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RESEARCH ARTICLE

Blended Learning with ChatGPT: Combining Traditional Teaching Methods with AI Assistance

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ARTICLE INFO	ABSTRACT
	This study investigates the integration of ChatGPT, a conversational artificial intelligence tool, into blended learning environments within the Department of English and Literature at the University of Bisha, Saudi Arabia. Employing a survey-based methodology, the research explores the perspectives of 76 faculty members on the benefits, challenges, and overall effectiveness of ChatGPT in supporting traditional teaching methods. The survey comprised 20 items across four key areas: perceived benefits, challenges, overall effectiveness, and future potential. Findings indicate that teachers perceive ChatGPT as a valuable resource for enhancing lesson planning, student engagement, personalized learning, and workload reduction. The tool was especially praised for its ability to provide personalized content and improve creative writing assignments. However, ethical concerns, such as plagiarism, over-reliance on AI, and the cultural relevance of AI-generated content, emerged as significant challenges. Additionally, the need for adequate training and robust infrastructure to integrate ChatGPT effectively was highlighted. Statistical analysis revealed high agreement levels among participants regarding ChatGPT's potential to transform teaching practices, with a mean score of 4.3 out of 5 across survey items related to its benefits. Despite concerns, there was widespread optimism about its long-term potential in higher education. The study concludes that while ChatGPT offers significant advantages in blended learning, its successful adoption requires targeted teacher training, ethical guidelines, and localized adaptations to align with cultural contexts. This research contributes to the growing body of literature on artificial intelligence in education and provides actionable recommendations for integrating AI tools into teaching practices. It highlights the importance of balancing traditional pedagogy with innovative technology to create effective, inclusive, and culturally sensitive learning environments.

INTRODUCTION

The growth and evolution of education in the past couple of decades have been phenomenal in a world ruled by globalization and technological innovation, with greater dependence on technology to assist the traditional way of teaching. Educators are increasingly looking at innovative ways through which teaching can be made more effective or learners can be made more participatory. Blended Learning is one such model that incorporates face-to-face instruction with digital tools and resources. It has also proved flexible in meeting the diverse learning needs of individuals by capitalizing on the beneficial aspects of both the traditional and modern methodology. This study is set to explore the use of ChatGPT, currently one of the most advanced AI language models, in a

blended learning environment. The focus shall lie in applying it within the Department of English and Literature at the University of Bisha, Saudi Arabia.

Blended Learning: A Modern Approach to Education

Blended learning integrates conventional face-to-face modes of instruction with e-learning, surmounting the inefficiencies of both. It offers advantages like greater engagement and consideration of individual needs, but effective implementation demands substantial effort, the right attitudes, sufficient funding, and motivated teachers and students (Omran & Salari, 2012; Dangwal, 2017). This approach increases effectiveness through ease of access to materials, cost-effectiveness, and an increase in learning styles. Blended learning uses collaborative, constructive, and computer-assisted techniques for a better educational experience. Blended learning, despite its shortfalls, is the imperative for modern education systems (Dangwal, 2017).

Artificial Intelligence in Education

Artificial Intelligence has disrupted many fields, and education is no exception. From adaptive learning tools to automated grading, AI is changing the mode of imparting and assessing knowledge. AI tools can assist both educators and students in various aspects of English and Literature education by streamlining administrative work, improving lesson delivery, and stimulating creativity. ChatGPT is a family of AI models developed by OpenAI, and it holds one of the biggest potentials for educational purposes. The agent was designed to create contextually relevant text, answer questions, and provide explanations based on user input. Instructors can use this as a multicompetent assistant that can be helpful in a variety of teaching aspects.

Artificial Intelligence (AI) is revolutionizing education by enhancing teaching, learning, and administrative processes (Sadiku et al., 2021). AI applications in education include personalized learning, intelligent tutoring systems, automated grading, and student performance prediction (Chen et al., 2020; Ahmad et al., 2020). These technologies aim to supplement educators, making learning more engaging and efficient while providing timely feedback to students. While AI offers numerous benefits, its implementation should be approached cautiously, with proper training and awareness for educators and students. AI also automates administrative tasks, allowing educators to focus on instructional improvement (Lampou, 2023). The integration of AI in education has progressed from computer-based technologies to web-based systems and humanoid robots (Chen et al., 2020). Challenges and limitations exist, necessitating further research and development to maximize AI's potential in education (Ahmad et al., 2020). Overall, AI has the potential to significantly improve educational experiences and outcomes.

