M.AI.A: An AI-Powered ESL Writing Platform with Reflective Prompts

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Abstract

In English as a Second Language (ESL) education, fostering reflective thinking and effective writing skills has long been a challenge. This innovation introduces a solution - a dynamic I-powered ESL writing platform aimed to cultivate reflective learning practices and improve writing proficiency. The platform integrates cutting-edge natural language processing (NLP) techniques to offer real-time grammar and vocabulary feedback while strategically introducing reflective prompts aimed at prompting critical analysis of writing choices. By combining automated error identification with opportunities for self-assessment, the platform engages students in active reflection, enhancing their awareness of language accuracy and essay principles. The proposed platform leverages a carefully curated dataset to train a specialized AI model capable of identifying errors and generating targeted suggestions for ESL writing. Additionally, the system generates contextually relevant reflective prompts that challenge students to explain their word choices, sentence structures, and overall narrative strategies. These prompts encourage learners to deepen their metacognitive understanding of their writing, thereby fostering a holistic improvement in language proficiency and reflective thinking. To enable an adaptive and personalized learning experience, the platform adapts the frequency and complexity of reflective prompts based on each student's progress. This innovation addresses the practical challenges of ESL writing improvement and aligns with the broader pedagogical goals of cultivating critical thinking and self-directed learning. By merging AI technology with reflective learning strategies, the proposed platform stands to revolutionize the ESL education landscape, empowering students to become more proficient and thoughtful communicators in English.

Keywords: English as a Second Language (ESL), reflective learning, AI technology

TEACHING AND LEARNING POSTER IDEAS
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"TOWARDS INNOVATIVE GLOBAL TRENDS IN EDUCATION"
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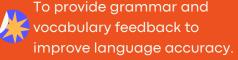# M.AI.A: AN AI-POWERED ESL WRITING PLATFORM WITH REFLECTIVE PROMPTS

This innovation introduces a solution - a dynamic AI-powered ESL writing platform aimed to cultivate reflective learning practices and improve writing proficiency. The platform integrates cutting-edge natural language processing (NLP) techniques to offer real-time grammar and vocabulary feedback while strategically introducing reflective prompts aimed at prompting critical analysis of writing choices. By combining automated error identification with opportunities for self-assessment, the platform engages students in active reflection, enhancing their awareness of language accuracy and essay principles.

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01. OBJECTIVES

- To cultivate reflective learning practices in essay writing
- To provide grammar and vocabulary feedback to improve language accuracy.
- To adapt the frequency and complexity of prompts based on individual student progress.

02. ADVANTAGES

- user-friendly interface
- learner-centered platform
- provides real-time grammar and vocabulary feedback
- enhances learners' critical thinking skills and creates awareness of language nuances-
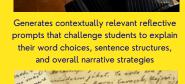 - facilitating a data-driven approach to improving writing quality

03. USEFULNESS

- **Enhanced Self-Awareness**: The reflective prompts would encourage students to think critically about their writing choices, leading to improved self-awareness and metacognition

- **Improved Writing Skills**: Regular reflection can help students refine their writing style, structure, and vocabulary choices

- **Efficient Learning:** Independent platform and Instant AI feedback combined with reflection accelerates the learning process

- **Personalized Learning:** Adaptive prompts cater to individual learning needs and preferences.

- **Engaging Experience:** Hybrid solution with interactive prompts create a dynamic and engaging learning environment.

- **Combining AI-powered writing assistance and reflective prompts:** helps to instill reflective thinking (an integral part of ESL writing learning), writing skills, and a deeper understanding of the subject matter

Generates contextually relevant reflective prompts that challenge students to explain their word choices, sentence structures, and overall narrative strategies

Encourage learners to deepen their metacognitive understanding of their writing, thereby fostering a holistic improvement in both language proficiency and reflective thinking

04. NOVELTY

▶ By combining AI-powered real-time feedback with strategically placed reflective prompts, the project introduces a unique methodology that fosters deep self-analysis and critical thinking among ESL students.

▶ The integration of AI technology to provide instant grammar, vocabulary, and structural feedback in real time is a novel approach within language education.

▶ The AI's ability to tailor the frequency and complexity of reflective prompts based on each student's progress ensures a personalized learning experience.

05. COMMERCIALIZATION POTENTIAL

A user-friendly interfaces, maintaining high-quality content and ongoing innovation. It is important to consider user feedback, adapt to evolving learning needs and stay current with advancements in AI and education technology to remain relevant in the market

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Saya yang menjalankan amanah,

Setuju.

27.1.2023

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