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Exploring Perceptions of the Case-Based Learning Model for Enhancing Extensive Reading Skills in a Hybrid Learning Environment

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ABSTRACT

Extensive reading is a pedagogical approach that emphasizes reading for pleasure, allowing learners to choose texts that align with their interests and target language proficiency. However, two significant challenges hinder its effectiveness: the complexity of texts, which often limits comprehension, and vocabulary constraints, which impede students' engagement with reading materials. This study explores students' perceptions of integrating case-based learning within a hybrid learning framework to enhance extensive reading instruction in an English as a Foreign Language (EFL) context. Data were gathered through a structured questionnaire encompassing 10 dimensions and 50 statements. The research was conducted in the English Education Study Program, Faculty of Teacher Training and Education, Universitas Muhammadiyah Mataram, Indonesia, involving 88 English Education students enrolled in an extensive reading course. The findings reveal that students generally held favourable perceptions of case-based hybrid learning, particularly regarding 10 critical dimensions: conceptual understanding of case-based learning, extensive reading skill development, interaction and collaboration, learner engagement, hybrid learning effectiveness, problem-solving through case studies, real-life applicability, challenges in hybrid learning, satisfaction with the instructional model, and recommendations for improvement. Overall, case-based hybrid learning was found to foster engagement, enhance comprehension, and develop students' problem-solving abilities in EFL extensive reading instruction.

Keywords: Case-Based Learning; Extensive Reading; Hybrid Learning; Perception

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1. Introduction

Extensive reading is commonly defined as reading for pleasure^[1, 2] and it serves as a pedagogical approach that promotes learner autonomy by allowing students to select reading materials that match their interests and the target language they are learning^[2]. While this approach offers several benefits, it also presents challenges. Many students struggle with the high complexity of reading texts, which can hinder comprehension^[3, 4]. Additionally, limited vocabulary often makes it difficult for learners to fully understand texts written in the target language^[5].

One promising strategy to address these challenges is the Case-Based Learning (CBL) model. CBL is an active, student-centered learning approach in which real or simulated cases serve as the foundation for instruction. It encourages learners to work collaboratively, apply theoretical knowledge to practical situations, and develop problem-solving skills^[6]. As an evidence-based instructional method, CBL engages students in collecting relevant information and applying it to analyse and solve complex issues^[7]. By incorporating authentic and contextually relevant cases, CBL helps make learning more meaningful and aligned with students' academic and personal needs^[8].

Some research results suggest the benefits of the CBL learning model, which can improve critical thinking skills^[7, 9], find solutions to cases that you want to cover^[8], develop critical thinking and problem-solving skills^[6], increase knowledge and skills, comprehensive abilities, and teaching satisfaction^[8], and improve communication skills because it involves a group-based learning process and encourages students to take responsibility for the learning process themselves^[7]. This research focused on the design of the CBL model through hybrid learning.

Hybrid learning is a learning process that is carried out through a combination of face-to-face learning (offline) with online learning^[10]. If the learning process through hybrid learning is carried out well, it will produce an interesting learning model^[11]. Therefore, the research aims to explore perceptions of implementing CBL with hybrid learning in EFL extensive reading.

2. Literature Review

This section reviews key concepts relevant to the current study, including extensive reading, case-based learning, and hybrid learning. These concepts form the theoretical foundation for exploring the integration of case-based learning within an extensive reading course delivered through a hybrid model.

2.1. Extensive Reading

Extensive reading is acknowledged as an instructional methodology that promotes immersive engagement with texts for intrinsic enjoyment, allowing learners to choose materials that align with their interests and the linguistic goals of their target language acquisition^[2]. In addition, it is also described as a technique in foreign language teaching where students read materials suited to their proficiency level and language competence^[12]. Unlike intensive reading, which focuses on close, detailed analysis to extract specific information from a text, extensive reading emphasizes reading for enjoyment and overall language exposure rather than scrutinizing every linguistic detail.

2.2. Case-Based Learning

Case-based learning (CBL) is a student-centered learning model because it makes students the center of learning^[6], and various real cases are used as the focus of learning^[8]. CBL is an evidence-based instructional method aimed at enabling students to solve problems through gathering information and applying it^[11]. Several researchers have researched CBL, which includes the title implementation of CBL in learning^[11], the influence of CBL in education^[8], the integration of competency-based education with CBL in learning^[13], and the effectiveness of CBL in improving students' critical thinking skills^[9]. In this study, the focus is on the CBL model of extensive reading through hybrid learning.

Building upon the concept of learner autonomy in extensive reading, the case-based learning (CBL) model introduces a structured, yet student-centered, approach to developing critical thinking and problem-solving skills. CBL

is considered a student-centered learning model because it places students at the core of the learning process^[6], utilizing various real-world cases as the primary learning materials^[8]. Moreover, CBL is recognized as an evidence-based instructional method that enables students to gather, analyze, and apply information to solve problems^[11].

A growing body of literature has examined CBL from multiple perspectives. These include studies on its implementation in classroom settings^[11], its overall influence on educational outcomes^[8], its integration with competency-based education^[13], and its effectiveness in enhancing students' critical thinking abilities^[9]. Within the scope of this study, however, the focus lies specifically on the application of the CBL model in the context of extensive reading, delivered through a hybrid learning platform.

2.3. Hybrid Learning

Hybrid learning is an instructional approach that combines offline (face-to-face) and online learning environments in a single, cohesive learning experience^[14-16]. Often referred to as *blended learning*, this model incorporates both synchronous (real-time) and asynchronous (self-paced) activities to support diverse learning needs^[17, 18]. Furthermore, it is also recognized as a teaching method that leverages 21st-century information technologies to integrate traditional classroom instruction with digital tools and platforms^[19]. This combination enhances flexibility, fosters greater student engagement, and supports the development of essential skills, ultimately contributing to improved learning outcomes^[20-22].

However, the effective implementation of hybrid learning is not without challenges. Not all students have equal access to the necessary technological resources, such as stable internet connections, appropriate devices, or quiet learning environments. These disparities can hinder active participation and exacerbate educational inequality, particularly among students from underprivileged backgrounds. Additionally, the shift toward increased self-directed learning in hybrid models may be overwhelming for learners who lack strong time management skills or intrinsic motivation. Without adequate support systems, such as clear instructional guidance and timely feedback from instructors, students may struggle to fully benefit from the hybrid learning environment. Therefore, while hybrid learning holds significant

promise, its success depends heavily on addressing these potential barriers to ensure inclusive and equitable access for all learners.

3. Research Methods

This study employed a qualitative approach to investigate students' perceptions of the CBL model in enhancing extensive reading skills within a hybrid learning environment. The qualitative data provided in-depth insights into students' experiences and challenges, contributing to a more nuanced understanding of the efficacy of CBL in fostering engagement and comprehension. The research sample comprised 88 students from the English Language Education Study Program, Faculty of Teacher Training and Education, Universitas Muhammadiyah Mataram. Participants were selected through purposive sampling to ensure the inclusion of individuals actively involved in CBL sessions. The diverse proficiency levels of the participants facilitated a comprehensive and representative analysis of their perceptions, thereby strengthening the study's validity.

To systematically capture students' perceptions, a structured questionnaire consisting of 50 items was developed. The instrument employed a Likert-scale format (ranging from 1: Strongly Disagree to 5: Strongly Agree) and was categorized into ten key dimensions: conceptual understanding of CBL, development of extensive reading skills, interaction and collaboration in hybrid learning, learner engagement, effectiveness of hybrid learning, problem-solving through case studies, real-world applicability, challenges in hybrid learning, overall satisfaction with the instructional model, and recommendations for refinement. The collected data were subjected to descriptive statistical analysis, with survey responses summarized as percentages to offer a precise and quantifiable representation of students' perspectives on the integration of CBL in hybrid extensive reading instruction.

4. Results

The results highlighted the perception of the model, which consisted of ten dimensions. Each dimension reflects different aspects of their learning experience, including conceptual understanding, skill development, engagement, and the effectiveness of hybrid learning.

4.1. Understanding the Concept of Case-Based Learning

This dimension evaluates the effectiveness of the CBL model in fostering students' understanding of extensive reading (Figure 1).

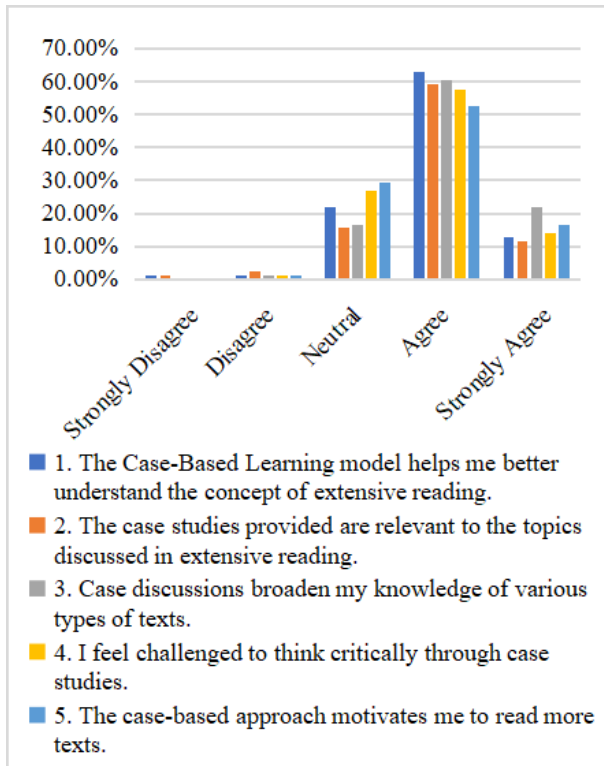


Figure 1. Understanding the concept of CBL.

The findings reveal that a significant proportion of students (62.8%) agreed, while 12.8% strongly agreed, that the CBL model helps them better comprehend extensive reading concepts. Furthermore, 59% of students agreed, and an additional 11.5% strongly agreed, that the provided case studies were highly relevant to the topics discussed in extensive reading sessions. Regarding the broadening of textual knowledge, 60.3% of respondents agreed and 21.8% strongly agreed that case discussions enhanced their familiarity with diverse text types. The critical thinking challenges posed by case studies were acknowledged by 57.7% of students as beneficial, with another 14.1% strongly agreeing. Additionally, 52.6% of students agreed, and 16.7% strongly agreed, that the case-based approach motivated them to engage with more texts. These responses collectively underscore the CBL model's capability to deepen students' conceptual understanding and foster active engagement with the learning material.

4.2. Development of Extensive Reading Skills

This dimension explores the impact of the CBL model on students' ability to improve their extensive reading skills (Figure 2).

