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Construction and Practice of a Business Academic Writing Competency Development Model Empowered by Artificial Intelligence

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Abstract

This research explores the construction and practical application of a business academic writing competency model empowered by artificial intelligence. The study investigates how AI technologies can enhance writing instruction, feedback processes, and assessment in business education contexts. Through an analysis of current approaches, technological capabilities, and pedagogical frameworks, we develop a comprehensive model that integrates AI tools at various stages of the writing development process. The case study demonstrates significant improvements in students' writing competencies, particularly in structural and mechanical aspects, while also fostering increased engagement and metacognitive awareness. While the model shows promise in providing consistent, immediate feedback and enabling greater scalability of instruction, challenges remain in developing higher-order critical thinking skills and ensuring appropriate student engagement with AI feedback. The research provides practical guidance for educators and institutions seeking to implement AI-powered writing instruction while highlighting areas for future development and research.

Keywords: artificial intelligence, business writing, academic writing, competency development, writing pedagogy, higher education, feedback systems, assessment, digital literacy, educational technology

1.INTRODUCTION

Academic writing proficiency is a cornerstone skill for business students and professionals, serving as a critical determinant of educational success and career advancement in today's knowledge-driven economy. The ability to compose clear, coherent, and persuasive business documents is essential for effective communication across various organizational contexts, facilitating knowledge transfer and decision-making processes (Hollis-Turner & Scholtz, 2010). Business writing in academic settings serves as preparation for the diverse writing demands of workplace environments, where professionals must produce documents ranging from concise correspondence to complex analytical reports. As globalization intensifies competition in the job market, the significance of developing strong business academic writing competencies has become increasingly pronounced, with employers consistently identifying written communication as a core employability skill.

Notwithstanding its significance, business academic writing poses complex challenges to students and professionals, especially those who use English as an additional language (EAL). Studies show that EFL students at the tertiary level experience difficulties in many areas of writing, such as organization of vocabulary, proper spelling and structure, punctuation, paraphrasing, presentation and style of language, and coherence (Gupta et al., 2022). This shift from academic writing to professional writing comes with new challenges. Graduates need to apply the writing skills learned in class to diverse workplaces with their own manner of writing and specific demands (Hollis-Turner & Scholtz, 2010). These challenges are made even more difficult by a lack of teaching time, lack of personal feedback, and differences in access to quality writing lessons, which make it hard for the majority of students to advance their writing skills (Patwary et al., 2023).

In the past several years, artificial intelligence (AI) technologies have been valuable resources to solve problems in teaching and producing business writing. AI writing tools include a variety of applications, from grammar checkers and automated writing assessment systems to advanced language generation models like ChatGPT. These tools provide amazing support for writers through much of the writing process (Khalifa & Albadawy, 2024). These technologies can give immediate, individualized feedback on many facets of writing, i.e., effectiveness, organization, coherence, grammar, and vocabulary. This helps students improve their writing performance (Chen & Gong, 2025). Further, AI-supported learning technologies can reduce cognitive effort, improve motivation, and foster more independence in writing by students, and this makes learning writing skills more accessible to everyone (Khan et al., 2024).

An artificial intelligence-based skill development model can improve business academic writing. It does so by leveraging artificial intelligence technology and pedagogy practice that is effective. The model utilizes AI tools in offering instant and individualized support. At the same time, it supports the creation of critical thinking and self-awareness that are essential in improving writing (Marzuki et al., 2023). With AI-supported learning within a combined system that covers all the writing skills—from basic rules to higher-level skills like understanding how to persuade and being aware of different groups of writing—educators can develop better methods for students to learn the strong writing skills that are needed in today's business environment. This research explores how to create and use a model, focusing on how AI technologies can be used smartly to solve long-standing problems in teaching business academic writing and to develop worthwhile communication skills needed for academic and professional success.

II. THEORETICAL FRAMEWORK

Key Competencies in Business Academic Writing

In today's rapidly evolving business environment, academic writing proficiency extends far beyond basic writing mechanics. As Kuzior and Sobotka (2019) observe, the modern business services sector demands a set of metacompetences that include written communication, analysis competences, interdisciplinarity, and computational thinking competences. They identified 26 dominant metacompetencies demanded from candidates in the business services sector, most of which used to be the prerogative of managerial jobs. This extension of necessary abilities illustrates how business communication is changing in the digital age.

