



STUDENTS' PERCEPTION ON THE IMPLEMENTATION OF DISCOVERY LEARNING METHOD INTEGRATED WITH PHOTOMINDSET MEDIA IN EFL LEARNING

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ABSTRACT

This research explores students' perceptions of integrating the Discovery Learning Method with Photomindset media in English reading activities at a junior high school in Batam. The method was chosen for its promotion of active learning, critical thinking, and student-centered exploration, while Photomindset media aids in visually organizing ideas. A mixed-method approach was employed, with quantitative data collected via a Likert-scale questionnaire and analyzed using Pearson's correlation, and qualitative data gathered through semi-structured interviews. The validity test results confirm that all questionnaire items surpassed the r-table value, ensuring the instrument's reliability in measuring students' perceptions. Quantitative results indicated generally favorable student responses toward the implementation of Discovery Learning enhanced by Photomindset media. Qualitative findings revealed that students felt more motivated and engaged, improved their text comprehension, and became more active in discussions and presentations. They also reported better vocabulary retention, increased grammatical awareness, and heightened confidence in sharing ideas. Despite some challenges, such as time constraints and difficulties with complex texts, the overall results suggest that the integration of Discovery Learning with Photomindset media fosters an interactive and effective learning environment. This approach enhances students' comprehension, participation, and motivation, proving to be a valuable strategy for junior high school English instruction.

Keywords: *Perception, Discovery Learning, Junior High School, Photomindset, EFL Learning*

1. INTRODUCTION

Teaching methods are crucial in shaping the effectiveness of the teaching and learning process. They are instrumental in the success of the educational system, as they ensure that students acquire the essential competencies required at each stage of the curriculum (Aguilar-moya et al., 2025). The

ways or strategies used by teachers in delivering material not only serve as a means of transferring knowledge, but also as the main key in creating an effective and meaningful learning experience for students. Effective learning methods do not merely emphasize the transfer of knowledge, but also focus on the development of students' critical thinking skills, creativity, collaboration, and character (Fajri &

Vol 9, No 1 (2026): ESTEEM

Hamdani, 2024). The success of learning does not only depend on the material taught, but also on how the method is applied to help students understand and master the material optimally (Vinarahmah, 2022). Teachers' efficiency can be improved through the use of appropriate teaching methods, leading to higher effectiveness in public education (Al-taai, 2021). Emphasize that the application of learning methods is a crucial aspect that every teacher must pay attention to (Fernanda et al., 2024; Merta et al., 2023; Sujati et al., 2023). In practice, choosing the right method can help teachers deliver material in a more interesting and understandable way for students. The selection and application of appropriate teaching methods help students understand and master learning materials more effectively, especially when challenging material is delivered through engaging teaching strategies (Wahyuni et al., 2020; Mahesti et al., 2025). This requires teachers to be able to adjust the methods used to the characteristics of the students, learning objectives, and learning environment conditions so that the process of delivering material can run effectively and efficiently (Amiruddin et al., 2024; Goyibova et al., 2025). Therefore, the aim of this study is to explore students' perceptions on the implementation of the Discovery Learning Method integrated with Photomindset media in English as a Foreign Language (EFL) learning.

2. LITERATURE REVIEW

According to Pertiwi et al. (2021), learning methods are basically a systematic

way used by educators to deliver subject matter with the aim of achieving predetermined learning outcomes. This means that methods are not merely teaching aids, but also an integral part of learning planning that serves to direct learning activities towards the achievement of certain competencies. Add that learning methods serve to facilitate the teaching and learning process, both in formal and non-formal educational institutions (Kurniati & Kisworo, 2023; Madhavi et al., 2023). Teachers or tutors utilize methods as a means to implement learning plans that have been systematically designed beforehand. With the right methods, learning plans can be realized in a concrete and practical manner, enabling students to more easily understand the material and achieve learning objectives to the fullest extent possible (Alias et al., 2025). Learning methods also play an important role in creating an active, creative, and enjoyable learning atmosphere through the use of appropriate strategies, teachers can encourage students to participate more actively, think more critically, and engage in meaningful learning experiences well-designed methods also help students feel more motivated and comfortable, allowing the classroom environment to become more dynamic and supportive (Hidayat et al., 2020; Jaya et al., 2025). Through the application of varied and innovative methods, teachers can stimulate students' interest in learning and foster their enthusiasm to be seriously involved in the learning process (Batubara & Lubis, 2025; Kubiszyn & Borich, 2024). Thus, learning methods are not only tools to assist in teaching,

STUDENTS' PERCEPTION ON THE IMPLEMENTATION OF DISCOVERY LEARNING METHOD INTEGRATED WITH PHOTOMINDSET MEDIA IN EFL LEARNING

Vol 9, No 1 (2026): ESTEEM

but also a means to enliven the learning process to make it more interactive and meaningful (Putri et al., 2025; Darmawanti & Widyaningrum, 2023).