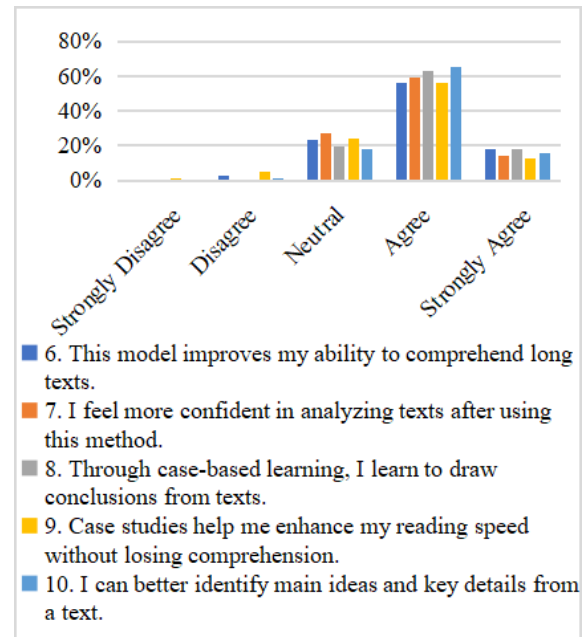


Figure 2. Development of extensive reading skills.

The results suggest that 56.4% of students agreed, and 17.9% strongly agreed, that the method enhanced their comprehension of lengthy texts. In terms of confidence in text analysis, 59% agreed, while 14.1% strongly agreed that their analytical abilities improved following the implementation of this model. Furthermore, the skill of drawing conclusions from texts was affirmed by 62.8% of students, with an additional 15.4% expressing strong agreement. Regarding reading speed, 56.4% agreed, and 12.8% strongly agreed that the approach helped them read faster without compromising comprehension. Moreover, the ability to identify main ideas and key details improved for 65.4% of the respondents, with another 12.8% strongly agreeing. These results indicate that the CBL model significantly enhances students' extensive reading skills, contributing to both speed and accuracy in text comprehension.

4.3. Interaction and Collaboration in Hybrid Learning

This dimension examines the level of interaction and collaboration facilitated by hybrid learning within the CBL

framework (Figure 3).

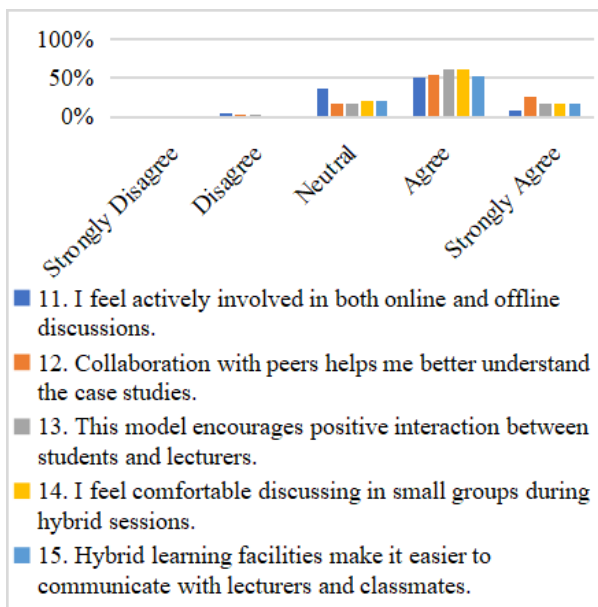


Figure 3. Interaction and collaboration in hybrid learning.

The data reveal that 51.3% of students agreed, and 7.7% strongly agreed, that they actively participated in both online and offline discussions. Collaboration with peers was identified as beneficial by 53.8% of students who agreed, alongside 26.9% who strongly agreed, indicating a high level of peer-assisted learning. Moreover, 61.5% of respondents agreed, and 17.9% strongly agreed, that the model fostered positive interactions between students and lecturers. Small group discussions during hybrid sessions were reported as comfortable and productive, with 61.5% agreeing and 17.9% strongly agreeing. Lastly, the hybrid learning infrastructure was found to ease communication between lecturers and classmates for 52.6% of students, with an additional 17.9% strongly agreeing. These findings demonstrate the effectiveness of hybrid learning environments in promoting collaborative and interactive educational experiences.

4.4. Engagement in Learning

This dimension evaluates students' level of engagement and motivation within the CBL framework (Figure 4).

A majority of respondents (59%) agreed, while 12.8% strongly agreed, that this model increased their motivation to attend classes. Additionally, 55.1% agreed, and 14.1% strongly agreed, that completing case-based assignments evoked excitement and engagement. CBL was perceived

as providing an engaging experience by 59% of students, with 20.5% strongly agreeing. Moreover, the use of interesting case studies motivated 60.3% of students to explore more references, and 16.7% strongly agreed. Lastly, 59% of students agreed, while 16.7% strongly agreed, that they felt more responsible for managing their own learning process. These insights highlight the model's ability to inspire active learning and personal accountability among students.

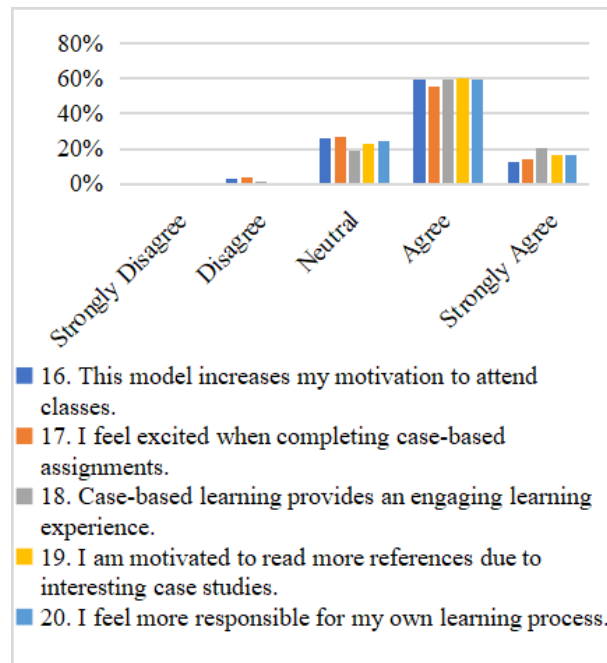


Figure 4. Engagement in learning.

4.5. Effectiveness of Hybrid Learning

This dimension focuses on the perceived effectiveness of the hybrid learning model employed in the CBL framework (Figure 5).

The majority of students (61.5%) agreed, and 11.5% strongly agreed, that the technology used supported the hybrid learning process. Ease of access to online learning materials was affirmed by 57.7% agreeing and 17.9% strongly agreeing. The complementary nature of face-to-face and online sessions in extensive reading learning was recognized by 53.8% of students agreeing, alongside 20.5% strongly agreeing. Furthermore, the flexibility of hybrid learning in facilitating class attendance was acknowledged by 59% of respondents. Additionally, 47.4% agreed, and 17.9% strongly agreed, that hybrid learning helped them manage their study time effectively. These results affirm the utility of hybrid

learning in enhancing the accessibility and organization of educational experiences.

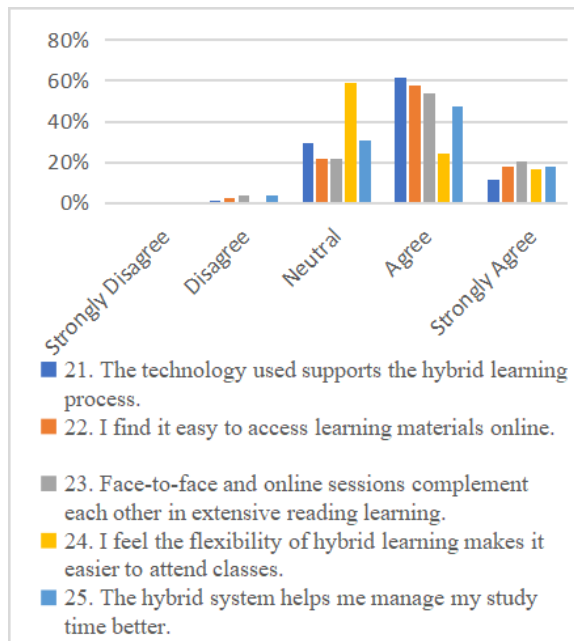


Figure 5. Effectiveness of hybrid learning.

4.6. Problem-Solving through Case Studies

This dimension explores the development of problem-solving skills among students within the CBL framework (Figure 6).

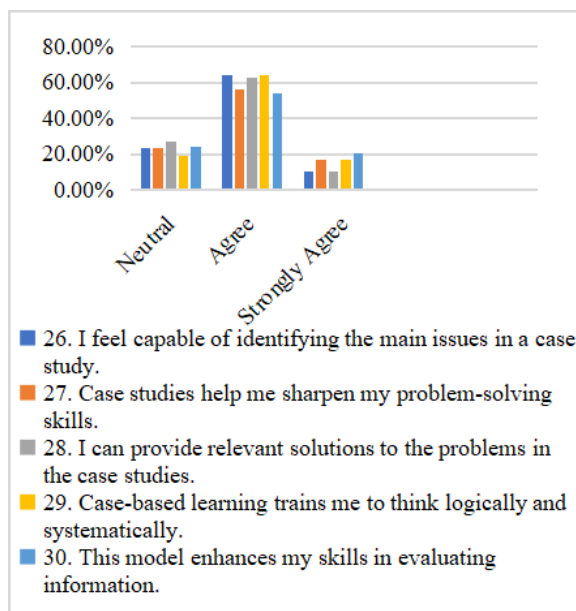


Figure 6. Problem-solving through case studies.

According to the findings, 64.1% of students agreed,

and 10.3% strongly agreed, that they were capable of identifying main issues in case studies. Problem-solving skills were enhanced for 56.4% of respondents who agreed, and 16.7% who strongly agreed. The ability to provide relevant solutions to case study problems was affirmed by 62.8% agreeing and 10.3% strongly agreeing. Additionally, 64.1% of students agreed and 16.7% strongly agreed, that the method trained them to think logically and systematically. The skills to evaluate information were improved for 53.8% of students agreeing, with another 20.5% strongly agreeing. These findings highlight the model's role in nurturing critical problem-solving abilities among students.

4.7. Relevance to Real Life

This dimension assesses the relevance of the CBL framework to students' real-life experiences (Figure 7).