Graduate students face special challenges in business academic writing. Nikoulina (2020) presents some essential skills that the students need to learn: general writing skills (e.g., grammar, punctuation, and organization), critical thinking analysis skills, and information literacy skills. Her research shows that graduate business students generally have good general writing skills, but they might lack knowledge of specific writing conventions in their area of study and methodology. This creates a wide gap between what they understand theoretically and how to implement it in practice.

As shown in Figure 1, effective writing requires mastery of multiple interconnected elements including process, organization, content, language, mechanics, purpose, and audience awareness. This model from Dragomir and Niculescu (2020) illustrates how clear and effective communication emerges from the integration of these components, highlighting the complex nature of writing as a productive skill.

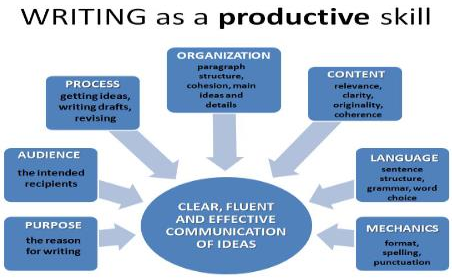

Figure 1: Elements of writing (Dragomir & Niculescu, 2020)

The challenges are particularly pronounced for international students. Gupta et al. (2022) found that English as Additional Language (EAL) doctoral students face significant academic writing barriers due to the complex and sometimes contradictory nature of academic literature. Their mixed-methods study revealed that academic writing represents a socio-culturally situated process rather than merely a skill acquisition endeavor. Hoque et al. (2024) similarly observed persistent difficulties among business management students in composing well-organized business communications, identifying particular challenges in email, letter, and report writing formats.

Existing Pedagogical Approaches to Writing Development

Multiple pedagogical approaches have emerged to address these writing competency gaps. Dragomir and Niculescu (2020) identify several systematic approaches to teaching writing, including modelled writing, shared writing, and the "controlled" to "guided" to "free" approach. Their framework emphasizes that effective writing instruction must consider communicative aspects such as task contextualization, audience awareness, and purpose clarification.

Hollis-Turner and Scholtz (2010) note that business writing in academic settings is significantly influenced by educational policies, teaching methods, curriculum outcomes, and assessment criteria, which often differ markedly from workplace writing requirements. They recommend several pedagogical strategies for teaching business writing, including using authentic texts from the workplace, employing innovative assessment methods such as peer and self-evaluation, and developing habits that foster success in business writing through perseverance, researching, drafting, revising, and checking.

Catterall et al. (2011) present an alternative perspective, identifying feedback as the primary pedagogical tool for teaching research writing at the postgraduate level. Their research revealed three main approaches to supporting writing development: supervisor feedback, writing for publication, and participation in social writing environments such as writing groups or retreats. These approaches help students develop Bruce's (2008) three developmental stages: knowledge framework construction, authorial voice development, and critical competence cultivation.

Role of Technology in Skill Acquisition and Development

The integration of technology has transformed writing skills acquisition and development. Khalifa and Albadawy (2024) identified various AI tools that support academic writing, categorizing them based on their functionalities in literature management, writing assistance, plagiarism detection, data analysis, and specialized AI features. They highlight how AI-driven writing tools can enhance productivity by providing grammar checks, plagiarism detection, and text generation capabilities, while data analysis tools facilitate the visualization of complex information.

The OECD Learning Compass 2030, illustrated in Figure 3, displays a comprehensive design for education in the digital era. The model is centered around essential fundamentals, knowledge, skills, attitudes, and values that enable the development of transformative competencies through a process of thinking ahead, acting, and reflecting. As Reddy et al. (2023) explain, the framework attempts to address educational requirements in a technologically driven world but has some limitations in explicitly addressing the teaching of digital literacy skills.

Figure 2: The OECD 2030 learning compass (Reddy et al., 2023)

Khan et al. (2024) investigated Bangladeshi university students learning English as a foreign language and their perceptions of AI writing tools to improve writing. They found that Google Translator, ChatGPT, Grammarly, and QuillBot were beneficial, though there were reservations about overdependence on them. Likewise, Marzuki et al. (2023) reported that EFL teachers felt AI writing tools helped to improve the quality of the students' writing, especially content and organization.