Therefore, after understanding the general importance of learning methods, it is also essential to discuss how these methods are applied in the use of learning media to optimize the learning process. The use of appropriate learning methods is very important in the implementation of learning media because it serves as a foundation that guides how teachers deliver material and how students interact with the learning tools provided (Raudah et al., 2024; Krisna et al., 2021). Well-chosen learning methods ensure that the media used in the classroom can function effectively to support the achievement of learning objectives (Komara et al., 2024). According to Fernanda et al., (2024), the application of learning methods is indeed a crucial aspect for teachers in delivering material in the classroom, as it determines how well students understand and engage in the lesson. If learning media are used without appropriate methods, students may find it difficult to understand the content or utilize the media optimally (Azhura et al., 2024). Therefore, the integration of methods and media must be carefully planned to create an active, meaningful, and student centered learning environment.

In this study, the use of the discovery learning method is considered essential in the implementation of Photomindset media because this method allows students to take an active role in their own learning process.

Discovery learning encourages students to explore concepts, investigate problems, and find solutions independently, rather than just receiving information from the teacher (Aulia et al., 2023; Firmansyah et al., 2021). This process not only develops students' problem-solving skills but also increases their curiosity and creativity in understanding the lesson (Andika et al., 2025; Nurjanah et al., 2025). Through the use of Photomindset media, students can visually organize their ideas while discovering new information, which helps improve their understanding and memory. As stated by (Yuri et al., 2025), discovery learning motivates students to be more engaged and independent in their learning journey, making the learning experience more interesting, interactive, and effective in building long-term understanding. Photomindset is considered useful, user-friendly, and engaging, as it facilitates vocabulary comprehension, grammatical awareness, and active interaction in the classroom in English language learning (Ghaisani et al., 2025)

Several previous studies have examined students' and teachers' perceptions of discovery learning methods in various educational contexts. Research findings indicate that students generally have positive perceptions of discovery learning, as it encourages active participation, independence, and deeper understanding during reading activities (Simatupang, 2020). Teachers also perceive discovery learning as an effective approach to increasing student engagement and motivation, although it requires greater

**STUDENTS' PERCEPTION ON THE IMPLEMENTATION OF DISCOVERY
LEARNING METHOD INTEGRATED WITH PHOTOMINDSET MEDIA IN
EFL LEARNING**

Vol 9, No 1 (2026): ESTEEM

preparation and effective classroom management (Alleyza et al., 2021).

Another study by Lapanda and Modjanggo, (2023) Other studies show that students' responses to teaching methods are strongly influenced by how well teachers integrate instructional strategies with learning materials and classroom conditions, with interactive and student-centered approaches receiving more positive responses. Meanwhile, Ardiyani and Puspitaloka (2025) In addition, discovery learning has been found to enhance students' motivation and critical thinking in reading comprehension by allowing learners to explore texts more deeply and actively. Finally, Saputra (2025) Similarly, positive perceptions of discovery learning have also been reported in science learning contexts, despite challenges related to time constraints and differences in students' readiness levels. Overall, these studies show that discovery learning methods generally receive positive responses from students and teachers alike, as they encourage active learning, critical thinking, and motivation. However, most existing studies focus on high school settings and specific subjects such as reading comprehension or science, while limited research has examined students' perceptions of discovery learning integrated with specific instructional media, particularly in junior high school English reading contexts. Therefore, further investigation is needed to explore how discovery learning combined with supportive learning media influences students' learning experiences and perceptions.

The novelty of this study lies in its focus on students' perceptions of the discovery learning method integrated with Photomindset media at the junior high school level (SMPN 21 Batam). Unlike previous studies, which mostly examined the discovery learning method as an independent strategy, this study explores how the use of Photomindset media supports and enhances the effectiveness of the discovery learning method in English language learning. Although previous studies, such as those conducted by Simatupang (2020) and Ardiyani & Puspitaloka (2025), focused on reading comprehension using discovery learning, they did not explore the integration of digital or visual-based media that could aid student comprehension. Furthermore, previous studies such as (Alleyza et al., 2021) and (Saputra, 2025) analyzed perceptions at the high school level, while this study provides a new perspective from junior high school students, who may face different challenges and levels of readiness. Therefore, this study provides new insights into how Photomindset media combined with discovery learning affects students' motivation, engagement, and perceptions in English learning, particularly in the context of SMPN 21 Batam.