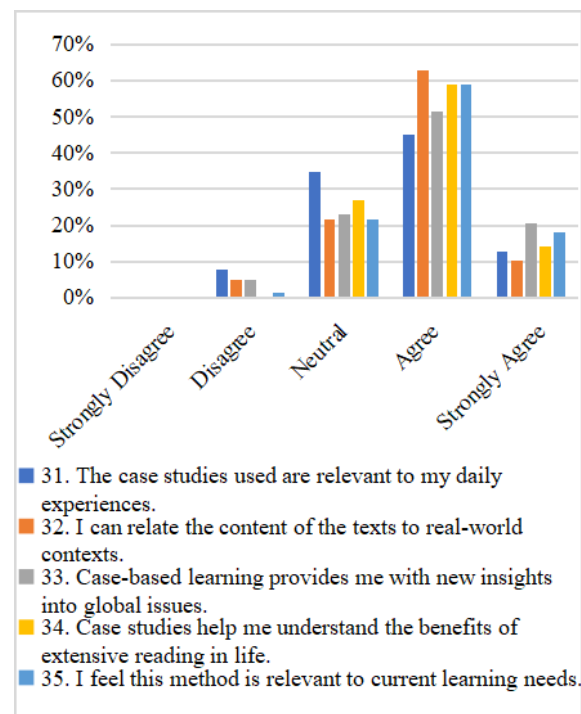


Figure 7. Relevance to real life.

A total of 44.9% of students agreed, and 12.8% strongly agreed, that the case studies used were pertinent to their daily experiences. Relating content to real-world contexts was acknowledged by 62.8% of students agreeing and 10.3% strongly agreeing. Additionally, 51.3% agreed, and 20.5% strongly agreed, that the CBL model provided new insights into global issues. Understanding the benefits of extensive

reading in life was affirmed by 59% agreeing and 14.1% strongly agreeing. Finally, 59% of respondents agreed, and 17.9% strongly agreed, that the method was aligned with current learning needs. These results validate the applicability of the CBL model in bridging theoretical concepts with practical experiences.

4.8. Challenges in Hybrid Learning

This dimension addresses the challenges faced by students in hybrid learning settings (Figure 8).

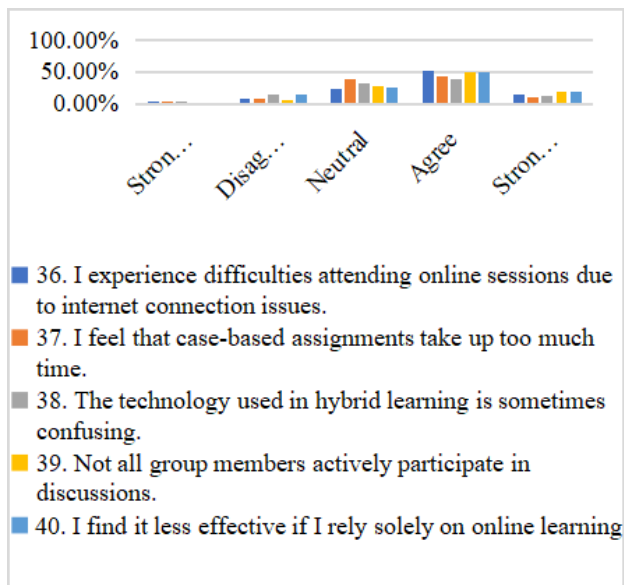


Figure 8. Challenges in hybrid learning.

Internet connection issues impeded participation for 52.6% of respondents agreeing and 14.1% strongly agreeing. Case-based assignments were perceived as time-consuming by 43.6% agreeing and 9% strongly agreeing. The technology used in hybrid learning was noted as confusing by 39.7% of students agreeing and 11.5% strongly agreeing. Additionally, unequal participation in group discussions was reported by 48.7% agreeing and 17.9% strongly agreeing. The inefficacy of relying solely on online learning was identified by 50% of students agreeing and 19.2% strongly agreeing. These findings underscore the need to address technical and structural issues in hybrid learning environments.

4.9. Satisfaction with the Learning Model

This dimension evaluates students' satisfaction with the CBL framework (Figure 9).

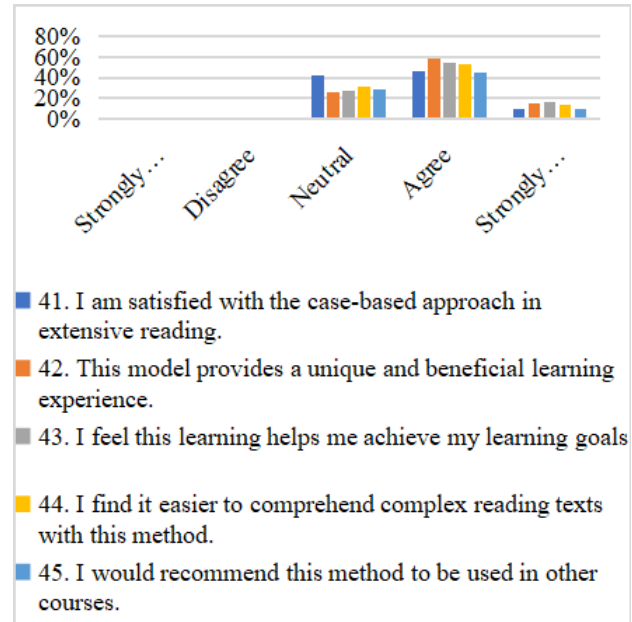


Figure 9. Satisfaction with the learning model.

A total of 46.2% of respondents agreed, and 10.3% strongly agreed, that they were satisfied with the model in the context of extensive reading. The learning experience was considered unique and beneficial by 59% of students agreeing and 15.4% strongly agreeing. The method's contribution to achieving learning goals was acknowledged by 55.1% agreeing and 16.7% strongly agreeing. Furthermore, 53.8% of respondents agreed, and 14.1% strongly agreed, that the method facilitated the comprehension of complex reading texts. Lastly, 44.9% agreed, and 10.3% strongly agreed, that they would recommend the model for use in other courses. These findings illustrate the positive reception of the CBL model among students.

4.10. Suggestions for Model Improvement

This dimension focuses on student recommendations for improving the CBL model (Figure 10).

A majority of students (53.8%) agreed, and 16.7% strongly agreed, that additional case study examples would enhance learning sessions. The need for improved hybrid sessions was highlighted by 52.6% agreeing and 19.2% strongly agreeing. Further guidance for completing assignments was desired by 57.7% of respondents who agreed, along with 21.1% who strongly agreed. Adjustments to assessment methods were suggested by 57.7% agreeing and 21.8% strongly agreeing. Lastly, 55.1% agreed, and 32.1%

strongly agreed, that incorporating more face-to-face discussions would improve the learning experience. These recommendations provide actionable insights for refining the implementation of the CBL framework.

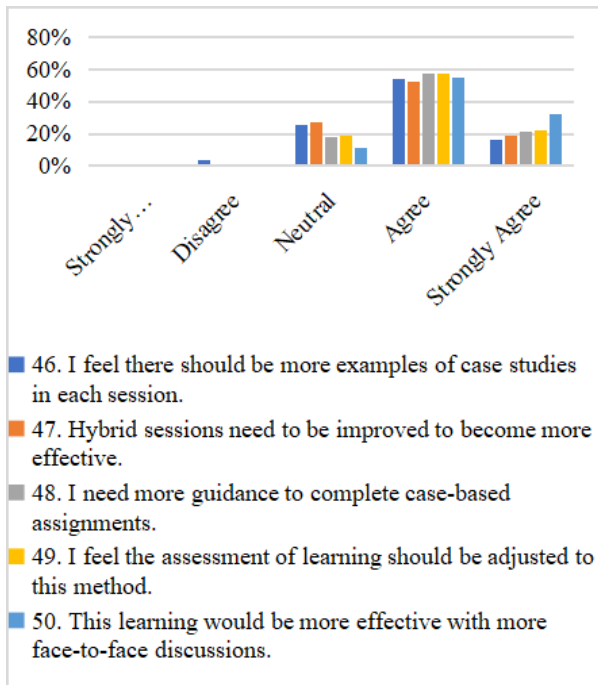


Figure 10. Suggestions for model improvement.

5. Discussion

The findings of this study underscore the multifaceted benefits of the case-based learning (CBL) model for extensive reading, providing both pedagogical insights and actionable recommendations for enhancing its implementation. Each dimension of this study reveals distinct strengths and challenges, offering a comprehensive understanding of how the CBL model impacts learning outcomes.

5.1. Effectiveness in Fostering Understanding

The findings of this study highlight the effectiveness of the CBL model in enhancing students' understanding of extensive reading. A substantial majority of students (62.8%) agreed, with an additional 12.8% strongly agreeing, that the CBL model contributed positively to their comprehension of extensive reading concepts. This suggests that integrating case studies into the learning process provides a structured and contextually rich environment that facilitates deeper cognitive processing of textual materials. Previous research

supports these findings, indicating that CBL promotes active learning and improves reading comprehension^[13, 23, 24]. Furthermore, the relevance of the case studies to the extensive reading topics was acknowledged by a significant proportion of students. With 59% agreeing and 11.5% strongly agreeing, the results indicate that the cases presented were well-aligned with course objectives, thereby reinforcing the applicability of theoretical knowledge. The use of real-world scenarios likely made the learning experience more relatable and engaging, further supporting students' understanding of diverse reading materials^[25, 26].

Another key aspect of the study was the impact of CBL on students' exposure to various text types. The data revealed that 60.3% of students agreed and 21.8% strongly agreed that case discussions broadened their textual knowledge. This finding suggests that analysing different cases facilitated an exploration of multiple genres and formats, helping students develop a more comprehensive understanding of extensive reading. By engaging with diverse textual materials, students can cultivate better reading habits and enhance their ability to analyse and interpret various forms of written content. A study by Ismail and Edi^[11] has emphasized the role of problem-based and CBL in strengthening analytical skills and broadening textual comprehension. Additionally, critical thinking emerged as another significant dimension influenced by the CBL model. More than half of the students (57.7%) agreed, and 14.1% strongly agreed, that case studies presented meaningful challenges that encouraged analytical reasoning. This aligns with existing literature, which posits that case-based approaches foster higher-order thinking skills by prompting students to engage in problem-solving, evaluation, and synthesis of information^[27]. The structured discussions surrounding case studies likely stimulated students' ability to critically assess textual content and draw informed conclusions.