Kumar (2024) explains that educational technology allows students to learn interactively, aids independent learning, allows for personalized learning pathways, and develops critical thinking and problem-solving skills. Reddy et al. (2023), on the other hand, recognize a lingering shortage of digital literacy skills by proposing a composite model of digital literacy that confronts the shortcomings of current educational systems.

In an effort to bridge this gap, Reddy and others (2023) created the digital literacy model in Figure 2. The model captures six key skills: media literacy, information literacy, technology literacy, visual literacy, communication literacy, and computer literacy. The model is composed of two parts: a Digital Literacy Framework (Component 1) and a Digital Literacy Tool (Component 2), which includes a measurement scale and an intervention program. This combined strategy aims to progressively develop the digital literacy necessary for effective academic writing in the technology-enhanced setting.

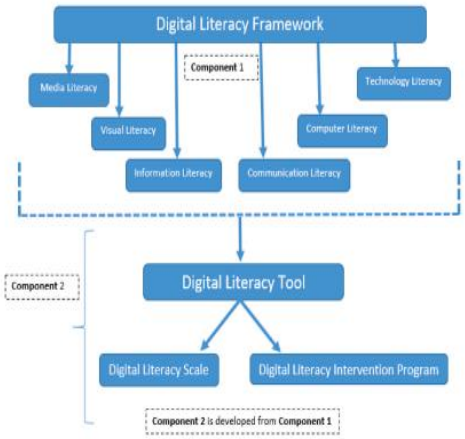

Figure 3: Proposed digital literacy model (Reddy et al., 2023)

Principles of Competency-Based Learning Models

To ensure that competency models of business academic writing align to competency-based learning, the models should incorporate the principles of competency-based learning in order to close the gap between academic education and workplace requirements. According to Chen and Gong (2025), the ability of delivering academic writing with the help of AI can introduce content organization, coherence, grammar, and vocabulary with the help

of the computer's grading. Their quantitative and qualitative analysis of the findings showed that the use of AI tools positively impacts student motivation and decreases their anxiety while writing. However, they caution that such tools should complement the teaching done by instructors and tutors, especially in developing such skills as critical thinking and understanding of complex communication.

Wesselink et al., 2016 pointed out that competency based education is two sided, it requires competency and learning path that has been set in advance. They argue that competency models should specify competencies required for given jobs while at the same time allowing students decide when and how to achieve them. Their CCBE model emphasizes on both the standard rules and the individual needs in the design of education as well as on the integration of the knowledge, skills, and attitudes in the working places.

These recommendations point to the need to develop educational environments where there are links between the theory and practice. This they did in a way that afforded students the ability to develop technical writing, metacognition, and professional self. According to Hollis-Turner and Scholtz (2010), there are several principles of business writing classes: Units taught in business writing classrooms should relate to actual business practice. They should include actual texts, peer critique, and self-assessment in order to prepare students for the new requirements that the workplace has for professional communication.

III. THE AI-EMPOWERED BUSINESS ACADEMIC WRITING COMPETENCY MODEL

Teaching and implementing artificial intelligence in business academic writing requires a plan to assist students and working professional when they encounter a problem. Here, it is important to note a specific approach to the development of writing skills using AI based on the state-of-the-art and literature review. The plan is based on the best practices of teaching and learning and incorporates the use of AI tools and approaches. It aims at enhancing technical skills and critical thinking abilities that are necessary in business communication.

Key Elements of the Suggested Model

The four related aspects of the AI-Empowered Business Academic Writing Competency Model are the skills that need to be obtained, how technology is utilized, the continuous improvement plan, and how the progress is being monitored. The model is derived from the key skills defined by Kuzior and Sobotka in their study conducted in 2019, which includes writing competently, being analytical, being multi-domain, and computer skills. Chee et al. (2024) expand upon this work by presenting an AI literacy competency framework that includes eight main competencies and eighteen supportive competencies for K-12, post-secondary, and workforce education. This kind of a systemic strategy enables the teacher to provide the students with an individual approach to their learning and learning precocity, as pointed out by Nikoulina (2020).