The main focus of this study is to explore students' perceptions of the Discovery Learning Method when applied through Photomindset media in English language learning. The research question is: "How do students view the use of the Discovery Learning Method when integrated with Photomindset media in EFL learning?" This question aims to understand students'

STUDENTS' PERCEPTION ON THE IMPLEMENTATION OF DISCOVERY LEARNING METHOD INTEGRATED WITH PHOTOMINDSET MEDIA IN EFL LEARNING

Vol 9, No 1 (2026): ESTEEM

experiences, responses, and interpretations of this method in classroom activities, particularly its influence on their motivation, engagement, and understanding. The purpose of this study is to analyze and describe students' perceptions of the Discovery Learning Method supported by Photomindset media. This study also aims to identify how the integration of discovery learning principles with visual media can increase students' curiosity, participation, and understanding in the English learning process.

3. METHODS

This study uses a mixed-method approach, combining quantitative and qualitative methods to obtain comprehensive and reliable results (Neuman, 2019). Quantitative data was used to measure students' perceptions and responses to the implementation of the discovery learning method using Photomindset media, while qualitative data was used to explore students' experiences and attitudes in greater depth during the learning process. This combination allowed researchers to not only analyze numerical data but also understand students' perspectives in more detail and meaningfully.

This research was conducted at one of junior high school Batam, Indonesia. Focusing on seventh-grade students in the even semester of the 2024/2025 academic year. This school was chosen because it has actively implemented innovative and student-centered learning methods, including discovery learning, which is in line with the objectives of this study. The environment at SMP Negeri 21 Batam provides a suitable context for

analyzing how the integration of discovery learning and Photomindset media affects students' motivation, engagement, and understanding in English learning.

The research population consists of all seventh-grade students at one of junior high school Batam, Indonesia. Meanwhile, the research sample focuses on class seven-four, which consists of a total of 40 students. This class was selected using purposive sampling, meaning that participants were deliberately selected based on specific considerations related to the research objectives. In this case, class seven-four was selected because it has implemented the discovery learning method and Photomindset media in its English learning process. Therefore, this class is considered the most suitable for providing relevant data and insights for the research.

In collecting data for this study, a closed questionnaire with a four-point Likert scale was used as the main tool (Robinson, 2024). This questionnaire was designed to measure students' perceptions of the implementation of the Discovery Learning Method through Photomindset media and was adapted from a validated questionnaire by (Simatupang, 2020). The questionnaire consisted of 24 closed-ended Likert scale items adapted from Simatupang (2020), which measured students' perceptions of discovery learning in terms of benefits, interest, learning activities, and implementation in the classroom. Each statement required students to indicate their level of agreement using the options "Strongly Agree," "Agree," "Disagree," and "Strongly Disagree." This type of

Vol 9, No 1 (2026): ESTEEM

questionnaire allowed researchers to obtain quantitative data that clearly and consistently represented students' attitudes and perceptions. To ensure the reliability and validity of the instrument, a systematic validation process was conducted. The reliability of the questionnaire was tested using Cronbach's Alpha to ensure internal consistency between items, while validity was evaluated through an expert assessment process involving professionals familiar with the Discovery Learning Method. The experts reviewed and provided feedback to ensure that each statement was relevant, clear, and aligned with the research objectives. Both content validity and construct validity were evaluated to ensure that the questionnaire accurately measured the intended variables. Triangulation between questionnaire data and supporting documents further strengthened the accuracy and credibility of the findings.

The data was obtained through a questionnaire on students' perceptions of the use of the Discovery Learning Method through Photomindset media. The questionnaire used a Likert scale response format, and the data was analyzed using descriptive quantitative and qualitative approaches. Quantitative data analysis was conducted by calculating the frequency and percentage of student responses for each statement to identify trends and common patterns in their perceptions. Average scores were also calculated to determine the general level of agreement on each aspect of the Discovery Learning Method and Photomindset media. In addition to statistical analysis, qualitative interpretation was conducted to provide deeper insight into what

the numerical results revealed about student engagement, understanding, and motivation during discovery-based learning. This interpretation was based on Bruner's Theory of Discovery Learning (1960), which helped researchers assess how theoretical principles were reflected in students' actual learning experiences. Through this combination of quantitative and qualitative analysis, this study was able to provide a comprehensive understanding of student perceptions and evaluate the effectiveness of using Photomindset media in the context of discovery learning at SMP Negeri 21 Batam.

