theory is illustrated through a four-stage learning cycle consisting of Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation.

Reflective learning occurs through four main stages that form a cycle of experiential learning. According to Kolb's Learning Theory (2015), these four stages are interrelated and describe how a person learns through experience, reflection, contextualization, and reapplication, as explained in Figure 2 below.

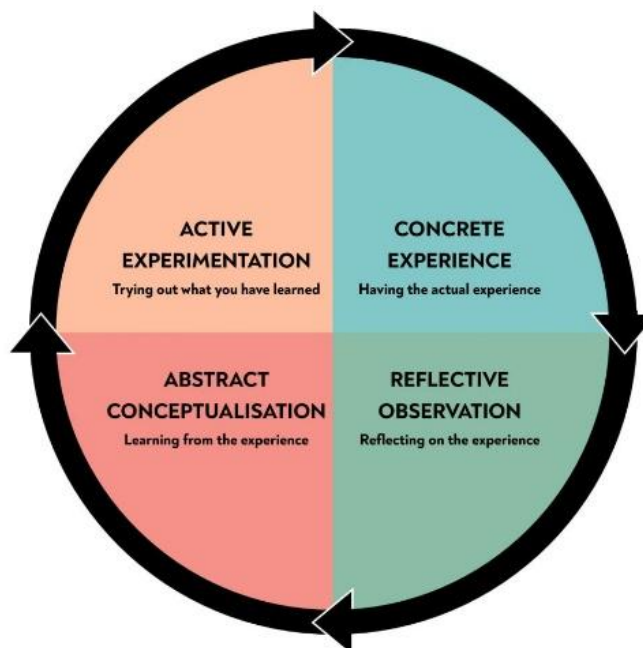


Figure 2. Experiential Learning Cycle (adapted from Kolb's 2015)

1. Concrete Experience

This stage is when individuals directly experience a new situation related to their professional practice. This experience forms the basis of the learning

process. In the context of teachers, this stage occurs when teachers begin to apply GBL in the classroom as a new approach to English language learning.

2. Reflective Observation

After an activity, the teachers enter a reflection stage, which involves reviewing the experience, noting what went well and what caused difficulties, and beginning to find meaning in the experience. In the context of GBL, Teachers evaluate the learning process after it is completed. Analyzing what went well and should be maintained, as well as what was ineffective and needs to be improved.

3. Abstract Conceptualization

This stage is a process in which the teacher transforms the results of reflection into conceptual understanding or new principles that can be used as a basis for improvement. In the implementation process of game-based learning, teachers formulate new ideas about how GBL can increase student learning and how to choose game strategies that are appropriate for learning objectives.

4. Active Experimentation

This stage involves applying the new knowledge gained in actual practice. Teachers try out new ideas or strategies in subsequent teaching situations and continue to adjust them based on the results obtained. In implementing game-based learning, teachers try modifying games, adjusting rules, or adding digital elements to see the impact on student engagement. Through these active experiments, teachers strengthen their professional understanding and expand their skills in designing game-based learning.

The Experiential Learning Theory views learning as a continuous process in which knowledge is formed through the transformation of experience. Kolb (1984) defines experiential learning as a theory of human learning, emphasizing that learning is a process in which knowledge is created from experience, rather than limiting it to specific groups of learners. Therefore, experiential learning is applicable not only to students but also to teachers, as they continuously construct professional knowledge through their teaching experiences. In this study, the teacher is viewed as a professional learner who continuously learns from classroom

experiences by identifying classroom challenges, reflecting on students' responses, designing instructional strategies, and refining pedagogical practices throughout the implementation of Game-Based Learning (GBL). Accordingly, Experiential Learning Theory is employed to understand teachers' professional learning experiences throughout the implementation of Game-Based Learning (GBL). Drawing on the ideas of Kolb (2015), this study explores how the teacher learns through classroom experiences, reflects on students' responses, develops instructional strategies, and continuously refines GBL practices throughout the implementation process. In the context of this study, this theory provides a useful perspective for understanding how teachers build professional knowledge when implementing Game-Based Learning (GBL). Through experience, reflection, and continuous adjustments to their teaching, teachers continually develop and refine their teaching practices; thus, the Experiential Learning Theory is highly relevant to the exploration of teachers' experiences in implementing GBL.

E. Study of the Relevant Research

Several studies have examined the GBL in English language teaching, particularly in vocabulary teaching. Dwirahmita (2020) examined teachers' perceptions of the use of GBL in the context of junior high schools, involving teachers from private, public, and Islamic schools. The study showed that teachers generally had positive perceptions of the use of game-based learning, emphasizing its role in creating an engaging classroom atmosphere, increasing student motivation, and strengthening vocabulary retention. In addition, teachers reported that despite challenges such as preparation and repetition, the benefits outweighed the disadvantages. This research highlights that GBL not only fosters student interest and active participation but also contributes significantly to their vocabulary acquisition, making it a valuable teaching medium in the EFL classroom.

Another study was conducted by Pratiwi et al. (2022), who used narrative research to explore students' enjoyment of learning and vocabulary mastery in digital game-based learning. This study focused on an Indonesian junior high school student who was actively involved in digital games, and data were collected

through observation, student journals, interviews, and artifacts. The results showed that six of the eight dimensions of learning enjoyment were experienced, including autonomy, immersion, concentration, challenge, social interaction, and knowledge enhancement. Importantly, students acquired 78 new words and phrases, demonstrating vocabulary mastery in terms of form, meaning, and usage. This study emphasizes that digital games not only increase enjoyment but also provide meaningful opportunities for vocabulary learning, making them a powerful tool to support EFL students' language development.

Similarly, Sarias et al. (2025) examined teachers' perceptions of the use of game-based strategies in English language teaching. The study highlighted that teachers consider games to be an effective tool for increasing student motivation and engagement during the learning process. It was found that games not only create a more enjoyable and interactive classroom atmosphere but also help students overcome the boredom that often arises from traditional memorization methods. In addition, teachers emphasized that game-based strategies can encourage collaborative learning, promote positive competition, and support vocabulary development. This shows that integrating games into English teaching provides significant benefits for students' language proficiency, especially in maintaining their interest and participation.

Although previous studies have highlighted the benefits of game-based learning, few have explored the real experiences of teachers in implementing GBL in depth. To fill this gap, this study uses narrative analysis to capture how an English teacher reflects on and constructs meaning from their teaching practices.