Educational Landscape in Saudi Arabia

English language education holds particular significance in Saudi Arabia, given its status as the global lingua franca and its importance for international communication. The Department of English and Literature at the University of Bisha plays a vital role in preparing students for academic and professional success. However, teaching English and Literature in a non-native context presents unique challenges, including varying levels of language proficiency, cultural sensitivity in curriculum design, and the need to maintain student motivation.

In this context, tools like ChatGPT offer immense potential to enhance English and Literature education. By providing personalized learning resources, automating routine tasks, and fostering interactive learning experiences, ChatGPT aligns with the objectives of Vision 2030 while addressing the specific needs of educators and students in Saudi Arabia.

The educational landscape in Saudi Arabia has undergone significant transformation in recent years. The government has invested heavily in higher education, allocating substantial funds to improve the quality and accessibility of education (Smith & Abouammoh, 2013). The King Abdullah Scholarship

Program has enabled many Saudi students to study abroad, particularly in the United States (Taylor & Albasri, 2014). This initiative, along with the expansion of domestic universities and colleges, has led to a steep rise in higher education enrollment rates. Private higher education institutions have also emerged, contributing to the sector's growth. However, challenges remain, including the need to align education with labor market demands and address the skills shortfall among Saudi nationals (Hamdan, 2013). The government's commitment to educational reform is evident through projects like Tatweer and the emphasis on achieving world-class standards in higher education (Saha, 2015; Smith & Abouammoh, 2013).

Saudi Arabian education is facing a complete transformation; it has been pushed forward by the government as part of its Vision 2030. This strategic framework includes diversifying the nation's economy and modernizing other key sectors, such as education. The integration of technology at all levels of teaching and learning involves developing the students' creativity, critical thinking, and global competence-a critical component of Vision 2030.

Objectives of the Research

The primary objective of this research is to evaluate the integration of ChatGPT into blended learning practices within the Department of English and Literature at the University of Bisha. The study aims to explore the benefits, challenges, and overall effectiveness of ChatGPT as a teaching aid. Specific objectives include:

- To Assess ChatGPT's Role in Lesson Planning
- To Explore the Impact of ChatGPT on Student Engagement
- To Evaluate ChatGPT's Effect on Teachers' Workload
- To Identify Challenges in Using ChatGPT

Research Questions

The study is guided by the following research questions:

1. How does ChatGPT support teachers in designing and delivering English and Literature lessons?
2. What impact does ChatGPT have on student engagement and learning outcomes?
3. How does the use of ChatGPT influence teachers' workload and efficiency?
4. What challenges and limitations are associated with the integration of ChatGPT into blended learning?

LITERATURE REVIEW

Literature review argues for the theoretical and empirical foundations of blended learning, artificial intelligence in education, and a specific application of ChatGPT in teaching English and Literature. This section is therefore divided into three parts: Blended Learning—concepts and application, Artificial Intelligence in Education, and ChatGPT in English and Literature Education. Each main heading is again divided into subheadings to provide an in-depth analysis of relevant literature.

Blended Learning: Concepts and Applications

Blended learning is a hybrid model of teaching that brings together face-to-face instruction with digital tools and resources. This next section traces the historical development, theoretical underpinnings, and applications of blended learning in educational contexts focusing on language and literature studies.

Blended learning incorporates the traditional classroom teaching and online and technologically enhanced methods, hence creating a much more flexible approach in education (Dangwal, 2017; Porumb et al., 2013). While it has lots of advantages, successful implementation entails a lot of effort,

the right attitudes, sufficient funding, and interested teachers and students. More precisely, this new concept integrates collaborative, constructive, and computer-assisted learning modes to enhance the learning experience for students (Dangwal, 2017). Blended learning can be applied institutionally, at program level, course level, and activity level, hence likely to develop concept development and higher-order thinking skills (Sayed, 2013). Implementation scenarios are very diverse according to the involvement of the instructor, learner self-organization, and online moderation (Trapp, 2006). In engineering education, blended learning applies project-based learning, virtual laboratories, and remote assistance to projects (Porumb et al., 2013).

