Applying AI in Teaching English Grammar to Develop Writing Skills for First-Year University Students

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Abstract: *This paper explores the use of artificial intelligence (AI) to enhance English grammar instruction, specifically for first-year university students developing their writing skills. Writing proficiency is essential for academic success, yet many students struggle with grammar's complex rules. Traditional methods often lack immediate, personalized feedback, which AI tools can provide effectively. Through tools like Grammarly and Write & Improve, students receive instant feedback and tailored exercises, fostering improved grammar knowledge and writing confidence. Implementing AI in grammar instruction allows for real-time corrections, continuous practice, and personalized learning, benefiting both students and educators.*

Keywords: *AI in education, English grammar instruction, Writing skills development, Personalized feedback, University students*

1. Introduction

English proficiency is essential for academic success, particularly for first-year university students who must often write essays, reports, and research papers. Effective English writing skills are crucial for expressing ideas, collaborating on projects, and achieving academic goals. However, mastering English grammar is challenging due to its complex rules and structures, which can lead to recurring errors that hinder clarity and fluency. Traditional grammar instruction builds foundational knowledge but often lacks the immediate, personalized feedback needed for students to identify and correct specific issues. Recently, AI has transformed language learning by providing tools that offer instant feedback, error analysis, and tailored support. Integrating AI into grammar education enables students to practice at their own pace, bridging the gap between knowledge and application to improve writing skills effectively.

2. Content

2.1. The Need to Improve Students' Writing Skills

First-year university students come from diverse educational backgrounds, with varying levels of English proficiency. For many, mastering English writing is an important but challenging task. Grammar, an essential component of clear and effective writing, often poses difficulties due to its intricate rules and structures. Without strong grammar skills, students risk making errors that affect the overall coherence and impact of their writing. This lack of proficiency can limit their academic performance, as written assignments and assessments frequently require clear and grammatically correct language.

In traditional classroom settings, teachers often face limitations in personalizing instruction due to class size and time constraints. Traditional grammar teaching methods, such as lectures, worksheets, and exercises, are generally one-size-fits-all and do not address the specific needs of each student. Additionally, these methods usually lack the immediate feedback necessary for students to understand and correct their mistakes promptly. This delay can cause students to repeat errors, leading to frustration and reduced motivation. Consequently, there is a need for an innovative approach that offers immediate, personalized feedback and caters to individual learning needs.

2.2. Relevance of AI in Enhancing Grammar Learning

AI technology is ideally suited to address the limitations of traditional grammar instruction. AI tools can automatically analyze and evaluate written work, identifying grammatical errors and providing explanations that help students understand their mistakes. AI-driven grammar tools offer an array of advantages, including personalized exercises, instant feedback, and error analysis that is tailored to each student's proficiency level. By receiving immediate feedback, students can focus on specific areas of improvement and gradually build their writing skills.

Moreover, AI tools provide continuous practice opportunities, allowing students to engage with grammar exercises as often as they need to build confidence and proficiency. This continuous feedback loop is invaluable in developing writing skills, as students can learn from their errors in real-time and make adjustments in future assignments. By making grammar practice accessible and responsive, AI tools encourage students to take an active role in their learning, resulting in a more effective and satisfying educational experience.

2.3. Implementation Methods and Practical Applications

*Choosing the Right AI Tools

To implement AI in teaching grammar effectively, it is essential to select the right tools that align with the curriculum and learning objectives. Various AI-powered tools are available, each offering unique features and functionalities. Popular options include Grammarly, Write & Improve by Cambridge, and other online grammar practice platforms. These tools are designed to identify grammatical errors, suggest corrections, and explain the rationale behind each suggestion, making them excellent resources for students aiming to improve their writing.

+*Grammarly*: This widely used AI tool checks for grammar, punctuation, and style errors, offering suggestions and explanations that help students understand their mistakes.

+*Write & Improve by Cambridge*: This tool allows students to submit their writing assignments for analysis, providing feedback on grammar and overall writing quality. It also tracks progress, enabling students to see their improvement over time.

+*Other Grammar Platforms*: There are various other tools available, some of which are tailored specifically for educational settings. These platforms offer customizable exercises and practice activities designed to reinforce grammar rules in context.