In addition to cognitive benefits, the motivational impact of CBL on students' engagement with texts was also noteworthy. The study found that 52.6% of students agreed and 16.7% strongly agreed that the case-based approach encouraged them to explore additional reading materials. This indicates that CBL not only enhances comprehension but also fosters an intrinsic motivation to read beyond the prescribed materials. By presenting engaging and thought-provoking cases, students are more inclined to seek further reading

opportunities, thereby reinforcing their learning experience. This finding is consistent with studies that highlight the importance of student-centered learning models in increasing intrinsic motivation and engagement^[28–30]. Overall, the findings underscore the effectiveness of the CBL model in fostering a deeper conceptual understanding of extensive reading. The model's emphasis on real-world application, exposure to diverse text types, critical thinking enhancement, and increased motivation collectively contribute to an enriched learning experience. These insights support the continued integration of CBL in extensive reading curricula, potentially leading to sustained improvements in students' reading proficiency and analytical capabilities. Future research could explore additional variables such as long-term retention of knowledge and comparative effectiveness with other instructional models to further validate these findings^[31, 32].

5.2. Improvement of Extensive Reading Skills

The results of this study indicate that the CBL model significantly contributes to the development of students' extensive reading skills. A substantial proportion of students (56.4% agreed, 17.9% strongly agreed) reported improved comprehension of lengthy texts, suggesting that the structured case-based approach facilitates deeper engagement with reading materials. This finding aligns with research by Vallée et al.^[33], which emphasizes that CBL enhances knowledge retention by embedding learning within meaningful contexts. Through real-world case analysis, students are encouraged to actively engage with complex texts, thereby developing stronger interpretative and inferential skills. This deeper engagement is crucial in extensive reading, where students must navigate various text types and synthesize information effectively. Moreover, the increased confidence in text analysis (59% agreed, 14.1% strongly agreed) further supports the effectiveness of CBL in fostering critical engagement with texts. Confidence in reading and analysing texts is a key factor in academic success, as it enables students to approach new reading materials with a strategic mindset. Research by Ismail and Edi^[11] suggests that when students engage in case-based discussions, they are more likely to apply analytical reasoning and make informed judgments about textual information. Additionally, as students repeatedly interact with case materials, they develop a habit of questioning, synthesizing, and evaluating content, which

strengthens their ability to process extensive reading materials with greater accuracy.

Beyond comprehension and analysis, the CBL model also improved students' ability to draw conclusions from texts, with 62.8% agreeing and 17.9% strongly agreeing. This suggests that engaging with case studies enhances students' synthesis and evaluative skills, which are crucial for extensive reading. The ability to draw conclusions requires students to connect different pieces of textual information, infer implicit meanings, and assess the reliability of sources—skills that are vital for advanced literacy and academic success. Previous studies, such as those by Sultana et al.^[23], have emphasized that case-based approaches promote deep learning by requiring students to actively construct knowledge rather than passively receive information. Additionally, the findings show that 56.4% of students agreed, and 12.8% strongly agreed, that CBL improved their reading speed without compromising comprehension. This suggests that the model not only enhances deep processing but also improves fluency, allowing students to read faster while retaining key details. This aspect is particularly important in academic settings, where students often need to process large volumes of reading material efficiently. The most notable finding is that 65.4% of students agreed, with 15.4% strongly agreeing, that their ability to identify main ideas and key details improved—an essential skill in extensive reading that enables efficient information processing. Identifying key ideas is a core component of critical reading, as it allows students to distinguish between relevant and extraneous information. Research by Senyah^[34] suggests that when students engage in structured discussions around case-based materials, they develop metacognitive skills that help them recognize patterns, organize information effectively, and draw meaningful insights from texts. These findings collectively reinforce the argument that the CBL model not only fosters comprehension but also enhances students' analytical capacity, reading fluency, and overall engagement with texts. Future research could further explore how sustained exposure to case-based materials influences long-term reading proficiency and critical thinking development. Additionally, comparative studies could investigate how CBL compares with other active learning approaches, such as problem-based learning (PBL) or inquiry-based learning, in enhancing extensive reading skills.

5.3. Interaction and Collaboration in Hybrid Learning

The findings from this study indicate that hybrid learning within the CBL framework fosters meaningful interaction and collaboration among students and lecturers. A considerable proportion of students (51.3% agreed, 7.7% strongly agreed) reported active participation in both online and offline discussions, suggesting that the hybrid approach successfully integrates digital and face-to-face learning environments. This aligns with the research undertaken by Vallée et al.^[33], who argue that hybrid learning enhances student engagement by providing flexible opportunities for interaction. The combination of online discussions, which allow for reflective and asynchronous engagement, and in-person sessions, which facilitate immediate feedback and dynamic dialogue, creates a balanced learning ecosystem. Students who engage in both formats can benefit from continuous discourse, reinforcing their understanding of course concepts. Additionally, this blended approach caters to diverse learning preferences, ensuring that students who may feel hesitant to speak in traditional classrooms have an opportunity to contribute in online discussions. By incorporating digital platforms, such as discussion forums and collaborative tools, hybrid learning encourages more inclusive participation, enabling students to develop their communication skills in both synchronous and asynchronous settings.

Collaboration with peers was also a significant benefit observed in this study, with 53.8% of students agreeing and 26.9% strongly agreeing that working with classmates enhanced their learning experience. These results highlight the importance of peer-assisted learning, where students support each other in analysing and discussing case studies. Research by Senyah^[34] emphasizes that collaborative learning environments promote deeper comprehension by allowing students to articulate their thoughts, challenge different viewpoints, and co-construct knowledge. Through group discussions, both in-person and virtual, students can refine their critical thinking skills and expand their understanding of complex topics. Furthermore, peer collaboration in hybrid settings fosters a sense of academic community, reducing feelings of isolation that can sometimes arise in online learning. The study also found that 61.5% of respondents agreed, and 17.9% strongly agreed, that the CBL model facilitated

positive interactions between students and lecturers. This suggests that hybrid learning strengthens the student-teacher relationship, providing multiple avenues for academic support and mentorship. Instructors can use digital platforms to provide continuous guidance, clarify misunderstandings, and offer constructive feedback, reinforcing the learning process. Additionally, small group discussions were reported as comfortable and productive, with 61.5% of students agreeing and 17.9% strongly agreeing, indicating that structured hybrid learning sessions create a supportive environment for academic discourse. This finding supports the argument that hybrid learning, when well-designed, can cultivate both intellectual and social engagement, making learning more interactive and participatory.

The hybrid learning infrastructure was also found to be effective in facilitating communication between lecturers and classmates, as indicated by 52.6% of students who agreed and 17.9% who strongly agreed. This underscores the role of technological tools in bridging the gap between in-person and remote learning experiences. Platforms such as video conferencing, collaborative documents, and discussion boards enhance communication efficiency, allowing students to seek clarification and share insights regardless of physical location. Research by Senyah^[34] and Preshaw et al.^[35] suggests that digital learning environments can enhance student engagement when complemented by interactive teaching methods, such as CBL, which promotes problem-solving and application-based learning. The ability to maintain continuous interaction with lecturers and peers contributes to a more cohesive learning experience, ensuring that students remain actively involved in their studies. Moreover, hybrid learning provides flexibility, enabling students to balance academic responsibilities with personal commitments while still engaging in meaningful discussions. These findings collectively demonstrate that hybrid learning, when integrated with CBL, offers a highly interactive and collaborative educational experience. By combining digital tools with in-person engagement, this model effectively enhances student participation, fosters peer learning, strengthens student-lecturer relationships, and improves overall communication in academic settings. Future research could further explore the long-term impact of hybrid learning on student engagement and retention, as well as its effectiveness in different subject areas and educational levels.

5.4. Engagement and Motivation

The findings suggest that the CBL model plays a crucial role in enhancing students' engagement and motivation in the learning process. A significant majority of students (59% agreed, 12.8% strongly agreed) reported that CBL increased their motivation to attend classes, indicating that this approach fosters a more stimulating and interactive classroom environment. Motivation is a key factor in academic success, as it influences students' willingness to participate in learning activities and persist in their studies. According to Self-Determination Theory^[36, 37], students are more likely to be engaged when they find learning experiences meaningful, autonomy-driven, and competence-enhancing. CBL meets these criteria by presenting real-world scenarios that require students to actively apply their knowledge, thereby making learning more purposeful and engaging. Unlike traditional lecture-based instruction, which can sometimes lead to passive learning, the CBL model encourages students to immerse themselves in problem-solving and discussion, leading to a deeper understanding of the subject matter. The interactive nature of this approach ensures that students are not merely recipients of information but active participants in the learning process.

In addition to increasing class attendance motivation, CBL was found to evoke excitement and engagement when completing case-based assignments. More than half of the students (55.1% agreed, 14.1% strongly agreed) expressed that working on case studies made their learning experience more enjoyable. This suggests that CBL transforms academic tasks from routine obligations into intellectually stimulating challenges. Research by Sukacké^[38] supports this finding, emphasizing that active learning strategies, such as CBL, significantly enhance student engagement by requiring them to apply theoretical knowledge to practical situations. The data further reveal that 59% of students agreed, and 20.5% strongly agreed, that CBL provided an engaging learning experience. The element of storytelling in case studies likely contributes to this engagement, as narratives are known to captivate learners' attention and help them connect emotionally with the content^[39, 40]. Furthermore, working through real or simulated cases encourages curiosity, prompting students to investigate topics more deeply. By integrating case studies that reflect real-world complexities, students develop a sense of relevance and authenticity in their learning, which

enhances their intrinsic motivation to participate actively in class discussions and assignments.

Another compelling insight is the impact of CBL on students' willingness to explore additional learning materials. A significant 60.3% of respondents agreed, with 16.7% strongly agreeing, that interesting case studies motivated them to seek out more references beyond the assigned readings. This aligns with research by Aceto, Persico and Pescapé^[41] and Ngandu^[42], who found that students are more likely to engage in self-directed learning when they encounter material that piques their curiosity and challenges their existing knowledge. When students encounter case studies that resonate with their interests or highlight real-world problems, they are more inclined to take ownership of their learning by conducting further research. This process not only broadens their academic perspectives but also fosters lifelong learning habits. Additionally, the increased motivation to explore references indicates that CBL cultivates information-seeking behaviour, a crucial skill for higher education and professional development. The ability to independently seek out knowledge beyond the classroom setting is essential for students to develop critical research skills and stay informed about their respective fields.