Definition and Evolution of Blended Learning

Blended learning has been defined as an educational approach that combines face-to-face classroom methods with computer-mediated activities. Graham (2014) defines blended learning as an education program where a portion of the content is delivered through time–place flexible methods, enabling them to combine physical classroom interaction with digital delivery systems. With the advancement of e-learning platforms and an increasing awareness in importance of personalized learning, the concept evolved best during the early 2000s.

On the other hand, it poses problems in higher education and particularly in the field of language teaching (Cuesta Medina, 2017). The idea is still an evolutionary one, and some researchers are even extending definitions to include theories of learning that merge direct instruction and learning-by-doing, mixing principles from behaviorism and constructivism (Cronje, 2020). Such steps can be considered as a never-ending process, which replicates the changing nature of blended learning phenomena to accommodate educational contexts.

More recent research shows the flexibility of blending learning ensures teachers can cater to varying needs whilst teaching. For instance, in language teaching, it helps with collaborative activities, grammar exercises and multimedia focused comprehension tasks.

Theoretical Foundations of Blended Learning

Blended learning (BL) combines traditional and online education for higher educational purposes. Theories like the Technology Acceptance Model and Unified Theory of Acceptance and Use of Technology have been used by researchers to explore BL adoption. BL practices involve both the face-to-face and online activities, resources, assessment, feedback for students as well as technology, pedagogy and content knowledge of lecturers (Bokolo Anthony Jnr et al., 2020). Types of frameworks/models that formed the theoretical foundations of BL Adapted from Ramalingam et al. (2021) The Revised Community of Inquiry framework is socio-constructivist in nature, and it emphasises the pedagogical principle that BL learning occurs via teamwork and interaction; With this in mind, Activity Theory serves as a cross-disciplinary approach to the study of social, pedagogical and technological factors of BL (Vásquez et al., 2020). According to Graham (2021), BL could be defined in relation to media, method and modality, the last one being a consideration from Graham himself which supports to include at least two types of pedagogical as well as physical dimension of the blend.

Benefits of AI in Education

AI offers several benefits for educators and learners:

- Personalization: enables tailored learning experiences by analyzing student performance and preferences.
- Efficiency: reduces administrative tasks for teachers, such as grading and attendance tracking.
- Engagement: Encourages interactive learning through gamification and simulations.

In education AI has various advantages such as personalized learning experiences, more efficient teaching, and improved student engagement. Such systems can also boost administration, enable adaptive learning environments or provide intelligent tutoring using AI-powered algorithms. From practical perspectives, virtual classrooms and smart campuses contribute to a more flexible and sustainable education (Younas et al. Additionally, AI makes assessment and feedback processes more precise and efficient. Nevertheless, that may pose problems regarding fairness/ethical issues and cheating (Younas et al., 2023; Ayala-Pazmiño, 2023).

Challenges of AI Integration

Despite the obstacles these challenges present, their potential utility has kept people on the quest to overcome them with better planning, partnerships between researchers and physicians, and ongoing research and development focused on resolving technical and ethical uncertainties.

While AI implementation has its positives in various fields, it also brings lots of challenges. While responsiveness such as personalization and innovation improve technical literacy, it also raises equitable access and ethical concerns regarding the classroom experience (Familoni & Onyebuchi, 2024). Although cost and technical requirements are still the main impediments to AI adoption among small and medium enterprises, prospects are changing as technology becomes easier accessible (Govori & Sejdija, 2023). Data quality, privacy, bias and interpretability challenges are key issues in AI adoption within industries (Sundar et al., 2024). AI integration brings the advantages of augmenting human resources with greater efficiency; however, there are ethical dilemmas associated with this trend as well as concerns regarding biases in talent acquisition and employee development (Mohana & Revathi, 2024).