Selecting the right tool depends on factors such as the institution's budget, the tool's compatibility with the curriculum, and the features most relevant to the students' learning goals.

*Implementation Process

Integrating AI tools into grammar instruction involves a series of steps that ensure students can fully benefit from the technology:

+*Assess Students' Grammar Proficiency*: Before starting, evaluate each student's current grammar skills using diagnostic tests or initial assignments analyzed by the AI tool. This assessment helps in identifying specific areas where students need improvement.

+*Provide Level-Appropriate Exercise*s: Based on the assessment results, assign grammar exercises that match each student's proficiency level. Tailoring the exercises ensures that students are neither overwhelmed by difficult tasks nor disengaged by overly simple ones.

+*Assign Writing Tasks with AI Feedback*: Ask students to complete short writing tasks that require them to apply grammar rules in context. The AI tool will then analyze their submissions, identifying errors in grammar and sentence structure while offering corrective feedback.

+*Encourage Revisions*: After reviewing the feedback from the AI tool, encourage students to revise and improve their work. This step is crucial as it reinforces learning by requiring students to actively correct their mistakes based on AI guidance.

*Real-World Application Example

A real-world application of AI in grammar instruction can be seen in a classroom setting where students are tasked with writing a short paragraph on a specific topic, such as their academic goals or personal interests. After submission, the AI tool reviews each paragraph, automatically identifying and highlighting grammatical errors. These may include common mistakes like incorrect verb tenses, misplaced modifiers, punctuation issues, or subject-verb agreement errors. For each error, the AI provides clear, detailed explanations, helping students understand the underlying grammatical rules.

This immediate feedback loop is incredibly valuable for students, allowing them to quickly recognize their mistakes and learn correct grammar usage. Students can revise their writing based on this feedback and resubmit their work for additional review. This ongoing cycle-writing, receiving feedback, revising, and refining-facilitates a hands-on, iterative learning experience. This method has shown to enhance students' understanding and retention of grammatical rules, as they apply corrections directly to their writing. Over time, this cycle builds students' confidence in their writing abilities, making them more conscious of recurring errors, which ultimately leads to clearer, more accurate written communication.

2.4. Conditions for Implementation

*Necessary Infrastructure

To implement AI tools in grammar instruction, certain technological resources are essential. Reliable

access to internet-connected devices, such as computers, tablets, or smartphones, is fundamental. These devices allow students to access AI tools within and beyond the classroom, encouraging independent learning. For a seamless experience, educational institutions may also need to invest in software licenses or subscriptions, which ensure that students have uninterrupted access to the chosen AI tools. Having these resources readily available is crucial for the smooth integration of AI in everyday learning and for maximizing the potential of AI-enhanced grammar instruction.

*Teacher Knowledge and Skills

Teachers play an essential role in guiding students to make the best use of AI tools. To unlock the full benefits of AI, educators require training on how to integrate AI feedback effectively within classroom activities and assignments. Teachers need to understand both the strengths and limitations of AI tools. For example, while AI can provide accurate grammatical feedback, it may lack the contextual awareness that a human instructor possesses. Educators should be able to interpret AI-generated feedback and supplement it with additional explanations or corrections as needed. By developing these skills, teachers help bridge the gap between AI feedback and students' practical understanding, fostering a comprehensive grammar learning experience.

*Student Motivation

For AI-assisted grammar learning to be effective, students must be motivated and actively engaged. Motivation plays a critical role in whether students will persistently use AI feedback to enhance their writing. Educators can foster this motivation by setting clear and achievable goals, recognizing individual progress, and creating a supportive environment where students feel encouraged to experiment, make mistakes, and learn. Teachers can emphasize that AI feedback is a tool to guide improvement rather than judge errors, helping students view the process as constructive rather than punitive. In doing so, they create an environment where students are more likely to embrace the technology and continuously work toward enhancing their writing skills with confidence and enthusiasm.

This three-pronged approach-adequate infrastructure, skilled educators, and motivated students-creates a supportive framework for the successful implementation of AI in grammar instruction, enabling students to become more competent and confident writers.