Lastly, the study highlights how CBL fosters a sense of responsibility in students regarding their learning process. More than half (59% agreed, 16.7% strongly agreed) indicated that the model encouraged them to take greater accountability for managing their academic progress. This supports the constructivist view of learning, which posits that students learn best when they take an active role in constructing their knowledge rather than relying solely on instructor-led teaching^[43–45]. By engaging with case-based problems, students must analyse, evaluate, and synthesize information independently, which nurtures self-regulation and time-management skills. Furthermore, CBL promotes a shift from extrinsic to intrinsic motivation, as students become more invested in solving complex cases and developing their own perspectives. The self-directed nature of case analysis reinforces personal accountability, as students must take initiative in understanding the material, collaborating with peers, and seeking clarification when needed. This finding aligns with that of de Ruig, de Jong and Zee^[46], research on self-regulated learning, which suggests that when students perceive themselves as active agents in their education, they

develop higher levels of motivation and academic persistence.

5.5. Effectiveness of the Hybrid Learning Model

The findings indicate that the hybrid learning model employed within the CBL framework is perceived as effective in supporting students' academic experiences. A significant proportion of students (61.5% agreed, 11.5% strongly agreed) affirmed that the technology used in hybrid learning played a crucial role in facilitating the learning process. This suggests that the integration of digital tools, such as learning management systems, video conferencing platforms, and interactive online resources, has been instrumental in bridging the gap between face-to-face and virtual learning environments. Research by de Ruig, de Jong and Zee^[46] highlights that well-implemented hybrid learning models enhance student engagement and comprehension by leveraging technological advancements to provide flexible and personalized learning experiences. The availability of recorded lectures, discussion forums, and real-time feedback mechanisms likely contributed to students' positive perceptions, as these features allow for a more adaptable and student-centered approach to education. Additionally, technology-enhanced learning environments enable students to revisit course materials at their own pace, reinforcing their understanding and retention of complex concepts.

Another key aspect of the effectiveness of hybrid learning is the accessibility of online learning materials. The data reveal that 57.7% of students agreed, and 17.9% strongly agreed, that accessing digital resources was convenient and efficient. This finding underscores the importance of providing students with well-structured, easily navigable, and comprehensive online materials that complement face-to-face instruction. According to Pramesworo et al.^[47], hybrid learning is most effective when digital resources are seamlessly integrated into the curriculum, ensuring that students can engage with learning materials in a meaningful and self-directed manner. The ability to access e-books, scholarly articles, multimedia content, and case studies at any time empowers students to take control of their learning and explore topics beyond classroom discussions. Furthermore, the ease of access to online materials may reduce learning barriers for students with different learning preferences and sched-

ules, allowing for a more inclusive educational experience. Instructors play a critical role in curating and organizing these resources to ensure that students receive relevant, high-quality content that enhances their extensive reading skills.

The results also emphasize the complementary nature of face-to-face and online sessions in the context of extensive reading learning. A combined 74.3% of students (53.8% agreed, 20.5% strongly agreed) recognized that hybrid learning effectively integrates traditional classroom interactions with digital learning experiences. This aligns with studies by Pramesworo et al.^[47], which suggest that blending in-person discussions with online components enhances knowledge construction by allowing students to engage in both synchronous and asynchronous learning. In face-to-face settings, students can participate in dynamic discussions, receive immediate feedback from instructors, and collaborate with peers on complex case analyses. Conversely, online sessions provide opportunities for deeper reflection, independent research, and access to diverse perspectives through digital forums. The synergy between these two modalities creates a holistic learning experience that caters to different learning styles and preferences. Moreover, students can use online platforms to prepare for in-person discussions, ensuring that they come to class with well-formed ideas and critical insights, thereby maximizing the effectiveness of classroom interactions.

Flexibility is another major advantage of hybrid learning, particularly in facilitating class attendance. The study found that 59% of students acknowledged the role of hybrid learning in making it easier to attend classes, which suggests that this model accommodates diverse student needs and commitments. Unlike traditional learning formats that require physical presence at all times, hybrid learning provides students with the option to engage with coursework remotely when necessary. This flexibility is particularly beneficial for students balancing academic responsibilities with work, family obligations, or extracurricular activities. Research by Pramesworo et al.^[47] suggests that flexible learning models increase student participation by reducing logistical constraints and allowing for greater autonomy in managing learning schedules. By offering both synchronous and asynchronous components, hybrid learning ensures that students do not miss out on critical content, even if they are unable to attend a session in person. Additionally, the

ability to engage with recorded lectures and supplementary materials enables students to review content at their own convenience, reinforcing learning and comprehension.

Time management is another critical skill that is supported by hybrid learning, as reflected in the study's findings. Nearly half (47.4% agreed, 17.9% strongly agreed) of the students reported that hybrid learning helped them manage their study time more effectively. This suggests that the structured yet flexible nature of hybrid learning encourages students to develop independent learning habits and organizational skills. According to Pramesworo et al.^[47], self-regulated learning is a key predictor of academic success, and hybrid learning environments provide an ideal framework for fostering these skills. The ability to schedule study sessions around personal commitments, set learning goals, and allocate time for both individual and group work enhances students' ability to plan and prioritize their academic responsibilities. Furthermore, online components often include self-paced learning modules, quizzes, and interactive exercises that allow students to track their progress and identify areas that require further improvement. By promoting a balance between structured instruction and independent study, hybrid learning equips students with essential time-management skills that are valuable not only in academic settings but also in their future professional endeavours.

5.6. Development of Problem-Solving Skills

The findings reveal that the CBL framework significantly contributes to the development of problem-solving skills among students. A substantial majority (64.1% agreed, 10.3% strongly agreed) reported that they were able to identify the main issues presented in case studies, indicating that this instructional approach enhances students' ability to analyse and break down complex problems. Identifying core issues is a fundamental step in problem-solving, as it allows students to focus on the most critical aspects of a given scenario. Research by Yang et al.^[48] suggests that the CBL promotes problem recognition and comprehension by engaging students in realistic and context-driven scenarios that require analytical thinking. By working through structured case studies, students learn to distinguish relevant from irrelevant information, a crucial skill for decision-making in both academic and professional settings. Moreover, repeated exposure to various case scenarios trains students to refine

their analytical strategies, ensuring they become more adept at recognizing patterns and underlying causes of problems in different contexts.

In addition to identifying key issues, students also reported improvements in their overall problem-solving abilities, with 56.4% agreeing and 16.7% strongly agreeing that CBL helped them enhance their capacity to resolve complex situations. This suggests that working through case studies fosters not only issue identification but also the application of critical thinking to formulate viable solutions. Problem-solving is an essential cognitive skill that involves logical reasoning, creativity, and adaptability—elements that are actively developed through structured case discussions. A study by Sultana et al.^[23] emphasizes that problem-based and CBL methodologies encourage active engagement with real-world problems, leading to deeper learning and retention of knowledge. Furthermore, by engaging with different perspectives during class discussions, students develop a more flexible approach to tackling challenges, as they must consider multiple viewpoints and justify their reasoning. This iterative problem-solving process strengthens their ability to navigate ambiguity, a key skill for both academic success and future professional roles.

Another crucial aspect of problem-solving is the ability to generate relevant and effective solutions, which was affirmed by 62.8% of students who agreed, alongside 10.3% who strongly agreed, that they could propose appropriate responses to case study problems. The ability to generate well-reasoned solutions is essential in professional decision-making and real-life problem-solving. According to Yan and Cheng^[49], case-based reasoning encourages students to draw upon previous knowledge and experiences to develop informed solutions, thereby improving their cognitive flexibility. Within the CBL framework, students must not only suggest potential solutions but also evaluate their feasibility, ethical implications, and practical implementation. This process encourages them to move beyond surface-level thinking and engage in deeper analysis, ensuring that their solutions are well-founded and applicable in real-world scenarios. Furthermore, discussing potential solutions with peers and instructors allows students to refine their ideas through constructive feedback, ultimately leading to a more robust understanding of problem resolution strategies.

Logical and systematic thinking is another key skill

developed through CBL, with 64.1% of students agreeing, and 16.7% strongly agreeing, that the method trained them to think in a structured manner. Logical reasoning involves the ability to assess problems methodically, considering all relevant variables before arriving at a conclusion. According to Sultana et al.^[23], structured problem-solving approaches, such as the CBL, help students cultivate disciplined thinking patterns that are crucial for critical analysis. The process of deconstructing a case study into its components, analysing relationships between elements, and constructing logical arguments enhances students' ability to think sequentially and systematically. Additionally, the requirement to justify their reasoning during class discussions further strengthens their ability to construct well-organized arguments, an essential skill for academic writing, debates, and professional decision-making. The emphasis on logical structuring ensures that students develop clarity in their thought processes, allowing them to approach problems with confidence and precision.

Beyond issue identification and solution formulation, the findings also highlight the improvement in students' ability to evaluate information critically. A significant 53.8% of students agreed, and 20.5% strongly agreed, that CBL enhanced their skills in assessing and interpreting data. The ability to critically evaluate information is an essential component of informed decision-making, particularly in today's information-rich environment where students must navigate vast amounts of data. According to Johnson, Adkins and Chauvin^[50], critical evaluation involves questioning assumptions, identifying biases, and weighing evidence before forming conclusions. The case-based approach naturally fosters these skills, as students must analyse information from different sources, compare multiple perspectives, and assess the credibility of evidence presented within a case. By consistently engaging in these evaluative practices, students become more discerning readers and thinkers, capable of distinguishing between reliable and misleading information. This skill is particularly valuable in academic research, professional problem-solving, and everyday decision-making, where the ability to assess information critically can lead to more informed and effective outcomes.

5.7. Relevance to Real-Life Experiences

The findings illustrate the strong relevance of the CBL framework to students' real-life experiences, reinforcing its

effectiveness in making learning more meaningful and applicable beyond the classroom. A significant proportion of students (44.9% agreed, and 12.8% strongly agreed) found that the case studies used in this learning model were directly pertinent to their daily lives. This suggests that the examples and scenarios presented in CBL are not only academically enriching but also practically relevant, allowing students to connect theoretical knowledge with their own experiences. When students engage with real-life cases, they are more likely to develop a deeper understanding of the material, as it becomes more relatable and applicable. According to Çeken and Taşkın^[51] and Marougkas et al.^[52], learning is most effective when individuals can actively relate new knowledge to their personal experiences, leading to better retention and practical application. By integrating familiar and meaningful case studies, the CBL model enables students to view their academic learning as a tool for solving real-world problems, ultimately increasing motivation and engagement. Additionally, the relevance of case studies helps students recognize the value of their coursework in addressing everyday challenges, making them more likely to internalize key concepts and apply them in future situations.

