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Core-iFree Model Utilizing Padlet and the Deep Learning Approach in Teaching Descriptive Text Writing

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ABSTRACT

English as a global lingua franca plays important roles in the international relations. It is very important for EFL students to master English both actively and passively so that they can communicate and interact with people around the world. Unfortunately, current learning models of English are still inadequate for students to optimally learn English, particularly the writing aspect. This research aimed to develop Core-iFree (completing, rearranging, incorporating, and free writing) model utilizing Padlet and the Deep Learning Approach in teaching descriptive text writing. It was a research and development method with ADDIE model. The researcher used questionnaire, interview, pre-test and post-test instruments to collect data. To obtain the data needed, 30 7^{th} grade students were investigated. The researcher used mixed method to process and analyze both qualitative and quantitative data. The research was conducted based on ADDIE model through the following stages: initial stage: need analysis; stage 2: creating the Core-iFree model utilizing Padlet and the Deep Learning Approach learning plan; stage 3: limited trial and evaluation; stage 4: draft revision; stage 5: design validation; stage 6: implementation and evaluation; and final stage: dissemination of research results. The research showed that there was a significant enhancement on the students' ability in writing descriptive text after implementing the model. The participants showed their engagements for the model because they learn english using a step-by step strategy in the online platform Padlet, and using the Deep Learning approach. In conclusion, the model can be implemented to enhance students' ability in descriptive text writing.

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1. Introduction

English itself has four language skills: speaking, listening, reading, and writing. Among the four language skills, writing skill is the most difficult english skill which involves complex processes engaging several competencies (Harlena et al., 2020, Bulqiyah et al., 2021). There are four internal factors as challenges for students to learn writing; native language interference, English competence (e.g. linguistic competence such as grammar

knowledge, vocabulary mastery), motivation, and reading habit (Akramovna & Alimovn, 2020).

To cover the problems in teaching English writing, some researches were conducted. A research promoted combination of guided and free writing intoduced the scaffolding process in teaching English writing (Widiati & Cahyono, 2006). Another research showed that scaffolding combined with task-based learning significantly improves students' ability to organize and develop descriptive paragraphs (Prismawati, 2018). Meanwhile, Husein As Sabiq et al. (2021) in their research emphasized the positive effects of peer and teacher feedback in enhancing descriptive writing.

While the previous researches have explored scaffolding, revision, feedback incorporation, and free writing separately, few studies have examined an integrated strategy combining all these elements in a structured manner. The Core-iFree model seeks to bridge this gap by providing a systematic approach that scaffolds student learning from guided tasks to independent writing. The Core-iFree model—an acronym for Completing, Rearranging, Incorporating, and Free writing—has emerged as a process-based approach designed to enhance students' writing skills through structured yet flexible stages. This model encourages learners to engage in various cognitive tasks such as completing fragmented texts, reorganizing disordered sentences, integrating learned content, and expressing personal reflections freely. Each stage supports scaffolding, autonomy, and creativity, which are essential components of effective writing instruction.

The integration of Padlet, an interactive and collaborative online platform, provides a digital space for learners to share and develop their ideas in real-time. Padlet facilitates peer interaction, feedback, and the curation of writing outputs in a visually appealing and organized manner. This digital tool enhances the Core-iFree process by promoting active engagement, visibility of thinking, and social learning.

Furthermore, the application of the Deep Learning approach—characterized by learning that is mindful, meaningful, and joyful—aligns well with the Core-iFree model. Deep learning shifts the instructional paradigm from rote memorization to active knowledge construction and authentic learning experiences. It emphasizes higher-order thinking, emotional engagement, and personal relevance in learning tasks, making it especially suitable for writing activities that require both cognitive and affective investment. Taken together, the integration of the Core-iFree model, digital collaboration tools like Padlet, and deep learning principles represents a promising instructional framework for improving students' writing performance and engagement.