4. RESULTS AND DISCUSSION

The quantitative findings of this study show that all questionnaire items used to measure students' perceptions of the Discovery Learning Method integrated with Photomindset media were valid. Based on the analysis conducted on 36 respondents of participants, the calculated r-value for each item ranged from approximately This indicates that the questionnaire successfully measured the intended constructs consistently and accurately, making the quantitative data reliable for further interpretation. The strong validity values also demonstrate that the instrument effectively captured students' attitudes toward motivation, engagement, and understanding during discovery-based learning with visual support from Photomindset media.

The qualitative findings obtained from student interviews further support the quantitative results. Students consistently expressed that the Discovery Learning Method

Vol 9, No 1 (2026): ESTEEM

greatly helped them understand reading texts more effectively because they were required to identify important information independently rather than rely solely on the teacher's explanation. This process stimulated their curiosity and increased their motivation to read more carefully and thoroughly. Students reported becoming more aware of vocabulary meaning, sentence patterns, and pronunciation when they explored texts independently, which positively influenced their linguistic development. The method also encouraged greater classroom participation, as students actively engaged in group discussions, exchanged ideas, asked questions, and presented their findings to peers. These activities boosted their confidence and helped them develop a deeper sense of responsibility for their learning.

However, students also acknowledged that Discovery Learning requires more time and can be challenging when dealing with complex texts. Some students noted that learning becomes less effective when group members are passive, and additional guidance from the teacher is sometimes needed to avoid confusion. Despite these challenges, most students agreed that the method is suitable for continuous use, especially when combined with other teaching strategies to maintain balance and prevent cognitive overload.

Overall, the integration of the Discovery Learning Method with Photomindset media contributed significantly to improving students' engagement, motivation, and comprehension in English reading classes. These findings align with Bruner's theory,

which states that learning becomes more meaningful when students discover knowledge through active exploration.

The students' responses in this study are also consistent with previous research indicating that discovery-based learning promotes critical thinking, autonomy, and deeper understanding (Simatupang, 2020; Ardiyani

& Puspitaloka, 2025). The visual structure provided by Photomindset media further enhanced the learning experience by helping students organize information, visualize connections, and retain content more effectively.

Although time constraints and varying levels of readiness pose challenges, the overall results highlight the strong potential of Discovery Learning combined with Photomindset media to create a more interactive, student-centered, and engaging learning environment. This approach is particularly effective in supporting reading comprehension at the junior high school level and provides valuable insights for teachers seeking to implement innovative and motivating learning strategies.

5. CONCLUSION

This study demonstrates that integrating the Discovery Learning Method with Photomindset media has a significant and positive influence on students' engagement in English reading activities. The results of the validity test confirm that all questionnaire items are valid, ensuring the instrument reliably gauged students' perceptions

Vol 9, No 1 (2026): ESTEEM

throughout the study. The quantitative analysis showed favorable responses from students towards the Discovery Learning approach, with consistently high validity scores across all items. Complementary qualitative data from interviews reinforced these findings, indicating that students felt more motivated, engaged, and accountable for their own learning when encouraged to independently uncover information. Moreover, students reported notable improvements in vocabulary comprehension, grammatical understanding, text interpretation, and classroom participation. While some challenges emerged, including time constraints, difficulty with complex texts, and uneven group participation, the overall feedback suggested that Discovery Learning, supported by Photomindset media, is a highly effective and well-received method. In conclusion, the study asserts that Discovery Learning, augmented by Photomindset media, is a valuable and appropriate approach for enhancing students' engagement, confidence, and comprehension in English learning at the junior high school level. Teachers are advised to implement this method regularly while ensuring it is complemented with other instructional strategies to preserve clarity, efficiency, and variety in learning.

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STUDENTS' PERCEPTION ON THE IMPLEMENTATION OF DISCOVERY LEARNING METHOD INTEGRATED WITH PHOTOMINDSET MEDIA IN EFL LEARNING

Vol 9, No 1 (2026): ESTEEM

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Vol 9, No 1 (2026): ESTEEM

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