Beyond personal relevance, the ability of the CBL model to connect academic content with broader real-world contexts was acknowledged by a majority of students, with 62.8% agreeing and 10.3% strongly agreeing. This indicates that students perceive the CBL as an effective bridge between classroom theories and real-life applications. The importance of contextualized learning has been emphasized by educational researchers like Lee^[53], who argue that knowledge is best acquired when it is situated within meaningful and authentic contexts. When students encounter case studies that reflect real-world situations—whether in business, education, healthcare, or social issues—they are better equipped to understand the complexities of practical decision-making. Furthermore, exposure to real-world cases encourages students to think beyond abstract concepts and consider how knowledge can be applied to solve tangible problems. For example, a case study on global sustainability challenges may not only deepen students' understanding of environmental issues but also inspire them to take action in their own communities. The ability to relate academic learning to real-world contexts fosters a sense of purpose, demonstrating that education extends beyond the classroom and has a direct

impact on society.

The results also highlight the role of CBL in broadening students' perspectives on global issues, with 51.3% agreeing and 20.5% strongly agreeing that this learning model provided them with new insights into worldwide challenges. The incorporation of real-world case studies enables students to explore issues that transcend their immediate environment, helping them develop a more global outlook. In today's interconnected world, the ability to understand and engage with international issues, such as climate change, public health, economic disparities, and technological advancements, is essential for students preparing to enter a rapidly evolving workforce. According to Jiang, Sun and Lin^[54], exposure to global case studies enhances students' ability to analyse complex international problems, fostering cross-cultural awareness and critical thinking. When students analyse case studies from different cultural and geographical contexts, they gain a broader appreciation of how issues manifest differently across societies. This exposure helps them recognize the interdependence of global systems and encourages them to think critically about solutions that are inclusive and sustainable. Additionally, engaging with diverse perspectives in the CBL promotes empathy and cultural sensitivity, which are essential skills for navigating the modern globalized world.

Another significant aspect of real-world relevance in CBL is its ability to demonstrate the practical benefits of extensive reading in everyday life. A total of 59% of students agreed, while 14.1% strongly agreed, that the model helped them understand how extensive reading contributes to their personal and professional growth. Extensive reading, which involves reading large amounts of material for general understanding rather than detailed analysis, is widely recognized for its cognitive and linguistic benefits^[55, 56]. The findings suggest that students are increasingly aware of how extensive reading can enhance their ability to absorb information, improve their critical thinking skills, and strengthen their problem-solving abilities. By engaging with real-world case studies, students are encouraged to explore additional reading materials that deepen their understanding of different topics. This not only improves their academic performance but also fosters a habit of lifelong learning. Furthermore, students who engage in extensive reading develop stronger analytical skills, as they are exposed to a wide range of perspectives

and arguments. This ability to process and synthesize large volumes of information is especially valuable in today's digital age, where individuals must navigate an overwhelming amount of information on a daily basis.

Lastly, the alignment of the CBL model with current learning needs was affirmed by 59% of students agreeing and 17.9% strongly agreeing. This finding highlights the adaptability of the CBL in addressing contemporary educational demands. Traditional lecture-based approaches, while informative, often fail to engage students in meaningful ways, leading to passive learning and limited retention. In contrast, the interactive nature of CBL encourages active participation, problem-solving, and critical reflection, making it a more effective pedagogical approach for modern learners. Research by Lee^[53] suggests that active learning strategies, such as the CBL, lead to improved knowledge retention and deeper comprehension. The ability to discuss, analyse, and apply case studies ensures that students are not merely memorizing information but are actively engaging with the material in a way that promotes long-term learning. Moreover, the dynamic structure of CBL allows for the incorporation of contemporary topics, ensuring that students are always engaging with the most relevant and up-to-date content. This adaptability makes CBL an ideal approach for equipping students with the skills and knowledge necessary to navigate an ever-changing world.

5.8. Challenges in Hybrid Learning

The findings highlight several key challenges encountered by students in hybrid learning settings, with internet connectivity emerging as one of the most significant barriers. A substantial portion of students (52.6% agreed, and 14.1% strongly agreed) reported that unreliable internet access hindered their ability to participate effectively in online learning sessions. This issue is particularly relevant in regions where internet infrastructure is less developed, leading to frequent disruptions during virtual lectures, discussions, and assignments. The impact of poor connectivity extends beyond mere inconvenience, as it can result in students missing out on critical explanations, peer interactions, and real-time feedback from lecturers. According to a study by Turnbull, Chugh and Luck^[57], students in hybrid learning environments often face disparities in access to stable internet, which creates an uneven learning experience. Inconsistent connectivity

can lead to frustration, disengagement, and reduced motivation, particularly when students are unable to fully engage in discussions or submit assignments on time. To address this challenge, institutions could explore solutions such as providing internet subsidies, developing offline-accessible learning materials, or optimizing online platforms to function effectively with lower bandwidth. Additionally, alternative arrangements such as recorded lectures and asynchronous discussion forums could help mitigate the impact of connectivity issues on students' learning experiences.

Another prominent challenge identified in the findings is the time-consuming nature of case-based assignments, with 43.6% of students agreeing and 9% strongly agreeing that these tasks demand a significant amount of effort. While the CBL is designed to promote critical thinking and problem-solving, the extensive research, analysis, and collaboration required for these assignments can be overwhelming for students managing multiple courses simultaneously. The complexity of case studies often necessitates prolonged engagement with reading materials, data interpretation, and solution formulation, which can place additional cognitive and time burdens on students. This concern aligns with research by van Nooijen et al.^[58], which suggests that excessive cognitive load can hinder learning efficiency, particularly when students are required to process large amounts of information within tight deadlines. Some students may struggle to balance their workload, leading to stress, burnout, or diminished enthusiasm for learning. To alleviate this challenge, educators might consider breaking case-based assignments into smaller, more manageable tasks, integrating more structured guidance, and providing clearer expectations regarding assessment criteria. Additionally, offering flexible deadlines or peer collaboration opportunities could help distribute the workload more effectively and make the learning process more engaging rather than overwhelming.

Technological difficulties were another major challenge noted by students, with 39.7% agreeing and 11.5% strongly agreeing that the technology used in hybrid learning was confusing. The transition to hybrid learning often requires students to navigate multiple digital platforms, learning management systems, and communication tools, which can be daunting for those who are not technologically proficient. Differences in familiarity with these tools can create disparities in students' ability to access course materials, submit

assignments, and engage in discussions effectively. A study by van Nooijen et al.^[58] highlights that digital literacy is a crucial factor influencing students' success in online and hybrid learning environments. When students encounter frequent technical difficulties, such as login issues, platform malfunctions, or difficulty accessing learning materials, they may become disengaged and frustrated with the learning process. Addressing this issue requires institutions to provide clear instructional guides, technical support services, and hands-on training sessions for students to familiarize themselves with the digital tools used in their courses. Additionally, simplifying the technological requirements and ensuring that platforms are user-friendly and compatible across different devices can help minimize confusion and enhance the overall hybrid learning experience.

Another challenge identified in the study is the issue of unequal participation in group discussions, with 48.7% of students agreeing and 17.9% strongly agreeing that some students contributed less than others. This imbalance in participation can reduce the effectiveness of collaborative learning and create frustration among more engaged students who feel burdened with the majority of the work. In hybrid settings, factors such as varying internet connectivity, differences in confidence levels, and lack of direct supervision can contribute to unequal involvement in group activities. Some students may hesitate to participate actively in discussions due to social anxiety, uncertainty about their contributions, or difficulties in communicating ideas in an online format. Research by Ferri, Grifoni and Guzzo^[59] suggests that online learners often experience a sense of isolation, which can further discourage active engagement. To promote more equitable participation, instructors could implement structured participation guidelines, assign specific roles within group projects, and use breakout rooms to facilitate smaller, more interactive discussions. Encouraging students to use collaborative tools such as shared documents, discussion boards, and peer assessment mechanisms can also help create a more balanced and inclusive learning environment.

Lastly, the inefficacy of relying solely on online learning was another significant concern, with 50% of students agreeing and 19.2% strongly agreeing that online education alone is insufficient for achieving optimal learning outcomes. While online learning provides flexibility and accessibility, it often lacks the immediacy and engagement of face-to-face in-

teractions. Students may struggle with reduced opportunities for spontaneous discussions, hands-on learning experiences, and direct interaction with instructors. According to Vallée et al.^[33] and Celestino and Noronha^[60], blended learning approaches—such as hybrid learning—are more effective than fully online or fully face-to-face instruction, as they combine the advantages of both modalities. Many students find that in-person interactions help clarify complex concepts, build stronger relationships with peers and instructors, and enhance their overall learning experience. To improve hybrid learning effectiveness, institutions should ensure that face-to-face sessions are used strategically to complement online learning, focusing on interactive activities such as debates, workshops, and collaborative problem-solving exercises. Additionally, integrating high-quality multimedia resources, virtual simulations, and personalized feedback mechanisms in online components can help bridge the gap between digital and physical learning experiences.

5.9. Student Satisfaction and Recommendations

The findings indicate that a significant proportion of students expressed satisfaction with the CBL framework, particularly in the context of extensive reading. A total of 46.2% of respondents agreed, and 10.3% strongly agreed, that they were content with the implementation of this model. This suggests that nearly half of the students found the approach effective in enhancing their reading comprehension skills and overall learning experience. Satisfaction in learning is a crucial factor in academic achievement, as it influences students' motivation, engagement, and willingness to actively participate in learning activities. When students are satisfied with a learning model, they are more likely to approach their studies with a positive attitude and demonstrate higher levels of effort in completing assignments and participating in discussions. Additionally, a satisfied student body can lead to improved retention rates and better long-term educational outcomes, as learners develop a deeper appreciation for the subject matter. Therefore, the generally positive response to the CBL model highlights its potential as an effective instructional strategy that meets the needs of students.

Beyond general satisfaction, students found the learning experience offered by the CBL model to be unique and beneficial. A majority of 59% agreed, while 15.4% strongly

agreed, that the approach provided a distinct and valuable learning experience. This finding underscores the novelty and effectiveness of the CBL in engaging students and promoting active participation. Unlike traditional lecture-based approaches that often rely on passive knowledge transmission, the CBL model immerses students in real-world scenarios that require critical thinking, problem-solving, and active engagement with course materials. This interactive and practical approach not only enhances understanding but also makes learning more meaningful and memorable. According to research by Vallée et al.^[33], CBL enables students to develop deeper cognitive connections by applying theoretical knowledge to practical situations, thereby improving both comprehension and retention. The fact that a majority of students viewed the experience as beneficial indicates that the CBL framework successfully met their learning expectations and contributed positively to their educational journey.