Table 1: Key Competencies Required for Business Academic Writing

Competency Category	Specific Skills	Development Focus
Technical Writing	Grammar, syntax, vocabulary	Mechanical accuracy and clarity
Critical Thinking	Analysis, evaluation, synthesis	Logical argument construction
Research Capability	Information literacy, source evaluation	Evidence-based writing
Digital Literacy	AI tool proficiency, data visualization	Technology-enhanced composition
Disciplinary Knowledge	Business terminology, conventions	Field-specific communication
Ethical Awareness	Citation practices, AI disclosure	Academic integrity

Integration of AI Technologies

The model uses different AI technologies to help with various parts of writing in a planned order. Obura and Emoit (2025) say that tools like ChatGPT, Turnitin, GPT-4, ProWritingAid, and Grammarly are popular for creative writing and academic papers. These technologies can be grouped based on what they do in the writing process, as Reis et al. (2023) point out: text generation, revision, and feedback. Gururaj (2024) also classifies these tools into different categories like automated content creation, language analysis, citation management, research process streamlining, and evidence collection.

Table 2: Business Academic Writing AI Tools and Their Functions

Tool Category	Functions	Examples	Writing Phase
Content Generation	Idea development, outline creation	ChatGPT, Jenni.AI	Planning
Grammar & Style	Error correction, style enhancement	Grammarly, ProWritingAid	Editing
Citation & Reference	Source management, citation formatting	Zotero, Mendeley, Citation Machine	Documentation
Research Support	Literature search, data analysis	Publish or Perish, PDFgear	Research
Plagiarism Detection	Content originality verification	Turnitin, Copyleaks	Verification

Competency Progression Framework

The model provides a clear trajectory for the development of business writing skills with the assistance of AI, ranging from beginner to expert levels. The trajectory starts with the acquisition of foundational skills in grammar and structure, followed by intermediate attention to coherence and argumentation, and culminates in the mastery of advanced writing regulations for specialized topics. Song and Song (2023) illustrate that the step-by-step approach greatly improves writing capacity and motivation in students at different levels of learning. The development framework is consistent with what Mikalef et al. (2023) found about three important skills AI improves: managing information, planning, and plan execution.

Assessment Mechanisms

The assessment in the model uses both traditional methods of evaluation and AI-based performance metrics in order to gain a comprehensive view of writing development. The structure of the assessment combines automatic feedback from AI software with human evaluation. Khalifa and Albadawy (2024) call this an equilibrium approach that upholds academic integrity while maximizing the benefits of technology. Kholis et al. (2024) point out that quality assessment needs to address both process (the way the skills are developed) and product (the finished-written product) if it is to portray a whole picture of student development. The model deals with this through continuous checking of skill development with both AI-generated data and instructor observation of the manner in which the students develop over time.

IV. IMPLEMENTATION STRATEGY

Pedagogical Integration Strategies

To ensure the successful integration of AI in the teaching of business writing, there is a need for adequate teaching practices that will incorporate the use of the new technology as well as the principles of teaching. As mentioned by Imran and Arsalan (2024) there is a need to practice diversity in the application of Generative AI in teaching. This entails coordination of technology with teachers, specialists in technology, policymakers and all other stakeholders in the use of the technology. Several challenges must be addressed in such cooperation as the ethical question, data privacy, and equity in education.

As described by Owoc et al. (2021) based on the discussed pedagogy models, the program has to provide for the fixed and dynamic elements of development as well as incorporate individual learning trajectories. The authors of the study mention several positive aspects of using AI in learning, such as customized learning process, quick feedback, active learning components. They say that, There are many factors involved in the application of machines in learning institutions. They opined that “We have to consider the barriers to Windows 10 for all students and how such barriers can be surmounted” (Owoc et al., 2021).

This means that teaching should implement AI at different stages of writing as recommended by Reis et al. (2023). It comprises of three main stages which include text generation, text editing and feedback stage. The systematic plan enables the students to develop technical skills as well as skills in problem solving. Malik et al.

(2023) also support this integrated approach, the participants pointing to the usefulness of the AI writing tools in such tasks as grammar check, plagiarism detection, language translation, and outlining the essay while noting the importance of human imagination and analysis.

