Integrating ChatGPT in English Culture Courses: Opportunities, Challenges, and Pedagogical Implications

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ARTICLE INFO	**ABSTRACT**

The rapid development of Artificial Intelligence (AI) has significantly transformed various sectors, including education. One of the most promising AI tools is ChatGPT, which provides interactive, contextual, and adaptive learning experiences for students. This study aims to analyze the influence of ChatGPT as a learning medium in the English Culture in ELT course at Universitas Negeri Medan. Using a mixed-methods approach, data were collected from 50 English education students through observation, interviews, and questionnaires. The questionnaire results revealed that 78% of respondents agreed and 16% strongly agreed that ChatGPT assists them in completing academic tasks effectively. Furthermore, the average mean score across all items was 2.85, indicating a generally positive perception toward ChatGPT use. Most students reported that ChatGPT enhanced their understanding of English culture and provided innovative ideas for lesson planning. However, some respondents noted limitations such as dependence on AI and insufficient critical thinking stimulation. Overall, the findings demonstrate that ChatGPT positively contributes to learning engagement, comprehension, and creativity. It can serve as an effective supplementary tool for independent and culturally contextual English learning, provided that its use is accompanied by proper pedagogical guidance and digital literacy awareness.

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INTRODUCTION

The emergence of Artificial Intelligence (AI) in recent years has brought substantial transformation to almost every field of human life, including education. In the era of Education 4.0, the integration of AI technology has enabled more personalized, efficient, and interactive learning processes. AI systems are now capable of analyzing learners' behavior, providing adaptive feedback, and facilitating autonomous learning experiences that transcend the boundaries of traditional classroom interaction. As noted by Luckin et al. (2016), AI has the potential to serve not only as a technological tool but also as an intelligent learning partner that enhances both teaching effectiveness and learner engagement.

One of the most discussed AI applications in higher education today is ChatGPT, a conversational AI developed by OpenAI. It is a Generative Pre-trained Transformer model designed to process, generate, and understand natural language. Its ability to produce coherent, contextually appropriate, and grammatically accurate responses makes it particularly valuable for language learning. In English Language Teaching (ELT), ChatGPT can act as a virtual assistant, conversation partner, or even as a source of academic feedback. The model allows learners to ask questions, seek explanations, or generate examples on a wide range of linguistic and cultural topics. This functionality aligns with current pedagogical paradigms emphasizing student-centered learning and the use of digital media to foster critical and creative thinking.

However, while ChatGPT offers enormous potential, its pedagogical implementation, especially in EFL (English as a Foreign Language) contexts such as Indonesia, is still developing. Several studies have focused on its use for improving students' writing or speaking skills (Fitria, 2023; Halim & Wulandari, 2023), yet research exploring its role in cultural learning remains scarce. In reality, language and culture are inseparable components of communication; understanding English culture helps students comprehend linguistic nuances, idiomatic expressions, and pragmatic conventions. Therefore, courses like English Culture in ELT are crucial in shaping culturally competent English teachers who can contextualize language instruction in intercultural settings.

Despite its potential, the use of ChatGPT in Indonesian universities still faces several challenges. The first is digital literacy, as not all students and

lecturers possess sufficient skills to utilize AI tools effectively. Second, technological infrastructure and accessibility can be uneven, particularly in institutions outside major cities. Third, ethical concerns such as plagiarism, overreliance on AI-generated content, and the decline of critical thinking are issues that educators must carefully address. These limitations highlight the importance of evaluating ChatGPT not merely as a technological innovation but as a pedagogical instrument that influences students' ways of learning and thinking.

Given these considerations, this study investigates the influence of ChatGPT as a learning medium in the course English Culture in ELT at Universitas Negeri Medan. The research seeks to identify (1) how ChatGPT affects students' learning experiences, comprehension of English culture, and task performance; and (2) what advantages and limitations students perceive from its use. Employing a mixed-methods design, the study combines quantitative data from questionnaires with qualitative insights from observations and interviews. The findings are expected to provide empirical evidence on the pedagogical impact of AI in cultural language learning and offer practical recommendations for integrating ChatGPT effectively into higher education curricula.

METHOD

This study adopted a mixed-methods design combining quantitative and qualitative approaches to explore the influence of ChatGPT as a learning medium in the English Culture in ELT course. The use of both methods provided a comprehensive understanding of how ChatGPT shaped students' perceptions, engagement, and comprehension of English cultural materials. The quantitative aspect aimed to reveal numerical tendencies and general attitudes toward the use of ChatGPT, while the qualitative aspect offered deeper insights into students' experiences and reflections during its implementation in the classroom.