Moreover, students acknowledged the CBL model's effectiveness in helping them achieve their learning goals. A substantial 55.1% of respondents agreed, while 16.7% strongly agreed, that the method facilitated their progress toward academic objectives. This demonstrates that the CBL framework aligns well with students' learning aspirations and provides them with the necessary tools and strategies to succeed. Learning goals in extensive reading often include improving comprehension, analytical skills, and the ability to engage with diverse and complex texts. By incorporating case studies that require students to critically evaluate information and draw meaningful conclusions, the CBL model encourages deeper cognitive engagement and promotes the development of essential reading skills. Furthermore, the structured yet flexible nature of the approach allows students to work at their own pace, making it easier for them to grasp challenging concepts. The strong agreement regarding the model's effectiveness suggests that students perceive CBL as a valuable method for academic success, further reinforcing its potential for broader implementation in educational settings.

An additional key finding is that the CBL framework was perceived as a useful tool for understanding complex reading texts. A total of 53.8% of students agreed, and 14.1% strongly agreed, that the method facilitated their comprehension of difficult reading materials. This highlights the

effectiveness of the CBL approach in breaking down complex information and making it more accessible to students. Extensive reading often involves engaging with lengthy and intricate texts that require a high level of analytical and interpretative skills. The CBL model supports this process by providing contextualized learning experiences, where students can analyse real-world cases and apply their reading skills in a meaningful way. According to Fries et al.^[61], learning is most effective when new information is presented in a context that allows learners to connect it with prior knowledge and practical applications. By structuring reading tasks around case studies, the CBL model creates an interactive and immersive learning environment that enhances comprehension and reduces cognitive overload. The positive student response indicates that this approach effectively supports their ability to tackle challenging texts with confidence.

Lastly, students demonstrated a willingness to recommend the CBL model for use in other courses. A total of 44.9% agreed, and 10.3% strongly agreed, that they would advocate for the adoption of this approach beyond its current application. This endorsement suggests that students recognize the broad applicability of the CBL and believe it can be beneficial across different academic disciplines. The willingness to recommend a learning model is a strong indicator of its perceived value and effectiveness. When students actively support the expansion of an instructional strategy, it signifies that they have found it engaging, useful, and impactful in their educational journey. Given the growing emphasis on student-centered and active learning approaches in higher education, the positive reception of the CBL model underscores its potential as a versatile and scalable teaching method. Future research and curriculum development efforts could explore how the model can be adapted to different subjects and learning contexts, ensuring that more students can benefit from its advantages.

5.10. Suggestions for Model Improvement

The findings indicate that students have several constructive suggestions for enhancing the CBL model to better support their learning experience. A significant portion of respondents (53.8%) agreed, and 16.7% strongly agreed, that incorporating additional case study examples would be beneficial. This suggests that students perceive the variety and quantity of case studies as crucial to reinforcing their un-

derstanding of course materials. The CBL thrives on the diversity of scenarios, as exposure to multiple cases allows students to analyse different contexts, develop adaptable problem-solving skills, and apply theoretical knowledge in practical settings. When students engage with a broad range of cases, they are more likely to build connections between concepts and develop critical thinking skills. Moreover, a more extensive collection of case studies can help cater to diverse learning preferences, ensuring that all students can relate to at least some of the content presented. Providing case studies that align with current industry trends and real-world challenges could further enhance engagement and make learning more meaningful.

Another key area for improvement is the hybrid learning sessions. A notable 52.6% of students agreed, and 19.2% strongly agreed, that enhancements to hybrid learning delivery would improve the overall educational experience. This finding underscores the importance of ensuring that both online and offline components are seamlessly integrated and effectively structured. Hybrid learning offers flexibility, but it also presents unique challenges, such as maintaining student engagement in virtual environments, ensuring equitable participation, and managing technological barriers. Students may benefit from a more structured approach to hybrid sessions, where clear guidelines and expectations are set for both online and face-to-face interactions. Additionally, integrating more interactive elements, such as live discussions, breakout room activities, and real-time collaboration tools, could foster a more engaging and dynamic hybrid learning experience. Institutions may also need to ensure that students have reliable access to digital resources and technical support to prevent connectivity issues from hindering their participation.

Further guidance on completing assignments was another area identified for improvement, with 57.7% of students agreeing and 21.1% strongly agreeing that they needed additional support. This highlights the importance of providing students with clear instructions, examples, and structured feedback to help them navigate case-based assignments effectively. Case studies often require students to engage in deep analysis, critical thinking, and problem-solving, which can be challenging without adequate guidance. To address this concern, educators could implement scaffolding techniques, such as providing step-by-step instructions, offering

templates or sample responses, and conducting workshops on analytical techniques. Additionally, incorporating peer review sessions and instructor-led discussions could help students clarify their understanding and refine their approaches to case analysis. Providing formative feedback throughout the assignment process, rather than just at the end, could also significantly enhance student confidence and performance.

Adjustments to assessment methods were another recurring recommendation, with 57.7% of students agreeing and 21.8% strongly agreeing that modifications to evaluation criteria would be beneficial. This suggests that students may feel that current assessment methods do not fully capture their learning progress or the complexity of their analytical work. A CBL assessments should be designed to evaluate not only knowledge retention but also critical thinking, problem-solving, and application of concepts in real-world scenarios. One possible improvement could be diversifying assessment formats, incorporating oral presentations, reflective journals, and collaborative projects alongside traditional written reports. Additionally, adopting more flexible grading rubrics that recognize creativity, depth of analysis, and real-world applicability could provide a more comprehensive evaluation of student performance. Educators might also consider integrating self-assessment and peer assessment mechanisms to encourage students to take ownership of their learning process and develop a deeper understanding of assessment criteria.

Lastly, students expressed a strong preference for incorporating more face-to-face discussions in the learning process. A substantial 55.1% agreed, and 32.1% strongly agreed, that increased in-person interactions would enhance their learning experience. This finding indicates that while hybrid learning offers convenience and accessibility, students still value direct engagement with instructors and peers. Face-to-face discussions provide opportunities for immediate feedback, deeper exploration of complex topics, and more dynamic exchange of ideas. In-person interactions also foster a sense of community and belonging, which can positively impact motivation and participation. To balance hybrid learning with the need for direct engagement, institutions could consider scheduling more in-person workshops, discussion sessions, or study groups where students can collaboratively analyse case studies. Blended learning strategies, which combine online preparatory work with intensive face-to-face ses-

sions, could also help maximize the benefits of both modes of instruction.

These student recommendations provide valuable insights for refining the implementation of the CBL framework. By expanding the variety of case studies, improving hybrid learning delivery, offering more guidance on assignments, modifying assessment methods, and increasing face-to-face interactions, educators can create a more engaging and effective learning environment. Addressing these suggestions can help ensure that the CBL model continues to evolve in alignment with student needs and learning preferences, ultimately enhancing the overall educational experience.

6. Conclusions

The results of this study highlight students' perceptions of the CBL model as a learning model used in an English extensive reading course in a hybrid learning environment. The data show that students generally have a favorable view of CBL, recognizing its capacity to deepen their understanding of extensive reading by expanding textual knowledge, fostering critical thinking, and increasing engagement with reading materials. Moreover, the model plays an important role in refining students' analytical abilities, enabling them to interpret complex texts, extract key insights, and improve reading comprehension and speed. The hybrid learning component further enriches the educational experience by facilitating meaningful interaction and collaboration, thus encouraging peer-assisted learning and constructive engagement with lecturers. However, despite the efficacy of the CBL framework in stimulating motivation and fostering students' sense of responsibility for their own learning, several challenges were identified, including issues with internet connectivity, task complexity, and gaps in participation during group discussions, all of which hindered an optimal learning experience. Nonetheless, the students expressed their overall satisfaction with the model, emphasizing its relevance to real-world applications and its potential adaptation to other courses.

Author Contributions

Conceptualization, H.I. and S.; methodology, H.I. and S.; software, L.; validation, A.R. and L.; formal analysis, A.R.; investigation, I. and E.A.; resources, S. and I.; data

curation, L. and A.R.; writing—original draft preparation, H.I. and A.R.; writing—review and editing, S., I. and A.; visualization, E.A.; supervision, S.; project administration, H.I. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement

The study did not require ethical approval.

Informed Consent Statement

We do not have Informed Consent of all the subjects involved in this study as all the students are our own students that we are teaching.

Data Availability Statement

The data supporting the findings of this study are accessible via the following link: https://docs.google.com/spreadsheets/d/15PpehgqeT0fv25foLPv3Wmdz_oCoCapa/edit?usp=sharing&ouid=105873004652271657391&rtpof=true&sd=true.

Conflicts of Interest

The authors declare no conflict of interest.

References

- [1] Renandya, W.A., 2017. Should you be Teaching Reading Intensively or Extensively?. *Proceedings of The KOTESOL 2016: Shaping the Future: With 21st Century Skills*; October 15–16, 2017; Seoul, Republic of Korea. pp 31–39.
- [2] Ro, E., Kim, H., 2021. The effects of extensive reading on young Korean students' construction development. *English Language and Literature*. 1(2), 1–25.
- [3] Hartshorn, K.J., Evans, N., Egbert, J., et al., 2017. Discipline-specific reading expectation and challenges for ESL learners in US universities. *Reading in a Foreign Language*. 29(1), 36–60.
- [4] Muñoz, C., Valenzuela, J., 2020. Demotivation in academic reading during teacher training. *Journal of Research in Reading*. 43(1), 41–56.
- [5] Liang, W., Fung, D., 2021. Fostering critical thinking in English-as-a-second-language classrooms: Challenges and opportunities. *Think Ski Creat*. 39, 100769.
- [6] Dewi, C.A., Rahayu, S., Dasna, I.W., 2022. Case-Based Learning (CBL) in Chemistry Learning: A Systematic Review. *Journal of Research in Science Education*. 8(4), 1926–1936.
- [7] Ripert, R.C., 2021. The Implications of Case-based Learning (CBL) on Biochemistry Education: An Integrative Literature Review [Honors undergraduate thesis]. University of Central Florida: Orlando, FL, USA.
- [8] Dong, H., Guo, C., Zhou, L., et al., 2022. Effectiveness of casebased learning in Chinese dental education: A systematic analysis review and meta-analysis. *BMJ Open*. 12(2) 1–10.
- [9] Sapeni, M.A.-A.R., Said, S., 2020. The effectiveness of case-based learning in increasing critical thinking of nursing students: A literature review. *Enfermería Clínica*. 30, 182–185.
- [10] Lestari, Syafril, S., Latifah, S., et al., 2021. Hybrid learning on problem-solving abilities in physics learning: A literature review. *Journal of Physics: Conference Series*. 1796, 012021.
- [11] Ismail, H., Edi, E., 2022. Students' perceptions of implementing problem-based learning with blended learning in Efl academic reading. *English Review: Journal of English Education*. 10(3), 929–936.
- [12] Eka, K., Janah, N., Mustofa, A., 2022. Digital extensive reading in indonesia: A critical review. *Journal of English Language Teaching and Linguistics*. 7(3), 513–528.
- [13] Sistermans, I.J., 2020. Integrating competency-based education with a case-based or problem-based learning approach in online health sciences. *Asia Pacific Education Review*. 21(4), 683–696.
- [14] Bozkurt, A., 2022. A retro perspective on blended / hybrid learning: Systematic review, mapping and visualization of the scholarly landscape. *Journal of Interactive Media in Education*. 2022(1), 1–15.
- [15] Helsa, Y., Marasabessy, R., Juandi, D., 2023. Penerapan hybrid learning di Perguruan Tinggi Indonesia: Literatur review. *Journal Cendekia: Jurnal of Pendidikan Matematika*. 07(1), 139–162.
- [16] Wandansari, S.A., 2021. A Hybrid Learning for Building Academic Resilience in Student with Disabilities During Pandemic. *Proceedings of The 5th International Conference on Islamic Studies*; November 17–18, 2021; IAIN Madura, Indonesia. pp. 119–136.
- [17] Heilporn, G., Lakhal, S., Bélisle, M., 2021. An examination of teachers' strategies to foster student engagement in blended learning in higher education. *International*

