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The Effects of Using AI Technology on Writing Assignments Among Postgraduate Students

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استخدام تقنية الذكاء الاصطناعي في كتابة المهام بين طلاب الدراسات العليا

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Abstract

Writing aids driven by artificial intelligence (AI) are one of the emerging technologies in educational settings. Nonetheless, the purpose of this study is to look into how applying AI tools affects writing tasks for postgraduate students in Iraq. There was a quantitative technique used, specifically a case study methodology. Forty voluntary postgraduate students from various fields make up the sample. The tool is a questionnaire about the kinds of AI writing tools used by postgraduate students in Iraq and their opinions about how these tools affect their writing assignments. It has been determined that Iraqi postgraduate students responded favorably to the use of AI tools since they assist them in discovering new concepts, terms, and subjects. Postgraduate students from Iraq also noted that AI tools have a variety of processes that make writing easier, more accurate, and easier to understand. Future researchers, however, can conduct additional research on the application of AI tools and their development.

Key Words; Technology, AI tool, writing, and writing assignments

الخلاصة:

تعد أدوات الكتابة التي تعمل بالذكاء الاصطناعي واحدة من أهم التقنيات الناشئة في البيئات التعليمية. ومع ذلك، فإن الغرض من هذه الدراسة هو النظر في كيفية تأثير تطبيق أدوات الذكاء الاصطناعي على مهام مهارة الكتابة لطلاب الدراسات العليا في العراق حيث تم استخدام تقنية كمية، وتحديدًا منهجية دراسة الحالة. تتكون العينة من ٤٠ طالبًا متطوعين من مختلف المجالات. الأداة هي عبارة عن استبيان حول أنواع أدوات الكتابة التي تم استخدامها من قبل طلاب الدراسات العليا في العراق وآرائهم حول كيفية تأثير هذه الأدوات على مهام الكتابة الخاصة بهم وقد ثبت أن طلاب الدراسات العليا العراقيين قد استجابوا بشكل إيجابي في استخدام أدوات الذكاء الاصطناعي لأنها تساعدهم في اكتشاف مفاهيم ومصطلحات وموضوعات جديدة. كما لاحظ طلاب الدراسات العليا من العراق أن أدوات الذكاء الاصطناعي لديها مجموعة متنوعة من العمليات التي تجعل مهارة الكتابة أسهل وأكثر دقة وأسهل في الفهم. ومع ذلك، يمكن للباحثين في المستقبل إجراء أبحاث إضافية حول كيفية تطبيق أدوات الذكاء الاصطناعي وتطويره. الكلمات المفتاحية: التكنولوجيا، أدوات الذكاء الاصطناعي، الكتابة، مهام الكتابة.

Introduction

Artificial intelligence (AI)-powered writing tools are one of the newest innovations in educational technology. A common feature of AI-driven writing tools is Natural Language Processing (NLP), which has been taught on vast volumes of human-written material (Ginting & Barella, 2022; Nazari et al., 2021; Perkins, 2023). An increasing number of academic research indicates that AI-driven assistants have the potential to help students write better, be more confident, and be more productive when writing. Nonetheless, there are concerns about their potential to encourage dependence or inappropriate use (Machicao, 2019). For instance, ChatGPT and other AI technologies can produce original and rational text that is difficult for both sophisticated academic staff and modern technology to detect (Perkins, 2023), leading to serious issues with academic integrity. AI programs