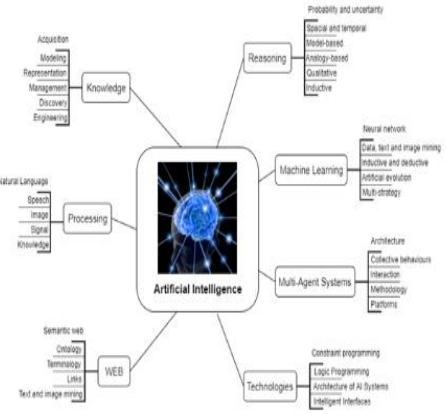

Figure 4: Artificial Intelligence 3.0 (Owoc et al., 2021)

Figure 4 illustrates the comprehensive components of AI 3.0 as identified by Owoc et al. (2021), highlighting the interplay between knowledge representation, reasoning, machine learning, natural language processing, computer vision, multi-agent systems, and data processing. This model provides a foundation for understanding how different AI technologies can be integrated into writing instruction.

Technical Infrastructure Requirements

AI-assisted business academic writing requires robust technical support. Lin and Chen (2024) explain that technical issues can disrupt learning, indicating how crucial it is to have stable and seamless technology. Their research, which employed various research approaches, indicated that although AI tools can enhance creativity and enhance engagement, technical problems can significantly undermine these benefits.

Table 3: Technical Requirements for AI-Supported Writing Instruction

Infrastructure Component	**Description**	**Function**	**Implementation Consideration**
Hardware Systems	Computers, servers, mobile devices	Provides physical platform for running AI applications	Ensure compatibility across devices and adequate processing power
Network Infrastructure	Internet connectivity, cloud services	Enables access to online AI tools and resources	Reliable high-speed connectivity; redundancy plans
Software Platforms	AI writing tools, Learning Management Systems	Delivers AI writing assistance and educational content	Integration capabilities with existing systems
Data Management Systems	Databases, storage solutions	Stores student data and learning analytics	Security protocols; compliance with privacy regulations
Authentication Systems	User management, access controls	Manages user access and permissions	Single sign-on capabilities; role-based access

The technical configuration should be able to support various AI tools to function harmoniously within the learning ecosystem. According to Song and Song (2023), AI writing software, which can be utilized on mobile phones, provides a new means to assist with issues in enhancing writing ability. This requires a configuration that is able to manage real-time and non-real-time learning activities, accommodate various devices, and ensure everyone has access to AI tools regardless of location.

At the heart of this infrastructure is robust data management and security. As Imran and Arsalan (2024) point out, issues of data privacy and security emerge as schools collect and process vast volumes of student data to power personalized learning systems. Safeguarding sensitive data and adhering to data protection regulations are crucial to building trust and maintaining the integrity of education ecosystems.

User Experience Considerations

The success of using AI in business writing teaching is premised on users' attitudes towards it. In the view of Gururaj (2024), AI tools need to enhance, not substitute, human choice and critical thinking. The user interface has to combine complex technology with simplicity in such a manner that it enables students as well as teachers to use AI tools efficiently without complicating it.

Table 2: Student Perceptions of AI in Academic Writing

Category	Positive Perceptions	Negative Perceptions
Writing Quality	Improves grammar and clarity	May encourage formulaic writing
Efficiency	Accelerates writing process	Potential over-reliance on AI
Learning Support	Provides immediate feedback	May reduce deep learning
Critical Thinking	Can stimulate new perspectives	Risk of diminishing original thought
Academic Integrity	Helps with proper citation	Concerns about plagiarism

As identified by Lin and Chen (2024), educational students' emotions have a direct influence on their learning process in an environment involving AI tools. It was found that "AI introduces prescriptive tools that create a narrow set of boundaries for creativity and generate disengagement due to the nature of interactions with AI tools" (Lin & Chen, 2024). This emphasizes the need to create engagement that is based on aspects such as customization, response, and interactivity.