- Journal of Educational Technology in Higher Education. 18(25), 1–25.
- [18] Castro-gil, R., Correa, D., 2021. Transparency in previous literature reviews about blended learning in higher education. *Education and Information Technologies*. 3399–3426.
- [19] Liu, X., 2021. Primary Science curriculum student acceptance of blended learning: Structural equation modeling and visual analytics. *Journal of Computers in Education*. 9, 351–377.
- [20] Halverson, L.R., Graham, C.R., 2019. Learner Engagement in Blended Learning Environments : A Conceptual Framework. *The Internet and Higher Education*. 23(2), 145–178.
- [21] Manwaring, K.C., Larsen, R., Graham, C., et al., 2017. Investigating student engagement in blended learning settings using experience sampling and structural equation modeling. *The Internet and Higher Education*. 35, 21–33.
- [22] López-pellisa, T., Rotger, N., Rodríguez-Gallego, F., 2020. Collaborative writing at work: Peer feedback in a blended learning environment. *Education and Information Technologies*. 26, 1293–1310.
- [23] Sultana, T.S., Gite, R.M., Tawde, D.A., et al., 2024. Advancing Healthcare Education: A Comprehensive Review of Case-based Learning. *Indian Journal of Continuing Nursing Education*. 25(1), 36–41.
- [24] Wijnia, L., Noordzij, G., Arends, L.R., 2024. The effects of problem-based, project-based, and case-based learning on students' motivation: A meta-analysis. *Educational Psychological Review*. 36, 29.
- [25] Tan, K.H., Rajendran, A., Muslim, N., et al., 2022. The potential of TikTok's key features as a pedagogical strategy for ESL classrooms. *Sustainability*. 14(24), 1–22.
- [26] Kılınç, S., 2023. Embracing the future of distance science education: Opportunities and challenges of ChatGPT integration. *Asian Journal of Distance Education*. 18(1), 205–237. Available from: <http://www.asianjde.com/> (cited 11 July 2024).
- [27] Yu, L., Zin, Z.M., 2023. The critical thinking-oriented adaptations of problem-based learning models: A systematic review. *Frontiers in Education*. 8, 1–13.
- [28] Shehata, B., Tlili, A., Huang, R., et al., 2024. How are we doing with student-centered learning facilitated by educational technologies? A systematic review of literature reviews. *Education and Information Technologies*. 29, 7813–7854.
- [29] Kerimbayev, N., Umirzakova, Z., Shadiev, R., et al., 2023. A student-centered approach using modern technologies in distance learning: A systematic review of the literature. *Smart Learning Environments*. 10(1), 61.
- [30] Che Mat, N., Jamaludin, K.A., 2024. Effectiveness of practices and applications of student-centered teaching and learning in primary schools: A systematic literature review. *International Journal of Academic Research in Progressive Education and Development*. 13(3), 1025–1044.
- [31] Lau, I., Sun, Z., 2022. The role of 3D printed heart models in immediate and long-term knowledge acquisition in medical education. *Reviews in Cardiovascular Medicine*. 23(1), 1–9.
- [32] Owen, K.L., Hughes, J.C., Watkins, R.C., 2022. From evidence-informed to evidence-based: An evidence building framework for education. *Review of Education*. 10(1), pp. 1–25.
- [33] Vallée, A., Blacher, J., Cariou, A., et al., 2020. Blended learning compared to traditional learning in medical education: Systematic review and meta-analysis. *Journal of Medical Internet Research*. 22(8), e16504.
- [34] Senyah, A.O., 2024. An Integrative Review of K-12 Teachers' Strategies and Challenges in Adapting Problem-Based Learning [PhD thesis]. Virginia Polytechnic Institute and State University: Blacksburg, VA, USA.
- [35] Preshaw, P.M., Ramseier, C.A., Loos, B.G., et al., 2024. Contemporary educational methods in periodontology. *Journal of Clinical Periodontology*. 51(March), 117–192.
- [36] White, R.L., Bennie, A., Vasconcellos, D., et al., 2021. Self-determination theory in physical education: A systematic review of qualitative studies. *Teaching and Teacher Education*. 99, 103247.
- [37] Guay, F., 2022. Applying self-determination theory to education: Regulations types, psychological needs, and autonomy supporting behaviors. *Canadian Journal of School Psychology*. 37(1), 75–92.
- [38] Sukackè, V., Guerra, A.O.P.d.C., Ellinger, D., et al., 2022. Towards active evidence-based learning in engineering education: A systematic literature review of PBL, PjBL, and CBL. *Sustainability*. 14(21), 13955.
- [39] Martins, S., Vairinhos, M., 2023. Ludic and narrative immersion in virtual reality exposure therapy to animal phobias: A systematic literature review. *Virtual Worlds*. 2(4), 303–325.
- [40] Singh, A.K., Alshammari, S.R., 2024. Storytelling (Hakawati) as a pedagogical tool: A literature review of theoretical insights and practical applications. *Journal of Educational Sciences & Psychology*. 14(2), 145–166.
- [41] Aceto, G., Persico, V., Pescapé, A., 2024. The role of Information and Communication Technologies in healthcare: Taxonomies, perspectives, and challenges. *Journal of Network and Computer Applications*. 107(April), 125–154.
- [42] Ngandu, M.R., Risinamhodzi, D., Dzvapatsva, G.P., et al., 2023. Capturing student interest in software engineering through gamification: A systematic literature review. *Discover Education*. 2(1), 47.
- [43] Kexin, D., Buang, N.A., 2024. Integrating innova-

- tive teaching strategies: Assessing the effectiveness of flipped classrooms, blended learning, and task-oriented methods in enhancing academic performance in vocational IT education. *Journal of Digitainability, Realism & Mastery (DREAM)*. 3(05), 94–108.
- [44] Doolittle, P., Wojdak, K., Walters, A., 2023. Defining active learning: A restricted systematic review. *Teaching & Learning Inquiry*. 11, 1–24.
- [45] Goodwin, J.R., 2024. What's the difference? A comparison of student-centered teaching methods. *Education Sciences*. 14(7), 736.
- [46] de Ruig, N.J., de Jong, P.F., Zee, M., 2023. Stimulating elementary school students' self-regulated learning through high-quality interactions and relationships: A narrative review. *Educational Psychology Review*. 35(3), 1–34.
- [47] Pramesworo, I.S., Fathurrochman, I., Sembiring, D., et al., 2023. Relevance between blended learning and students' independent learning curriculum: An overview of digital age education, student and teacher engagement, technological resources. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran, dan Pembelajaran*. 9(3), 858.
- [48] Yang, W., Wei, Y., Wei, H., et al., 2023. Survey on explainable AI: From approaches, limitations and applications aspects. *Human-Centric Intelligent Systems*. 3(3), 161–188.
- [49] Yan, A., Cheng, Z., 2024. A review of the development and future challenges of case-based reasoning. *Applied Sciences*. 14(16), 7130.
- [50] Johnson, J.L., Adkins, D., Chauvin, S., 2020. A review of the quality indicators of rigor in qualitative research. *American Journal of Pharmaceutical Education*. 84(1), 138–146.
- [51] Çeken, B., Taşkın, N., 2022. Multimedia learning principles in different learning environments: A systematic review. *Smart Learning Environments*. 9(1), 19.
- [52] Marougkas, A., Troussas, C., Krouska, A., et al., 2023. Virtual reality in education: A review of learning theories, approaches and methodologies for the last decade. *Electronics*. 12(13), 1–21.
- [53] Lee, S.M., 2022. A systematic review of context-aware technology use in foreign language learning. *Computer Assisted Language Learning*. 35(3), 294–318.
- [54] Jiang, S., Sun, Q., Lin, X., 2024. Exploring Chinese international students' critical thinking skills: A systematic literature review. *New Directions for Adult and Continuing Education*. 2024(182–183), 125–141.
- [55] Smith, R., Snow, P., Serry, T., et al., 2021. The role of background knowledge in reading comprehension: A critical review. *Reading Psychology*. 42(3), 214–240.
- [56] Ali, Z., Palpanadan, S.T., Asad, M.M., et al., 2022. Reading approaches practiced in EFL classrooms: A narrative review and research agenda. *Asian-Pacific Journal of Second and Foreign Language Education*. 7(1), 28.
- [57] Turnbull, D., Chugh, R., Luck, J., 2021. Learning management systems: A review of the research methodology literature in Australia and China. *International Journal of Research & Method in Education*. 44(2), 164–178.
- [58] van Nooijen, C.C.A., de Koning, B.B., Bramer, W.M., et al., 2024. A cognitive load theory approach to understanding expert scaffolding of visual problem-solving tasks: A scoping review. *Educational Psychology Review*. 36, 12.
- [59] Ferri, F., Grifoni, P., Guzzo, T., 2020. Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies*. 10(4), 1–18.
- [60] Celestino, E.H., Noronha, A.B., 2021. Blended learning: A systematic review of advantages and disadvantages in students' perceptions and impacts on higher education institutes. *Administração: Ensino e Pesquisa*. 22(1), 31–63.
- [61] Fries, L., Son, J.Y., Givvin, K.B., et al., 2021. Practicing connections: A framework to guide instructional design for developing understanding in complex domains. *Educational Psychology Review*. 33(2), 739–762.