Benefits of ChatGPT in the Classroom

ChatGPT, an artificial intelligence (AI) tool developed by Open AI is a big step toward making the education and research benefits of this technology available. It can simplify the experiences of teaching and learning, as it will help prepare for classes, create exams and instructional materials (Domenech, 2023). ChatGPT encourages individualized and interactive learning, creates formative assessments, and offers continual feedback. Other significant weaknesses include the potential for privacy infringement, as well as biased data training (Baidoo-Anu & Owusu Ansah, 2023). It can help with article outlines and efficient brainstorming ideas in research. Nonetheless, there are challenges in academic integrity violations, long-term assessment of learning process and potential misinformation generation (Sok & Heng, 2023).

METHODOLOGY

Research Design

This study adopted a descriptive quantitative research design.

Participants

The sampling comprised faculty members from the Department of English and Literature at the University of Bisha. The department was chosen for its relevance to the study's focus on English language and literature education, a field where ChatGPT's language-processing capabilities can be effectively applied.

Sample Size

A total of 76 teachers participated in the study, representing the entire teaching staff of the department.

Survey Instrument

A structured questionnaire consisting of 20 items was developed to measure teachers' perspectives on integrating ChatGPT into blended learning. The questionnaire was divided into four thematic sections:

Demographic Information (5 items): Captured participants' gender, age, teaching experience, academic qualifications, and familiarity with AI tools.

Perceived Benefits of ChatGPT (5 items): Focused on the advantages of using ChatGPT in lesson planning, content delivery, and student engagement.

Challenges of ChatGPT Integration (5 items): Addressed potential barriers, such as technical issues, ethical concerns, and cultural relevance.

Overall Effectiveness and Future Potential (5 items): Assessed participants' perceptions of ChatGPT's overall impact on teaching effectiveness and its potential for long-term adoption.

Survey Format

The survey items were presented in a Likert scale format, ranging from 1 (strongly disagree) to 5 (strongly agree).

Data Collection

Procedure

Data collection took place in March 2024. Faculty members were invited to participate through a google form link, which included a brief introduction to the study and informed consent details.

Data Analysis

Data collected from the survey were analyzed using descriptive and inferential statistical methods by SPSS (Version 0.26). The analysis process was carried out in three stages:

Statistical Analysis

Descriptive Statistics: Frequency distributions, means, and standard deviations were calculated for each survey item to summarize participants' responses.

RESULTS

This section presents the findings of the survey conducted among 76 teachers in the Department of English and Literature at the University of Bisha, Saudi Arabia. The data are analyzed based on 20 survey items grouped into four thematic sections: Demographic Information, Perceived Benefits of ChatGPT, Challenges of ChatGPT Integration, and Overall Effectiveness and Future Potential. The results are displayed in tables and interpreted in detail.

Demographic Information

Table 1: The demographic characteristics of the participants

Variables	Category	Frequency (N)	Percentage (%)
Gender	Male	46	60.5%
	Female	30	39.5%
Teaching Experience	Less than 5 years	10	13.2%
	5–10 years	28	36.8%
	11–20 years	24	31.6%
	More than 20 years	14	18.4%
Academic Qualification	Master's	48	63.2%

	Ph.D.	28	36.8%
Familiarity with AI Tools	Moderate	38	50.0%
	High	16	21.1%

As shown in the table above, the main demographic information of the participants can be explained as follows:

- Most participants were male (60.5%), and most had teaching experience ranging from 5 to 20 years (68.4% combined).
- Over half (63.2%) held master's degrees, while the rest had Ph.D.'s.
- Familiarity with AI tools was moderate for most participants (50%), indicating a balanced exposure to technology.

Perceived Benefits of ChatGPT

The following table (Table 2) shows the participants' views on the benefits of ChatGPT in blended learning.