such as QuillBot, AI Writer, and Typeset can rephrase original phrases or sentences by altering the sentence structure or substituting synonyms for words. Non-native English speakers can translate a number of languages into English with the aid of a program called Wordtune (Nazari et al., 2021). Students can write more quickly and easily by using ChatGPT, Writesonic, and Trink AI to create text-based material (Bhatia, 2023; Cheong et al., 2023). Additionally, research indicates that artificial intelligence (AI) tools such as Grammarly, Jasper, and Consensus not only improve writing skills but may also offer academic proficiency opportunities when users observe differences between their initial writing and the more skilful revision that the program recommends (Teng & Wang, 2023; Zhao et al., 2023). Writing is one of the most popular learning activities and a special learning tool (Emig, 1977) (Klein, 1999). According to Arnold et al. (2017) and Galbraith & Baaijen (2018), writing is a vital talent and a potential learning tool, but it is also an extremely challenging endeavour. According to Banert-Browns, Hurley, and Wilkinson (2004), writing is a practice that supports and advances the cognitive learning approach while still requiring a cognitive effort at the heart of learning (Boscolo & Mason, 2001). One criterion for teaching lessons is the completion of writing assignments. There are several steps that students must follow when completing writing projects, and employing artificial intelligence (AI) tools to assist students in completing their tasks has grown popular. However, this study's research questions;

1. How is the Iraqi post graduate students knowledge about AI tool?
2. What are the AI programs that Iraqi postgraduate students use in their writing assignment?
3. What is the impact of AI too on Iraqi postgraduate students on writing assignments?

2.Literature Review

2.1 Writing

It can be difficult to define the writing-to-learn paradigm, despite the fact that writing is commonly used as a learning technique (Graham, Kiuahara & MacKay, 2020). The phrase "writing-to-learn" does not describe the usual passive, direct note-taking conduct of pupils for particular knowledge that is presented in textbooks or that a teacher seeks to impart. Rather, it refers to a non-traditional, alternative writing style (poetry, stories, letters, and the like) that aids students in developing critical thinking skills (Kayaalp, Meral, Rztürk & Işık, 2016), understanding scientific content, expressing their opinions, and building information (Tynjala, 1998). In addition to helping students grasp concepts that are relatively difficult to understand (Alharbi, 2023; Hohenshell, Hand & Staker, 2004), writing as a learning tool ensures that scientific information is permanent (Rivard & Straw, 2000) and works as an alternative method to learn and develop current information in the school curriculum (Bazerman et al., 2005). Instructors should be able to help students with writing-to-learn assignments and provide them with a comprehensive learning environment (Kieft, Rijlaarsdam & Van den Bergh, 2006). However, educators need to understand which type to use for what, as well as how to properly mentor students in process design and writing. Hand and Prain (2002) provided a model for the application process of writing exercises for learning purposes in order to clarify this important aspect of the writing for learning process. The implementation method in this study and many other studies in the literature refers to the writing-to-learn model developed by Hand and Prain (2002, p.743). We believe that this model is the most applicable and useful approach for using writing for learning objectives.

2.2 Types of Writing

In general, there are four types of writing, though these are typically mixed together. A writer will choose a type based on what they hope to achieve, what kind of material they want to discuss, and what kind of impact they want to leave on the reader of their essay or paragraph.

2.2.1. Narrative

Like a narrator in a play, the narrative paragraph or essay recounts a story—albeit one that, unlike a play or short story, must be true. The ideal use of narrative writing is to show the "personal developmental path" that an individual (often you) has followed to get at a specific stage of life. Because of this, it is typically written in the first person. Because it requires a lot of work, true story writing is uncommon. There must be a conflict resolved in a story. This is the foundation of all narrative writing, whether it be a story, essay, or paragraph.

2.2.2 Descriptive

Writing that is descriptive creates an image. In its pure state, not much occurs. Without any action or occurrences, "description" describes how something appears, feels, tastes, sounds, or smells. It concentrates on one's immediate subjective sensations rather than explaining a relationship or a process outside of oneself.

2.2.3 Expository Writing that is expository "exposes" or explains aspects of a subject. It is frequently referred to as "information writing" since it provides details on a person, location, object, relationship, or concept. Clear justifications, facts and statistics, cause-and-effect links, or examples are the greatest ways to achieve it.

2.2.4 Persuasive

At the university level, this kind of writing is most likely the most prevalent. The goal of persuasive (or argumentative) writing is to persuade the reader that the writer's viewpoint or suggested course of action is sound. The author must create a narrow, well-defined, contentious topic with multiple sides in order to do this. To give the best evidence to refute the others, the author must be aware of opposing viewpoints on the subject.