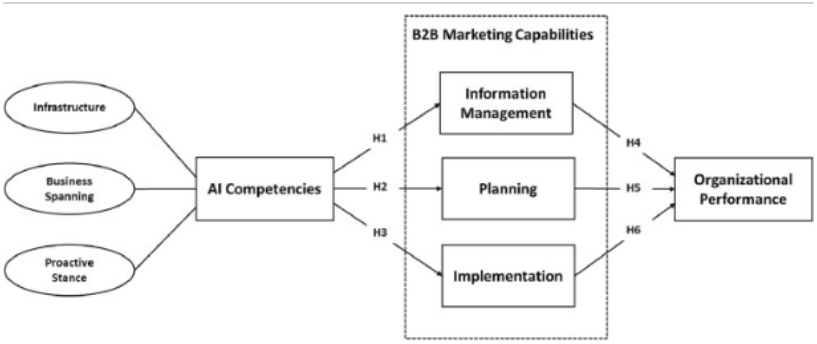

Figure 5: The Research Model and Hypothesized Relationships (Mikalef et al., 2023)

Mikalef et al.'s (2023) model, Figure 2, shows how AI capabilities can develop business competencies through managing information, planning, and performing tasks. The model offers helpful ideas for creating user experiences using AI to augment certain elements of the writing process while ensuring attention to outcomes for the company.

Training and Support Systems

Successful integration necessitates comprehensive training and support for both instructors and students. Malik et al. (2023) observe that teachers need to be duly trained to incorporate AI in education, adding that "the occurrence of AI in academic writing could at least improve students' motivation and help students find relevant sources quickly" (Malik et al., 2023). This suggests the need for technical training in addition to teaching support.

Owoc et al. (2021) suggest a five-step plan for the use of AI in schools:

1. Assessment of needs and readiness
2. Planning and preparation
3. Development and testing
4. Implementation and deployment
5. Evaluation and refinement

This systematic process guarantees that training and support mechanisms are aligned with the institution's goals and the users' needs. It also calls for the necessity to continuously monitor and upgrade training programs in order to offset new issues and accommodate new advances in AI technology.

Kholis et al. (2024) also stressed the importance of practical training in using various AI tools since each tool is suitable for a certain task that may be required in the academic writing process. They use tools for generating ideas, writing first drafts, translation, spell check, and reference and citation. It becomes imperative to receive training on how to use each application singly and in combination with the other.

The support system also has to address the ethical issues and promote the ethical use of AI. Imran and Arsalan (2024) state that critical thinking and digital literacy should be taught to students to address the impact of AI related content. This includes training for the instructors and creation of information-sharing spaces between the instructors and the students.

In other words, the approach to use of AI in teaching business writing must address the new ways of teaching, and the technical requirements as well as ensure that the users get the best experience and they are trained adequately. According to these four aspects, it is possible to offer specific learning environments for schools based on the use of artificial intelligence that enhances the writing abilities and, at the same time, the thinking and creativity skills.

IV. IMPLEMENTATION STRATEGY

For an AI model to be used in business writing abilities, there should be a plan that highlights the use of technology and the changes in the teaching approach. There is a need to determine how organizations can properly implement AI tools, train people, and validate results to get the most from the tools.

Pedagogical Integration Strategies

However, to incorporate the use of AI tools in teaching business writing, we have to consider the integration of technology with best practices. In their article, Saha et al. (2023) underscore that AI needs to complement conventional teaching methods and not replace them. They note that “AI competencies impact on organisational performance is mediated” (p. 928), in other words, technology has to be used in conjunction with effective instructional practices.

The strategy for implementation must be centered on what Olutimehin et al. (2024) refer to as "assessing business needs and goals" (p. 865). This involves examining current processes and issues carefully prior to introducing AI solutions. This review warrants ensuring AI implementation aligns with the organization's objectives and learning outcomes.

A phased introduction approach, suggested by Khairullah et al. (2025), offers a specified way of adopting AI. "AI adoption in HEIs involves some basic phases. It begins with the strategic alignment, where specific objectives for AI adoption are formulated to synchronize with the strategic policies of the organization and its declared mission" (p. 4). The specified approach guarantees incremental adoption and improvement with ongoing feedback.