Table 2: Descriptive analysis of views on the benefits of ChatGPT in blended learning

Item	Mean	Standard Deviation	Agreement Level (%)
ChatGPT enhances lesson planning efficiency	4.2	0.7	85.5%
ChatGPT improves student engagement	4.0	0.8	80.3%
ChatGPT supports personalized learning	4.3	0.6	88.2%
ChatGPT facilitates creative assignments	4.1	0.7	82.9%
ChatGPT reduces teacher workload	4.4	0.5	90.8%

As shown in the above table (Table 2), the main findings are explained in the following points:

- Teachers overwhelmingly agreed that ChatGPT supports personalized learning (88.2%) and reduces workload (90.8%).
- The highest mean score (4.4) was for ChatGPT's ability to reduce teacher workload, highlighting its potential for automating repetitive tasks.
- Slightly lower agreement was observed for improving student engagement (80.3%), suggesting a need for further exploration of its interactive capabilities.

Challenges of ChatGPT Integration

The following table (Table 2) addresses the barriers to adopting ChatGPT in blended learning.

Table 3: Descriptive analysis of the barriers to adopting ChatGPT in blended learning

Item	Mean	Standard Deviation	Agreement Level (%)
ChatGPT requires significant teacher training	4.1	0.8	81.6%
ChatGPT raises ethical concerns (e.g., plagiarism)	4.3	0.7	86.8%
ChatGPT-generated content may lack cultural relevance for students	3.8	0.9	76.3%
The technological infrastructure required to use ChatGPT is insufficient	3.9	0.8	78.9%
Over-reliance on ChatGPT may reduce students' critical thinking abilities	4.2	0.7	84.2%

As shown in Table 3, the main findings of the participants' views on the barriers to adopting ChatGPT in blended learning are shown as follows:

- Ethical concerns, such as plagiarism (86.8%), and over-reliance on AI (84.2%) emerged as significant challenges.
- Technological infrastructure and cultural relevance received slightly lower agreement levels (78.9% and 76.3%, respectively), reflecting localized issues.

Overall Effectiveness and Future Potential

This section evaluates perceptions of ChatGPT's overall impact and potential for long-term adoption.

Table 4: Descriptive analysis of the participants' perceptions of ChatGPT overall impact and potential for long-term adoption

Item	Mean	Standard Deviation	Agreement Level (%)
ChatGPT enhances overall teaching effectiveness	4.2	0.7	85.5%
ChatGPT is suitable for creative writing and literary analysis	4.3	0.6	88.2%
ChatGPT improves assessment and feedback efficiency	4.4	0.5	90.8%
ChatGPT encourages adoption of innovative pedagogy	4.1	0.8	82.9%
ChatGPT has the potential for long-term integration in teaching	4.5	0.4	92.1%

Table 4 above shows the main findings of the participants' perceptions of ChatGPT overall impact and potential for long-term adoption, that can be explained in the following points:

- The highest level of agreement (92.1%) was for ChatGPT's potential for long-term integration, indicating optimism among teachers.
- ChatGPT's role in improving assessment efficiency (90.8%) was also highly rated, reinforcing its utility in automating grading and feedback tasks.
- Teachers were slightly less confident about its role in encouraging innovative pedagogy (82.9%).
- To summarize the findings of this study, it noticed that teachers viewed ChatGPT as highly beneficial in improving efficiency, engagement, and personalization in blended learning. It is also noticed that ethical concerns, over-reliance on AI, and technological infrastructure were notable barriers to integration. Furthermore, the tool's long-term potential and effectiveness in creative writing and assessments were widely acknowledged.
- In addition, there are general trends in the findings, they can be summarized as follows:
- Participants with greater familiarity with AI tools expressed higher agreement levels for benefits and lower concerns about challenges.
- Teachers with over with more teaching experience were more cautious about ChatGPT's potential to reduce critical thinking skills, highlighting generational differences in AI adoption.

DISCUSSION

This study investigates the implementation of ChatGPT in blended learning in the University of Bisha Department of English and Literature. The findings show that teachers recognize potential advantages of ChatGPT such as increased efficiency, personalized learning, and enhanced student engagement but experience challenges regarding ethical issues, cultural relevance, and teacher training. The results corroborate Younas et al., (2023); Ayala-Pazmiño, etc.