2.3 Writing Assignments

Assignment writing is a type of documented work completed by students earning master's and doctoral degrees. The goal of most assignment writing is to help students focus their thoughts from broad concepts to more focused ones. Their academic tutors provide them several assignments to complete in order to accomplish this. Writing assignments allows students to gain practical understanding about the theories that have been proposed thus far. The ultimate goal of encouraging students to complete assignments is to psychologically get them ready for academic writing (see pay for my research paper, proposal, journal paper, and dissertation writing). Do you know why so many people are urged to write assignments? The solution is contained in the following passage; to learn more, go to that section. Writing an assignment is nothing more than interpreting various data from a single field of study. For instance, you might have to write lengthy assignments about cyber security if you're interested in working on projects relating to that field. In this instance, writing assignments might advance a variety of topics, including malware detection, cyber attacks, network security, communication protocols, vulnerability management, and threat analysis. "PhD assignment writing is like a supporting pillar where a researcher is getting flash over to investigate an idea" Assignments are written before to each research project in order to familiarize oneself with the subject matter. A researcher may then be inspired to write any of the completed assignments. In particular, if a student is interested in malware detection, he should research malware categories including ransom ware, spyware, Trojan horses, and so on. Since malware detection is based on a number of criteria, this is merely an example and does not limit your perceptions to these regions. Lastly, a suitable format is used to present the findings from the suggested field of study. Novices and novices are intimidating since they have a lot of problems with writing assignments. PhD assignment writing is somewhat difficult. Therefore, the purpose of this post is to provide interesting advice on how to get through those challenges. Would you like to receive more amazing notes? Let's dive right into the portions without any further delay.

3. Methodology

In order to answer the research issues, a quantitative strategy more especially, a case study methodology was used. The researcher can identify significant aspects that arise from the open-ended process by using the case study approach, which usually entails administering a questionnaire (Yin, 2009). This methodology allowed us to thoroughly examine the kinds of AI writing tools that postgraduate students use, as well as their opinions regarding how these tools affect their writing, especially in terms of organization and substance. Forty voluntary postgraduate students from various fields make up the sample. The tool is a questionnaire about the kinds of AI writing tools used by postgraduate students in Iraq and their opinions about how these tools affect their writing assignments.

4. Findings and Discussion

To answer research question one (How is the Iraqi post graduate students knowledge about AI tool?). Just 32% of Iraqi postgraduate students answered that they have knowledge about AI tool and how to use it. 16 % of Iraqi postgraduate students mentioned that Iraqi postgraduate students have knowledge about AI and they do not know how to use it. 52% answered that they do not have any knowledge about AI tool and Iraqi postgraduate students do not know how to use it. To answer research question two (What are the AI programs that Iraqi postgraduate students use in their writing assignment?). The most common programs that Iraqi postgraduate students use is ChatGPT, WordTune, and Quilpot. To answer research question three (What is the impact of AI too on Iraqi postgraduate students on writing assignments?). Iraqi postgraduate students answered that using AI tool has a positive impact as it gives helps student find new ideas, vocabularies and topics. Iraqi postgraduate students also mentioned that AI tool has varieties of processes that make students' writing easy, comprehended, and accurate. However, future researcher can make more studies on the using the AI tool and how can it be developed.

Conclusion

Writing aids driven by artificial intelligence (AI) are one of the emerging technologies in educational settings. Nonetheless, the purpose of this study is to look into how applying AI tools affects writing tasks for postgraduate students in Iraq. It has been determined that Iraqi postgraduate students responded favorably to the use of AI tools since they assist them in discovering new concepts, terms, and subjects. Postgraduate students from Iraq also noted that AI tools have a variety of processes that make writing easier, more accurate, and easier to understand. Future researchers, however, can conduct additional research on the application of AI tools and their development.

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