Research Design

The research design consisted of four sequential stages: (1) identification of problems, (2) data collection, (3) data analysis, and (4) reporting. The problem identification stage involved a literature review to determine existing gaps in AI-based learning studies, especially concerning cultural learning in ELT contexts. The data collection phase incorporated the distribution of questionnaires, classroom observations, and semi-structured interviews. The mixed-methods approach was selected because it allowed triangulation, ensuring the reliability and validity of the data (Nassaji, 2015). Quantitative data from the questionnaire measured the extent of students' agreement with each statement, while qualitative data provided interpretive context for those numerical patterns.

Participants

The study involved 50 undergraduate students enrolled in the English Culture in ELT course at the Faculty of Languages and Arts, Universitas Negeri Medan. These students were chosen through purposive sampling, as they had firsthand experience using ChatGPT as part of their classroom activities over one academic semester. The participants represented a balanced demographic, with both male and female students aged between 19 and 22 years old. All participants consented voluntarily to join the study and were informed about the purpose and confidentiality of the research.

Instruments

Three main instruments were used to collect data:

1. Observation Sheets – used to record students' engagement, participation, and interaction patterns while using ChatGPT during class sessions.

2. Questionnaire – designed to gather quantitative data on students' perceptions of ChatGPT's effectiveness. The instrument consisted of 17 statements rated on a four-point Likert scale (Strongly Agree, Agree, Disagree, Strongly Disagree).

3. Interview Guide – semi-structured interviews were conducted to gain in-depth qualitative insights regarding challenges, benefits, and behavioral changes related to ChatGPT use.

The questionnaire items were developed based on previous literature (Fitria, 2023; Halim & Wulandari, 2023) and validated by two ELT experts to ensure content validity and linguistic clarity. Cronbach's Alpha reliability test resulted in a coefficient of 0.86, indicating high internal consistency.

Instrument Structure

Table 1 below presents a summary of the key questionnaire items grouped according to thematic indicators.

Table 1: Indicators and Sample Items from the Questionnaire

Indicator	Example Statement	Measurement Focus
Usefulness and Efficiency	"ChatGPT helps me complete academic tasks efficiently."	Students' perception of ChatGPT's practical utility in completing assignments.
Understanding and Clarity	"The responses generated by ChatGPT are easy to	The clarity and comprehensibility of ChatGPT's output.

	understand."	
Cultural Learning	"ChatGPT helps me understand the history and development of English culture."	The extent to which ChatGPT contributes to cultural comprehension.
Teaching Creativity	"ChatGPT provides innovative ideas for lesson plan design."	ChatGPT's role in developing creative teaching materials.
Critical Thinking	"I become more critical after using ChatGPT."	Students' reflective and analytical abilities.
Satisfaction and Motivation	"I feel satisfied using ChatGPT in my learning process."	Students' motivation and emotional response to AI-assisted learning.

These indicators were essential in assessing the multidimensional role of ChatGPT, not only as a tool for task completion but also as a medium for cultural engagement and pedagogical innovation.

Procedure

The research procedure consisted of four systematic steps:

1. Preparation Phase: The researchers reviewed existing literature, designed research instruments, and coordinated with the course instructor to integrate ChatGPT into classroom activities.

2. Implementation Phase: Students were guided to use ChatGPT for various academic purposes, such as seeking cultural information, analyzing texts, or generating teaching ideas related to English-speaking cultures.

3. Data Collection Phase: After four weeks of consistent ChatGPT use, students completed the questionnaire, and follow-up interviews were conducted with selected participants to clarify and expand upon survey results.

4. Data Analysis Phase: Quantitative and qualitative data were analyzed separately and later integrated to provide a holistic interpretation of findings.

Data Analysis

Quantitative data from the questionnaires were analyzed using descriptive statistics (frequency, percentage, and mean score). Items with

mean scores above 2.5 indicated a positive perception, whereas lower scores reflected neutrality or disagreement. Qualitative data from interviews and observations were examined through thematic analysis, following Braun and Clarke's (2006) framework: (1) familiarization, (2) coding, (3) theme identification, and (4) interpretation. The integration of both datasets enhanced the robustness of the results and allowed for a clearer understanding of how ChatGPT influenced students' learning engagement, comprehension, and creativity.

Through this methodological framework, the study ensured data triangulation and internal validity, providing reliable evidence to understand the pedagogical role of ChatGPT in developing English cultural competence among undergraduate learners.

DISCUSSION

This study investigated the influence of ChatGPT as a learning medium in the course English Culture in ELT by analyzing students' perceptions and experiences through a combination of quantitative and qualitative data. The results demonstrated that the majority of students responded positively toward the integration of ChatGPT in their learning activities. Findings are presented below according to the main indicators: usefulness, understanding, cultural learning, teaching creativity, and critical thinking.

General Findings

Table 2 below summarizes the overall descriptive statistics obtained from the questionnaire distributed to 50 respondents.