The research topic was chosen based on the observed gap in current English language teaching practices, especially in writing instruction for junior high school students. Writing, particularly descriptive text, remains one of the most challenging skills for students to master due to its demand for vocabulary development, grammatical accuracy, coherence, and the ability to express sensory details meaningfully. In classrooms, traditional approaches often focus on isolated writing tasks with minimal scaffolding, resulting in disengaged learners and underdeveloped writing skills.

Therefore, this research seeks to address this gap by integrating a structured yet flexible strategy that promotes gradual learning—namely, the Core-iFree model (Completing, Rearranging, Incorporating, and Free writing).

In addition, this research introduces a novelty in the form of combining the Core-iFree model with Padlet, a collaborative online platform, and the Deep Learning principles as defined in The Indonesia's Merdeka Curriculum. While previous studies have explored digital platforms and writing instruction separately, few—if any—have systematically developed a writing strategy model that blends step-by-step cognitive scaffolding with a tech-based environment. Padlet, as an interactive and visual tool, enables students to co-construct knowledge, receive feedback, and engage with content meaningfully. Simultaneously, embedding the deep learning approach—which emphasizes mindful, meaningful, and joyful learning—ensures that the model aligns with current curriculum demands and fosters a more holistic learning experience.

2. Literature Review

The Core-iFree model utilizing Padlet and the Deep Learning approach was built on some grand theories. Constructivism became the basis theory in the Core-iFree model. Constructivism is simply defined as a theory of learning which posits that learners learn by actively constructing their own knowledge (Fosnot, 1996). In this matter, the Core-iFree strategy aligns strongly with constructivist principles. Each stage (completing, rearranging, incorporating, and free writing) encourages students to actively construct and reconstruct knowledge through scaffolded tasks. Cognitive Load Theory (CLT) formulated by John Sweller focuses on how the structure of learning materials affects the brain's working memory (Sweller, 1988). In this research, the Core-iFree model addresses this issue by sequencing tasks gradually—from completing to independent writing—thereby managing cognitive load efficiently. Meanwhile, Process Writing theory (PWT) initiated by Donald Graves, often referred to as the process approach to writing, is a pedagogical approach that fundamentally shifted the focus in writing instruction from solely the final product to the entire journey a writer undertakes to create a piece of writing (Smith, 2021). The Core-iFree model is fundamentally built upon process writing principles. Each stage mirrors stages in the writing process—from guided structuring (Completing and Rearranging) to collaborative revising (Incorporating), and finally to independent drafting (Free Writing).

Integrating online platform Padlet based on Multimedia Learning theory (MLT) proposed and formalized by Richard Mayer in 2001. MLT posits that people learn more deeply from words and pictures than from words alone (Mayer, 2014). Padlet, as a multimedia-rich platform, enables students to incorporate images, videos, and audio into their writing process. Another theory in utilizing Padlet is the Technology Acceptance Model (TAM) proposed by Fred Davis in 1986 (as part of his doctoral work) and formalized in a seminal paper in 1989 (Dziak, 2024). According to (Davis, 1989)The TAM explains user acceptance of technology based on perceived usefulness and perceived ease of use. Learners and teachers are more likely to adopt digital tools when they believe the tool enhances their performance and is user-friendly. In educational settings, this model helps identify factors influencing the integration of platforms like Padlet. In the context of this research, TAM provides a theoretical basis for evaluating how students and teachers respond to the Padlet.

Combining the Core-iFree model with Padlet and the Deep Learning approach promotes an integrated learning model. deep learning approach is defined as a dignified educational approach that emphasizes the creation of a mindful, meaningful, and joyful learning environment and process, integrates and harmonizes the cultivation of critical thinking, emotional intelligence, sensitivity and appreciation, and physical well-being in a holistic and integrated manner (Suyanto, 2025).

The Core-iFree model is well-suited to deep learning because it guides students from structured tasks to independent expression, enabling them to develop authentic writing skills. Padlet enriches this by fostering interaction, sharing, and critical feedback among peers. The gradual nature of the strategy also aligns with the learning trajectory model used in the Merdeka Curriculum, helping learners build from basic to complex understanding in writing.