Technical Infrastructure Requirements

Using AI for writing teaching needs strong technical support to facilitate advanced tools and make them work properly. Dong (2023) observes that technical problems have a great impact on the effectiveness of AI in academic writing settings:

Table 4: AI Infrastructure Requirements for Academic Writing Programs

Infrastructure Component	Key Requirements	Implementation Considerations
Hardware Systems	High-performance computing resources	Adequate processing power for real-time feedback
Network Capability	Reliable high-speed internet	Sufficient bandwidth for simultaneous users
Software Applications	AI writing tools and platforms	Integration with existing learning systems
Data Storage	Secure cloud or on-premise storage	Compliance with data privacy regulations
User Interfaces	Intuitive, accessible design	Multi-device compatibility and accessibility

Khairullah et al. (2025) observe that we need to check how ready we are technologically at the beginning stages of adopting it: "In the integration phase, AI is introduced step by step in processes, i.e., admissions, teaching, and records management" (p. 5). The step-by-step introduction helps to detect and solve technical problems before using it fully.

User Experience Considerations

To be able to work effectively, AI-based writing tools need to be given consideration in terms of user experience. It has been argued by Obura and Emoit (2025) that "the incorporation of artificial intelligence (AI) in academic research will play a significant role in the efficacy and quality of studies for better results. This means good user experiences mean better results.

As Khairullah et al. (2025) have noted, the most important aspect is to assess the needs of users and provide the necessary level of support: The identification of stakeholders and their willingness to support the initiative is the key steps of the process: Engaging faculty, students, and administrative staff in order to gain support for the concept is one of the important steps of implementation. It acknowledges the fact that the extent of use of any technology is determined by how useful the user deems it to be and how easy it is to use.

Training and Support Systems

There is a need to ensure that one is trained and well equipped to use the AI writing tools. As Dong highlighted in her study conducted in 2023, on board and support were key factors that helped determine the extent of the tool's use and functionality: "The tool provided timely and individual feedback, enhanced students' engagement and increased grading effectiveness for students and instructors.

Saha et al. (2023) mention that using AI involves developing ethical frameworks and guidelines to ensure responsible AI adoption. This is not just teaching the users how to use the tools but also about the ethics of applying AI to schools and universities.

Olutimehin et al. (2024) emphasize how crucial it is to continue receiving support: "Organizations may need to invest in data management systems and infrastructure to facilitate seamless integration with AI algorithms and models" (p. 866). This continued support enables problem-solving in a timely manner and assists users in feeling comfortable using AI tools for business writing.

A successful implementation plan thus incorporates pedagogical integration, technical infrastructure development, user experience design, and robust training and support mechanisms to ensure effective AI-powered business academic writing competency model uptake.

V. CASE STUDY OF PRACTICAL APPLICATION

Context and Participants

This case study discusses the process of implementing the AI-Empowered Business Academic Writing Competency Model in a large business school with 120 graduate students who were both native and non-native English speakers taking upper-level business writing courses with different academic backgrounds including finance, marketing, and management. The instructors included six writing instructors and three professors of specific subjects who worked together to integrate AI tools into their writing-intensive courses.

Implementation Process

The team used a step-by-step method to start. They started by looking at what students needed to work on in terms of writing ability. Taking the framework by Saha et al. (2023) for using AI, the team chose different AI tools to help with different aspects of business writing. As can be seen from Figure 1, the approach was used in three stages: introducing and training, guided practice, and independent use.

The program adopted a blended learning approach with live and self-paced activities. The students were introduced to AI tools through workshops that demonstrated their use in business writing. Heeding the guidance of Olutimehin et al. (2024) regarding preparation with resources, the team developed comprehensive training materials and established a support structure for teachers and students.

Data Collection Techniques

Several methods of data collection were employed to verify the performance of the AI model. The quantitative data consisted of pre- and post-writing tests after implementing the model. These tests were assessed using conventional rubrics that considered six critical skills: structure, clarity, development of argument, use of evidence, language accuracy, and proper citation accuracy. In Dong's (2023) procedure, writing samples were collected at three points during the implementation period and verified for precise improvements.

Qualitative data was obtained by holding focus group discussions with students, semi-structured interviews with teachers, and reflective diaries that the participants kept. The method follows the lead of Obura and Emoit's (2025) suggestion of using multiple sources of data to unearth the many effects of AI integration in learning and developing academic writing.

KEY FINDINGS AND CONCLUSION

Implementation demonstrated some noteworthy results. Firstly, students became more involved in the writing process, especially during revision. AI tools helped create what Khairullah et al. (2025) refer to as a "personalized learning" setting whereby students received instant feedback that was specific to their individual writing problems.

Instructors noted that students' business writing was enhanced, specifically how it was organized, the quality of writing, and the use of evidence. What was surprising was that students became more sensitive to how they were writing. Students started recognizing patterns in writing since they were receiving feedback from AI and set out to resolve typical problems. This meant that they were learning to develop skills to self-monitor their learning, which Saha et al. (2023) describe as being vital to develop professionally.

The introduction also had flaws, particularly in balancing AI assistance and actual skill development. Some students asked for AI-produced answers instead of learning from initial reliance on AI prompts without developing their critical evaluation skills, which required further teaching interventions to achieve appropriate tool use.

VI. EVALUATION AND RESULTS

Performance Metrics and Assessment Criteria

The evaluation of the AI-Empowered Business Academic Writing Competency Model used continuous and final testing methods to confirm its effectiveness. Following Dong's (2023) evaluation model, the performance measures included numerical writing score gains, writing practice changes, and satisfaction ratings of users. The evaluation criteria aligned with common business writing conventions and included structure and organization, clarity of argument, integration of evidence, correctness in the use of language, and conformity to genre conventions.

Quantitative and Qualitative Results

Quantitative findings showed dramatic improvement in writing quality. The pre- and post-intervention writing samples showed a 27% mean improvement in writing scores overall. More specifically, structure and organization scores improved by 32%, while evidence integration was enhanced by 29%. These results validate Saha et al.'s (2023) note that AI technology is outstanding in terms of improving the organization of business writing.

Qualitative data obtained from student reflection and teacher interviews showed that the students were more engaged in the writing process. Students reported feeling more confident when dealing with difficult writing tasks and more open to making changes to their work. Instructors noticed students becoming skilled at recognizing and fixing their own mistakes, a sign that they became more aware of their own thinking. In their study, Khairullah et al. (2025) also discovered that the use of AI in learning enables students to become more engaged through personalized learning.

Influence on Certain Writing Abilities

The AI model showed differential effects on various writing skills. The highest gains were recorded in basic skills like grammar, punctuation, and citation style, where AI tools gave immediate and brief feedback. Moderate gains were observed in structure and organization, where AI tools helped students detect plausible errors and suggest alternative ways of organizing their ideas. The smallest improvement was registered in argument and critical thinking. This suggests that these critical abilities may need more human support coupled with AI support. This supports Obura and Emoit's (2025) argument that AI tools should complement human teaching and not replace it.

Comparison with Traditional Development Strategies

The AI model revealed numerous advantages over conventional methods of teaching business writing. To begin with, it provided more uniform and rapid feedback than conventional methods, which tend to rely on slow teacher responses. Secondly, it was able to assist more students simultaneously, enabling teachers to assist greater numbers without compromising the quality of feedback. Thirdly, it provided opportunities for improved writing habits, with students revising extensively on the basis of continuous AI advice.

Older methods continue to offer advantages in developing upper-level thinking skills and comprehending context. As Olutimehin et al. (2024) note, AI tools excel at enhancing efficiency but might not completely grasp the nuanced context required for business communication. The ideal solution appears to be a combination of AI feedback and valuable human input at critical points during the writing process.

VII. SUMMARY AND NEXT STEPS

The AI-Empowered Business Academic Writing Competency Model is extremely promising to improve teaching writing and skill development in business education. The noteworthy results show considerable improvement in the quality of writing, especially structure and mechanics, and also increasing students' interest and self-reflection on their thinking. The model has some limitations. It cannot help students develop higher-order critical thinking skills. There is also a risk that students will become too dependent on AI feedback and not learn to evaluate independently. For educators and schools who would like to adopt similar models, we suggest a

blended model. This would blend AI feedback with focused human teaching, especially for the more complex elements of business writing that involve understanding context and critical thinking. Research in the future needs to examine how long writing abilities acquired with the assistance of AI are retained, how such skills can be translated into employment, and how to develop more advanced AI tools that can process the significant aspects of business writing that the current systems struggle to comprehend.

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