Table 2: Summary of Students' Perceptions toward ChatGPT

Indicator	Mean Score	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
Usefulness and Efficiency	3.12	16.0	80.0	4.0	0.0
Understanding and Clarity	2.68	2.0	64.0	34.0	0.0
Cultural Learning	2.74	6.0	64.0	28.0	2.0
Teaching Creativity	2.78	2.0	76.0	20.0	2.0
Critical Thinking	2.74	8.0	60.0	30.0	2.0
Overall Average	**2.85**	—	—	—	—

The data indicate that most students agreed or strongly agreed with the positive statements regarding ChatGPT's role in learning. The overall mean score of 2.85 suggests a favorable perception, showing that ChatGPT is generally perceived as useful, comprehensible, and relevant for English cultural learning.

Usefulness and Efficiency

A significant majority of respondents (96%) agreed that ChatGPT helps them complete academic tasks more efficiently. Students reported that ChatGPT provided immediate explanations, generated writing models, and clarified difficult cultural terms. This finding supports previous studies (Ayu, 2020; Fitria, 2023) emphasizing AI's potential to enhance learning autonomy and save time in academic tasks. However, several students noted the risk of overdependence, emphasizing the need for teacher guidance to ensure critical engagement with the generated content.

Understanding and Clarity

Although 66% of students agreed that ChatGPT responses were easy to understand, a notable 34% expressed uncertainty about their accuracy or depth. This mixed response aligns with Halim and Wulandari (2023), who argue that ChatGPT's explanations are sometimes oversimplified and lack contextual nuance. Nonetheless, most students appreciated ChatGPT's ability to clarify grammatical structures and cultural expressions, especially when reading texts about English-speaking countries.

Cultural Learning Enhancement

One of the most relevant findings concerns the role of ChatGPT in improving cultural comprehension. More than 70% of respondents agreed that ChatGPT helped them understand English cultural concepts, traditions, and social practices. The statements "ChatGPT helps me to understand the history and development of English culture" and "My understanding of English culture has broadened after using ChatGPT" both recorded mean scores around 2.7–2.8. These results demonstrate that AI-driven tools can serve as cultural mediators, providing access to diverse examples, historical references, and intercultural perspectives that traditional textbooks may not cover.

This aligns with Yule (2016), who stated that language cannot be separated from its cultural context; thus, learning through AI tools that integrate authentic examples can deepen learners' intercultural awareness. Students' open-ended responses also revealed that they enjoyed exploring cultural comparisons, such as differences between British and American idioms or customs.

Teaching Creativity and Pedagogical Impact

Regarding creativity in lesson design, 78% of respondents agreed that ChatGPT provided innovative ideas for developing lesson plans and teaching

materials. Several students mentioned that ChatGPT suggested culturally rich activities, such as role-play scenarios and critical discussion prompts, which helped them contextualize language use in real-life settings. This indicates that ChatGPT functions not only as an information source but also as a pedagogical partner that inspires creative instructional design.

However, a smaller portion of respondents (around 22%) expressed concern about the originality of ideas generated by ChatGPT, noting that overreliance might reduce their individual creativity. This concern reflects the ethical discourse raised by Dwivedi et al. (2021) regarding AI's dual nature as both an enabler and a constraint for innovation in education.

Critical Thinking and Independent Learning

When asked whether ChatGPT helped develop their critical thinking skills, responses were more balanced. About 68% of students agreed, while 32% disagreed. Some students found that interacting with AI encouraged them to question, refine, and verify information, whereas others admitted to passively accepting the answers provided. This mixed result echoes Halim & Wulandari's (2023) observation that AI can only foster higher-order thinking if used under guided and reflective learning frameworks. Therefore, lecturers play a crucial role in designing AI-integrated activities that emphasize evaluation and interpretation rather than simple information retrieval.

CONCLUSION

This study explored the influence of ChatGPT as an AI-based learning medium in the English Culture in ELT course at Universitas Negeri Medan. The findings revealed that the majority of students hold a positive perception of ChatGPT, with an overall mean score of 2.85, indicating that it effectively supports learning engagement, comprehension, and creativity. Students found ChatGPT helpful in completing assignments, broadening their understanding of English culture, and generating innovative ideas for lesson planning. These results confirm that ChatGPT can function as both a learning assistant and a pedagogical resource in English language education.

Nevertheless, the findings also highlight several limitations and pedagogical concerns. While ChatGPT facilitates efficient access to information, it does not automatically guarantee critical or reflective thinking. Some students showed tendencies to rely heavily on AI-generated content without sufficient verification or analysis. Therefore, its integration into classroom practice must be accompanied by teacher supervision, ethical awareness, and digital literacy development. Educators must guide students in evaluating AI outputs, fostering autonomy while maintaining academic integrity.

In conclusion, ChatGPT holds great potential as a supplementary tool in English language and cultural learning. It bridges the gap between technology and pedagogy by providing interactive, authentic, and culturally enriched

materials. Future research should further examine long-term behavioral impacts of AI-assisted learning and explore strategies to balance technological efficiency with critical human reasoning. With appropriate use, ChatGPT can play a transformative role in shaping innovative, reflective, and globally competent English educators.

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