3. Research Methodology

3.1 Research Design

In this research, the Core-iFree model stages, Completing, Rearranging, and Incorporating stages serve as scaffolding before students reach the Free Writing stage. It is designed to help students gradually build their writing abilities. To support deep learning needs, it integrates online platform Padlet and deep learning approach. The research follows the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) to systematically develop and test the strategy.A complete description of the research design used enables the reader to evaluate the appropriateness of the research methodology. By integrating this model with the principles of the Merdeka Curriculum, the study aims to enhance students' ability to write descriptive texts with better structure, vocabulary, coherence, and fluency, while fostering independent, meaningful, mindful, and joyful learning experiences. Therefore, the conceptual framework of the research can be explained as follows:

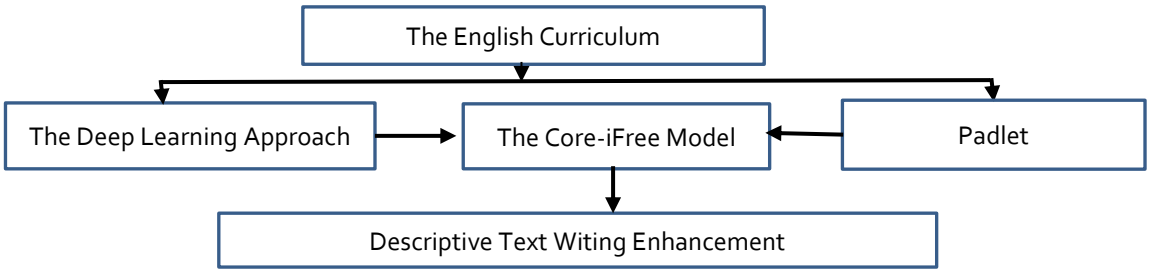

Figure 1. The Core-iFree strategy model framework

3.2 Participants

The participants of the research were 30 students of junior high school who are EFL students. The participants were purposely chosen based on their willingness and availability to participate in the research.

3.3 Instruments

To obtain quantitative data, pre-test and post-test were applied to the participants of the research. The pre-test was conducted before implementing the Core-iFree learning model utilizing Padlet and the Deep Learning approach. The post-test was then conducted after implementing the learning model. Meanwhile, questionnaire, classroom observation, and

interview were conducted on the participants to obtain qualitative data. The questionnaire was closed-ended questions with 15 items. It was distributed in Google Forms to collect the responses from 30 participants. The items were structured with an attitudinal scale, the Likert scale, also referred to as a summated rating scale. Within the Likert Scale, the participants were offered five potential response choices: strongly disagree (SD), disagree (D), neutral (N), agree (A), and strongly agree (SA). The classroom observation was a check-list applied during the teaching and learning process. The interview used semi-structured interview consisting 10 questions about students' perceptions after implementing the model.

3.4 Data Analysis Procedures

The pre-test and post-test scores from the writing test were analyzed using statistical methods to measure students' writing enhancement. A non-parametric statistical test using Wilcoxon Signed Rank Test was used to assess changes in paired data by examining the differences and the magnitude of these differences between two studied parameters, typically before and after a treatment. It was conducted to determine whether there is a significant difference between students' performance before and after implementing the Core-iFree model. Descriptive statistics, including mean, standard deviation, and percentage analysis, were used to interpret the questionnaire responses, highlighting students' and teachers' perceptions of the model.

The questionnaire and interview were analyzed using thematic analysis to identify recurring patterns, challenges, and perceptions regarding the Core-iFree model. The classroom obervations was analyzed and reported. The qualitative data were coded and categorized based on emerging themes such as students' engagement, writing difficulties, and enhancements observed throughout the intervention.

4. Findings

According to the result analysis of questionnaire, the data obtained were then analyzed by determining the percentage of each student's response to each question. Each of the questions was described in the percentage through the bar chart. The purpose was to explore students' interest of applying the Core-iFree learning model utilizing Padlet and the Deep Learning approach. The result analysis of questionnaire was then displayed in block chart to make it easier to read and understand. The result as follows:

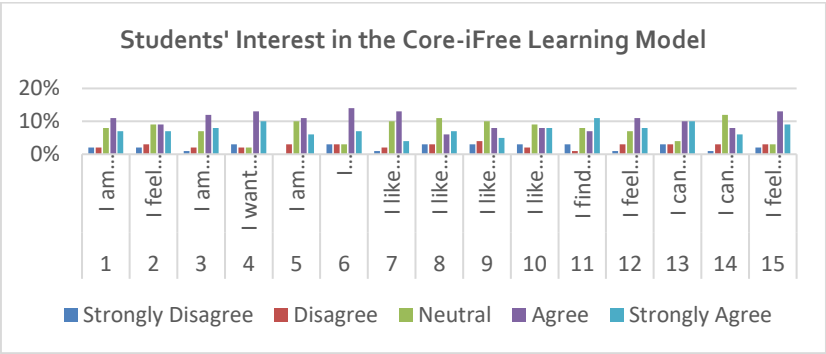

Figure 2. Students' interest in the Core-iFree Learning Model

Figure 2. demonstrates the distribution of student responses on their interest in the Core-iFree learning model. The majority of responses fell within the "Agree" and "Strongly Agree" categories across all 15 items, with particularly high agreement on items related to writing motivation (Q4, Q15) and digital creativity (Q12). Items with a slightly higher proportion of neutral responses (e.g., Q2, Q9) may indicate areas where students are still adjusting or require further support. Overall, the data suggests that the Core-iFree model, when implemented through digital platforms such as Padlet, fosters student engagement, motivation, and interest in writing activities.

Most items are dominated by "Agree" (green) and "Strongly Agree" (purple) bars, consistently rising above 10% and often the highest in each cluster. Notably high levels of "Agree" and "Strongly Agree" are seen in:
Q4: "I want to improve my writing ability"
→ Indicates strong intrinsic motivation toward writing skill development.
Q12: "I feel more creative when I use digital tools"
→ Shows that Padlet and similar platforms enhanced creative expression.
Q15: "I feel motivated when learning to write is related to me."
→ Reflects the effectiveness of meaningful, personalized learning in the Core-iFree model.
This showed that students generally perceive the Core-iFree model positively, particularly in relation to engagement and skill development. Q2, Q7, Q9, Q10 have relatively higher neutral (orange) bars, suggesting students may have mixed or developing opinions about their enjoyment of current English study (Q2), understanding descriptive texts (Q7), and learning through digital platforms (Q9, Q10). Across all items, Strongly Disagree (blue) and Disagree (red) responses remain minimal, mostly below 5%. This suggests there is no significant resistance to the model, affirming its broad acceptability and relevance.

Meanwhile, based on the research findings for pre-test and post-test scores, the data obtained were presented in Table 1 below:

Table 1. The pre-test and post-test scores

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest Score	30	60.5333	12.54985	40.00	84.00
Postest Score	30	80.4000	7.07399	72.00	96.00

Table 1. presented the descriptive statistics for the pre-test and post-test scores of 30 participants. The mean pretest score was 60.53 (SD = 12.55), with scores ranging from 40.00 to 84.00. This suggests a relatively wide range of initial performance levels before the intervention. The mean posttest score increased to 80.40 (SD = 7.07), with a narrower score range between 72.00 and 96.00. There was a notable increase of nearly 20 points in the average score after the intervention, indicating improvement in participants' performance. The standard deviation decreased from pretest (12.55) to posttest (7.07), suggesting that scores became more consistent and less dispersed after the intervention. The minimum posttest score (72.00) was higher than the maximum pretest score (84.00) for most participants, further confirming a substantial positive shift. The descriptive statistics revealed

a significant improvement in scores following the intervention. Participants' mean score increased from 60.53 (SD = 12.55) in the pretest to 80.40 (SD = 7.07) in the posttest. Additionally, the minimum posttest score (72.00) exceeded the lower quartile of pretest scores, and the reduction in standard deviation indicates a more uniform improvement among participants.

To asses the effect of of the Core-iFree model on students' writing performance, the obtained data were then analyzed using the non-parametric test Wilcoxon Signed Rank Test. The result was shown in Table 2 as follows:

Table 2. Wilcoxon signed ranks test

Ranks

		N	Mean Rank	Sum of Ranks
Postest Score - Pretest Score	Negative Ranks	0[a]	.00	.00
	Positive Ranks	30[b]	15.50	465.00
	Ties	0[c]		
	Total	30		

a. Postest Score < Pretest Score
b. Postest Score > Pretest Score
c. Postest Score = Pretest Score

From Table 2., it could be seen that All 30 participants showed higher post-test scores, with no score ties or decreases — indicating a consistently positive effect of the intervention. It indicated b. Post-test score>Pre-test score.

Table 3. Test statistics

Test Statistics[a]

	Postest Score - Pretest Score
Z	-4.792[b]
Asymp. Sig. (2-tailed)	<,001

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

In Table 3., based on test statistics, it was clearly seen that Z-value was -4.792 and a p-value was .001. Since p < .001, the result is statistically significant at the 0.05 level.

The results of interview revealed the same findings. The participants agreed that the Core-iFree model utilizing Padlet and the Deep Learning approach promoted:

1. writing confidence
   … I like the parts where I delete and write. When I delete, I can complete based on my thoughts, and if it's wrong, I can learn from it (Participant 1).
   The participant expressed strong positive reactions to the structured stages of the Core-iFree model. This reflects how the Completing and Writing phases of the model promote critical thinking, error correction, and self-directed learning.
2. ease of use and writing fluency
   … I could write and delete quickly, and it helped me see the text as a whole."
   The participant described Padlet as a convenient platform that allowed him to write, delete, and revise quickly. This indicates that Padlet not only enhanced usability but also

supported revision and fluency in writing. The student also mentioned that typing with Padlet was less physically tiring, suggesting that digital platforms reduced learning fatigue (Participant 5).

3. cognitive and critical engagement
   … When I wrote the descriptive text, I had to think more deeply and critically to find the right words (Participant 6).
   The participant confirmed that the writing process using Core-iFree and Padlet required and stimulated critical thinking. This statement directly supports the mindful dimension of the Deep Learning approach, indicating that the model fostered cognitive engagement and metacognition.
4. creativity improvement
   … My creativity increased because I felt freer using Padlet (Participant 3).
   The participant expressed that his creativity had increased during the intervention. This sense of autonomy and freedom is a critical indicator of a deep, creative learning environment and supports the use of digital platforms for student expression.
5. motivation and joyful learning experience
   … With Padlet, I felt more impressed, happier. It was very different from usual school activities (Participant 10)
   Such statements reinforce the idea that integrating digital tools like Padlet can transform student attitudes and motivation toward writing.

The qualitative data from the interview support the quantitative results: the Core-iFree learning model integrated with Padlet effectively enhances students' engagement, writing fluency, creativity, and critical thinking. Students experienced the learning process as meaningful, joyful, and mindful, the three pillars of the Deep Learning approach. Additionally, the use of Padlet empowered learners with tools for efficient writing and self-expression.

However, for broader implementation, infrastructural issues such as device accessibility and internet stability must be addressed to ensure equitable access and participation. It could be seen from one of the participants' suggestion.
… Maybe provide stable internet and good devices because not all students have them Participant 8).

Based on the classroom observation, it was seen that the students were self-motivated, self-learning, and high motivation during the teaching and learning process. Their engagement, collaboration, participation, and creativity increase significantly. They enjoyed the learning process using Padlet. They were also active to give peer feedback each other during the stages of the Core-iFree model. This observation supported the results of questionnaire, interview, and the pre-test and post-test.

5. Discussion

This study aimed to design and examine the effectiveness of the Core-iFree learning model, enhanced by Padlet and guided by the Deep Learning approach, in improving students' writing skills in descriptive text writing. The findings from multiple data sources—including pre- and post-test scores, questionnaire responses, interview feedback, and classroom

observations—demonstrate consistent evidence that the model effectively enhanced students' writing performance, engagement, motivation, and cognitive involvement in the learning process.

Quantitative analysis using the Wilcoxon Signed Rank Test revealed a statistically significant improvement in students' writing scores. The posttest mean (M = 80.40, SD = 7.07) was notably higher than the pretest mean (M = 60.53, SD = 12.55), with all 30 participants showing improved scores. The absence of ties or negative ranks, combined with a Z-value of -4.792 and $p < .001$, indicates the intervention's substantial and consistent impact on students' writing ability. This aligns with previous studies affirming the effectiveness of process-based, scaffolded writing instruction in EFL settings.

The student questionnaire further reinforced the quantitative findings. All 15 items scored in the "High" category, with mean scores ranging from 3.40 to 3.80. Particularly strong agreement was seen in statements related to joyful learning, creativity, and relevance to students' lives. These perceptions suggest that students found the learning model engaging and motivating. The positive responses support the integration of deep learning principles—joyful, meaningful, and mindful engagement—in the classroom, as well as the benefit of using digital platforms like Padlet to enhance the learning experience.

Qualitative insights from students' interview confirmed the questionnaire results and added personal depth. The students described Padlet as a flexible tool that allowed quick revisions and improved focus. They also expressed that the Core-iFree model helped them write more effectively and confidently. The act of describing in writing tasks made the learning meaningful and emotionally resonant. Furthermore, the students reported that the process required deep and critical thinking, especially when generating vocabulary. These experiences reflect the model's capacity to foster not only skill development but also metacognitive awareness and creativity.

Classroom observation documented increased student participation, focus, and autonomy. Learners actively engaged with the Core-iFree writing stages, frequently interacting with Padlet to draft, revise, and comment on texts. Students demonstrated clear understanding of the writing structure and showed enthusiasm when completing meaningful tasks. The learning environment was collaborative, student-centered, and supportive of exploration—hallmarks of a successful deep learning classroom. These behavioral indicators provide observable confirmation of the quantitative and qualitative data.

The triangulation of data from four sources confirms that the Core-iFree model, when supported by Padlet and underpinned by the Deep Learning approach, creates an effective and holistic learning experience. The structured yet flexible writing stages encouraged thoughtful learning, while the integration of digital tools made the process more interactive and enjoyable. This alignment between instructional strategy, student perception, and academic outcomes underscores the model's potential for broader application in EFL writing instruction.

The findings imply that digital, scaffolded, and deep learning-based writing models can significantly improve student performance and engagement in writing classrooms. Teachers are encouraged to implement models like the Core-iFree in combination with platforms such as Padlet to foster personalized, student-centered, and reflective learning environments.

Curriculum designers and teacher educators should also consider incorporating digital and process-oriented pedagogies to address 21st-century learning demands.

Despite the promising results, this study was limited to a single class of 30 students, and its quasi-experimental design lacked a control group. In addition, access to devices and stable internet was mentioned as a challenge by students, suggesting infrastructural barriers to full implementation. Future research should expand the participant pool, include comparative studies, and explore long-term impacts of the Core-iFree model across diverse contexts.

6. Conclusion

The results of this research demonstrated that the Core-iFree model, when integrated with Padlet and grounded in the Deep Learning approach, significantly enhances students' writing performance, motivation, and engagement. The combination of structured writing stages and digital interactivity created a learning environment that was not only effective but also enjoyable and meaningful. Triangulated evidence from pre- and post-tests, questionnaires, interviews, and classroom observations confirmed that the model supports mindful, meaningful, and joyful learning. With appropriate support and accessibility, this Core-iFree learning model integrated with Padlet and guided by the Deep Learning approach holds strong potential for transforming writing instruction in EFL and digital classrooms.

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