These issues notwithstanding, the potential for ChatGPT to serve teaching and learning in the long term remains robust. This is in line with several other studies such as Famoloni & Onyebuchi, (2024),

Govori & Sejdija, (2023), Sundar et al. and Mohana & Revathi (2024) And to unlock this potential, institutions need to support faculty training, build ethical frameworks and localize AI tools for their specific student populations.

RECOMMENDATIONS AND PEDAGOGICAL IMPLICATIONS

The results imply a number of important practice implications. Universities must develop holistic professional development programmes to help faculty effectively use AI tools such as ChatGPT to support teaching and learning given that the teachers themselves expressed concerns over the further necessity for training. Bills have been introduced to ban AI at schools, but educational institutions should establish clear ethical guidelines for navigating concerns about plagiarism and over-reliance on AI. Instead, teachers need training on how to use these AI tools in ways that maintain the integrity of their assessments and encourage critical thought. ChatGPT and most of the AI tools need much more localization to answer the local needs with regional content. Such a tool is likely to work much better if the content caters to linguistic and cultural context on the Saudi students. At the same time, teachers will need to come together to share best practices for blending AI into their teaching approaches without compromising good old-fashioned pedagogy.

LIMITATIONS AND ETHICAL CONSIDERATIONS

Despite its advantages, ChatGPT has certain limitations:

- Cultural Sensitivity: AI may generate content that is culturally or contextually inappropriate if not carefully monitored.

- Plagiarism Risks: Students might misuse the tool to produce unoriginal work.

- Dependence on AI: Over-reliance on ChatGPT could hinder students' independent critical thinking skills.

Ethical concerns, including ensuring transparency in AI-generated content and maintaining academic integrity, require careful management by educators and institutions.

ChatGPT, a powerful language model, has potential in many sectors such as healthcare, education and content creation. To enable responsible deployment. Future advancements will include more conversation and personalization, especially using it in healthcare (Elhag et al., 2023; Dave et al., 2023). Nonetheless, it is limited and there are ethical issues related to its implementation. These consist of problems of precision, independence of judgement and fall into pitfalls of sociological labelling (Ngo Cong-Lem et al., 2024; Elhag et al., 2023). Ethical concerns include privacy infringement, bias reinforcement and misinformation generation. However, ChatGPT also offers educational help, streamlining workflow and its usefulness in content development (Ngo Cong-Lem et al., 2024), nonetheless these challenges. These needs must be addressed along multiple governance paths (Shangying Hua et al., 2023).

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APPENDIX

Survey

The survey consisted of 20 items designed to explore the attitudes of teachers towards the use of ChatGPT in blended learning. It was divided into four sections: Demographic Information, Perceived Benefits of ChatGPT, Challenges of ChatGPT Integration, and Overall Effectiveness and Future Potential. Below is the full list of survey items:

Section 1: Demographic Information
1. Gender
2. Age
3. Teaching Experience
4. Academic Qualification
5. Familiarity with AI Tools

Section 2: Perceived Benefits of ChatGPT
6. ChatGPT enhances lesson planning efficiency.
7. ChatGPT improves student engagement.
8. ChatGPT supports personalized learning for students.
9. ChatGPT facilitates the creation of creative assignments.
10. ChatGPT reduces teacher workload.

Section 3: Challenges of ChatGPT Integration
11. ChatGPT requires significant teacher training to use effectively.
12. ChatGPT raises ethical concerns (e.g., plagiarism).
13. ChatGPT-generated content may lack cultural relevance for students.
14. The technological infrastructure required to use ChatGPT is insufficient.
15. Over-reliance on ChatGPT may reduce students' critical thinking abilities.

Section 4: Overall Effectiveness and Future Potential
16. ChatGPT enhances overall teaching effectiveness.
17. ChatGPT is suitable for creative writing and literary analysis.

18. ChatGPT improves assessment and feedback efficiency.
19. ChatGPT encourages the adoption of innovative teaching pedagogy.
20. ChatGPT has the potential for long-term integration in teaching.

Each item was rated on a 5-point Likert scale:

1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree