EXPLORING AI-BASED TECHNOLOGIES TO IMPROVE STUDENTS' INSPIRATION IN STUDYING INTERCULTURAL COMMUNICATION - ONE OF THE COMPULSORY SUBJECTS AT THE FACULTY OF ENGLISH - HANOI OPEN UNIVERSITY

Le Thi Vy, Le Phuong Thao*, Le Thi Anh Tuyet*, Le Quynh Mai*.*
Email: levy_hou@hou.edu.vn

Abstract: These days, chatbots play a crucial role in students' lives and are utilized in various settings. As a result, we are interested in integrating these tools into the teaching process to use their advantages, help and mentor students as they try to avoid problems like plagiarism, and primarily increase students' motivation. The qualitative and quantitative analysis methods have been applied, together with the documents, the result of research works of previous scholars, and results from the questionnaires obtained from 100 students (course 2021-2025) who have studied the subject of Intercultural Communication at the Faculty of English for the academic year 2022-2023. The purpose of this research is to investigate whether using an AI-based chatbot agent as a teaching tool makes students more motivated or not, evaluate the advantages and disadvantages of these conversational chatbots, show how vital chatbots may be for raising student motivation, and improve teaching techniques in the process of studying the subject of Intercultural Communication.

Keywords: AI, chatbots, digital tools, student motivation.

I. Introduction

Artificial intelligence (AI) technologies have been integrated into education for several decades. The widespread application of AI in various educational settings, including curriculum development, online tutoring, and teacher training, has increased exponentially in recent years. The increasing use of AI technologies in schools raises significant concerns and issues. AI's long-term impact on teaching roles and its practical implementation concerns researchers and educators (Zhang, 2023). ChatGPT (generative pre-prepared transformer), created by OpenAI in late 2022, is a high-level simulated intelligence innovation that has acquired impressive consideration.

Understanding the customs, traditions, people's lifestyle, and cultural features... of the countries that speak English as an official language is an essential requirement for general English-majored students and those at the Faculty of English,

---

* Hanoi Open University

Hanoi Open University. In recent years, the development of information technology has brought several advantages to teachers in preparing lessons and lectures, as well as students in the learning and research process. The teaching and learning of *Intercultural Communication* for students of the Faculty of English at Hanoi Open University also received positive impacts from these changes.

This paper focuses on the effect of using chatbots as AI conversational partners on encouraging the motivation and engagement of students. This paper plans to look at the job of a chatbot as a device to upgrade students' inspiration and involvement. Some of the best ways to boost students' motivation, such as setting clear goals, personalizing learning, using artificial intelligence, and providing positive reinforcement, will be stated. The spotlight will then, at that point, be on the utilization of artificial intelligence, where we feature the different computerized apparatuses that can improve students' inspiration and engagement. The attention will be on AI-based chatbots and the proposal to include them in our learning activities. The research describes the experiment carried out on 100 English majors at Hanoi Open University. Then, the results are presented and discussed to find out the benefits, challenges, and limits of the application. The last part, the most important, offers recommendations for *improving students' inspiration in studying Intercultural Communication* - one of the compulsory subjects at the Faculty of English - Hanoi Open University.

II. Literature Review

2.1. Effective methods to enhance students' motivation

It is essential to motivate students to achieve learning outcomes successfully. Motivation, both intrinsic and extrinsic, is a fundamental part of thinking about students' results at all periods of their tutoring, and teachers can expect to play a pressing part in giving and engaging that motivation in their students. However, not all students are equally motivated, and it takes a lot of time and effort to have a class full of students who are enthusiastic about learning, hardworking, and strive to excel. Even the most well-intentioned and knowledgeable teachers sometimes need help keeping students on track. Therefore, whether you are a new or an experienced teacher, try applying different methods to improve your students' motivation and encourage them to work towards their goals. Wissal Neji et al. (2023) state some practical techniques to motivate students.

- Setting clear objectives

One of the best ways to boost student motivation is to set specific goals. For this to work, specific learning goals need to be set. Numerous studies, including those by Moeller et al. (2012) and Shih and Reynolds (2018), have analyzed the connection between targets and understudy inspiration in academic writing. Having clear-cut objectives might enormously increase student inspiration and learning results. As per the discoveries, students with explicit objectives were more determined and outflanked their friends. It is hugely baffling for students to finish a task or even act in class without defined goals. Students must realize what is generally anticipated of them to remain spurred to work. Toward the start of the course, it is crucial to lay out clear learning objectives, rules, and expectations of students so that everything is clear and students have goals to pursue.

- Personalizing learning

Modified learning is an enlightening technique that adjusts learning for each student's solidarity, necessities, capacities, and interests. Each student gets a learning

plan that relies upon what they know and how they learn best.

Providing students with a feeling of control is essential. Giving understudies autonomy over what happens in the study hall is one of the most excellent approaches to keeping them charmed, even while the board from the teacher is essential to keeping them convinced and on target. Giving them the decision to pick the issues they need to zero in on or the sort of errand they complete, for instance, could offer them a sensation of control and spur them to work harder. Students at different rates may acquire some skills. However, their learning plans keep them on track to meet course requirements. It has been exhibited that this strategy would build students' inspiration and interest in courses.