2.5. Achieved Results
*Improved Writing Skills

The integration of AI in grammar instruction has yielded notable improvements in students' writing abilities. With AI tools providing immediate feedback on grammar, students can quickly identify and correct their mistakes, enhancing the clarity and accuracy of their writing. This continuous cycle of practice and instant correction enables students to internalize grammatical rules in a practical, context-based way. Over time, this method of learning fosters greater confidence, as students become more proficient in recognizing and avoiding common errors. This practical approach, anchored in immediate application, supports sustained improvement, transforming grammar learning from a theoretical concept into an active, skill-building exercise. Ultimately, AI-driven feedback empowers students to develop into more competent writers, with enhanced skills to communicate effectively and accurately in writing.

*Feedback from Students and Teachers

The response to AI-assisted grammar instruction has been highly positive from both students and teachers. Students find AI tools engaging and approachable, appreciating the instant feedback that helps them understand and rectify errors without delay. This real-time interaction with AI makes grammar practice feel more interactive and less intimidating, encouraging students to participate actively without the fear of making mistakes in front of others. The AI's ability to handle basic grammar corrections also allows students to progress at their own pace, giving them the freedom to learn from their mistakes in a supportive, private environment.

Teachers, on the other hand, find that AI tools greatly enhance their instructional capabilities by addressing fundamental grammar issues independently. This frees teachers to dedicate more time to complex, higher-order writing skills, such as structure, argumentation, and style, knowing that the AI is managing basic grammar corrections. Teachers view AI as a valuable supplement to traditional grammar teaching, one that lightens their workload and allows them to target instructional energy where it's most needed. With AI addressing routine corrections, teachers can offer more personalized support and guidance on areas requiring human insight.

Cần có cơ chế và chính sách giao quyền tự chủ quản lý tài chính cho các trường để tạo điều kiện thực hiện các quyền tự chủ về đào tạo và chọn lựa con đường phát triển. Quyền tự chủ trong quản lý tài chính giúp các trường chủ động và có trách nhiệm hơn trong điều hành trên tinh thần khách quan và minh bạch.

Các trường cần có quyền tự chủ trong xây dựng cơ cấu tổ chức và quản lý nguồn nhân lực của mình. Bộ máy tổ chức phải tinh gọn, phân công công việc rõ ràng và khoa học, phục vụ hiệu quả cho hoạt động đào tạo và nghiên cứu của các trường đại học.

5. Kết luận

Việc hình thành các trường đại học địa phương Việt Nam nhằm đáp ứng nhu cầu đào tạo nguồn nhân lực cho mục tiêu phát triển kinh tế - xã hội của địa phương và quốc gia, nhưng trên khía cạnh xã hội nó cũng đáp ứng nhu cầu học tập của người dân trên quan điểm "xã hội học tập" và "học tập suốt đời", đồng thời sự phát triển này cũng phù hợp với xu thế tăng trưởng của giáo dục đại học trong khu vực và trên thế giới trong nền kinh tế hội nhập. Với chức năng nhiệm vụ của mình, các trường đại học địa phương chọn hướng phát triển thành đại học định hướng ứng dụng là phù hợp và khả thi. Khi địa phương có trường đại học hoạt động có hiệu quả và đào tạo nguồn nhân lực thực sự có chất lượng sẽ là một lợi thế cạnh tranh cho chính địa phương. Ngoài ra, với quyền quản lý của địa phương, sẽ rất thuận lợi cho việc huy động các nguồn lực xã hội cho sự phát triển trường đại học với mô hình phi lợi nhuận.

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Overall, the introduction of AI in grammar instruction has proven effective, benefiting both students and teachers alike. The positive feedback underscores AI's role in not only improving grammar proficiency but also in making the learning process more engaging and accessible, helping students achieve a higher standard of writing proficiency and confidence.

3. Conclusion

The application of AI in teaching English grammar is a promising solution for developing writing skills in first-year university students. By providing personalized feedback, instant error correction, and continuous practice opportunities, AI tools empower students to take an active role in their learning and achieve meaningful progress. As modern education continues to evolve, AI's role in personalizing grammar instruction will likely become increasingly important, offering students a pathway to become proficient, confident writers equipped for academic and professional success.

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