- Positive reinforcement

Encouraging feedback includes giving students positive input or prizes for their endeavors and accomplishments. It is the only type of inspiration that works very well as support. Indeed, even as grown-ups, we long for acknowledgment and applause, and students at whatever stage in life are no exception. Instructors can provide students with an abundance of inspiration by remunerating achievement openly, giving recognition for an unparalleled piece of handiwork, and sharing praiseworthy work.

The teacher can utilize positive rivalry to spur students to put in more effort and attempt to succeed, to encourage a well-disposed soul of the contest in your classroom, maybe through bunch games connected with the material or different open doors for students to 'flaunt' their insight or abilities.

Many students find it fun to cooperate to take care of issues, do trials, and work on projects. Social communication can get them excited about things in the classroom,

and students can persuade each other to reach a goal.

2.2. Application of AI-based technologies in the learning process

2.2.1. AI-based technologies

Simulating human intelligence using machines, particularly computer systems, is known as artificial intelligence. Explicit utilizations of simulated intelligence incorporate master frameworks, regular language handling, discourse acknowledgment, and machine vision.

Most of the time, AI systems take a lot of labeled training data, look for patterns and correlations, and use these patterns to predict future states. Consequently, a chatbot that manages events of text can figure out a workable method for making positive trades with individuals, or a picture certification contraption can figure out an intelligent method for perceiving and depicting objects in pictures by surveying many models. New, immediately further creating generative reenacted insight techniques can make text, pictures, music, and various media sensible. Artificial intelligence is gigantic because of its capacity to change how we live, work, and play. It has been genuinely utilized in business to modernize attempts made by people, including client support work, lead age, distortion region, and quality control. Artificial intelligence (AI) can outperform humans in several areas. Especially with dull, thorough errands, for example, breaking down a wide variety of authoritative records to ensure pertinent fields are filled in appropriately, Artificial intelligence systems frequently complete tasks quickly and without many errors.

2.2.2 Application of ChatGPT in Education

Grading can be done by AI, freeing up educators' time for other activities. It can assess students and adjust to their necessities, assisting them with working at

their speed. AI guides can offer extra help to students, guaranteeing they keep focused.

Chatbots are computer programs that use text or speech to mimic human conversation. They can give customized help to students, upgrade understudy commitment, and further develop learning results. A few recent studies have investigated the capability of chatbots as artificial intelligence conversational accomplices in advanced education. Essel et al. (2022) research the viability of a chatbot in offering scholarly help to college students. The study found that the chatbot successfully enhanced student engagement, reduced instructors' workload, and provided personalized assistance to students.

Thadphoothon (2020) states that the chatbot was viewed as powerful in further developing students' language abilities, with students announcing elevated degrees of commitment and fulfillment with the chatbot-helped learning approach. Kuhail et al. (2023) demonstrate that a more significant part of the chatbots worked as showing specialists, while to an extensive extent, they were filled in as companion specialists. Moreover, a larger part of the chatbots followed a foreordained conversational way. In contrast, roughly a quarter of the chatbots utilized a customized learning approach that took special care of individual students' learning necessities. In Daud et al. (2020) offered a chatbot to help students learn JAVA programming by diminishing the amount of time to find support from speakers and giving a specific solution to their concerns as opposed to an illustration of comparable code from the web. Despite the promising aftereffects of the examinations, difficulties in the reception of chatbots in advanced education still exist.

III. Research Methodology

3.1. Research background

At the English Faculty at Hanoi Open University, the subject of Cultural Communication has been taught to students in the faculty for many years. All teachers and students in the faculty have realized the close relationship between language and culture and the importance of comprehending elements of culture, customs, and traditions of the language-speaking community in learning this language.

When surveying the students' requirements for the subject to be taught effectively, Le Thi Vy et al. (2020) also found that the majority of the students said that to increase the effectiveness of studying this subject, lecturers need to combine many different teaching methods and activities to help students learn effectively, create group activities, and allow students to actively participate into the learning process, motivating and encouraging students to ask questions and discuss to understand the lesson content deeply. In addition, the teachers must guide the students in using supplementary textbooks and introduce reference materials to help students better understand or expand their understanding of the subject content. Students always want to be guided on how to self-study and self-research.

3.2. Research purpose

This article aims to evaluate the effectiveness of utilizing the chatbot in the classroom and survey the students' viewpoint of this apparatus in teaching and learning *the subject Intercultural Communication* for English majors at Hanoi Open University.

3.3. Research Participants

The experiment was conducted in the context of the *Intercultural Communication* course for upper-intermediate English majors at the Faculty of English, Hanoi Open University, comparing the effectiveness of the experimental lessons with the use of a chatbot to the efficacy of the other traditional lessons. The participants are

100 full-time students (course 2021-2025) who have completed three semesters at the Faculty of English and have been arranged in three groups. Before each lesson, they were presented with questions related to the course material. Still, they were asked to utilize the chatbot to generate answers in the experimental lessons (3 lessons in a total of 12). Following the generation of responses by the chatbot, students in the experimental lessons took part in a discussion taught by the educator's analysis of their consolidated reactions. Based on the talk, students could reformulate additional requests for the chatbot.

In addition to the statistics from the survey, the authors also had private discussions with the teachers involved in teaching the subject *Intercultural Communication*. These exchanges help the authors get more information about teaching activities, how to design lessons, interactions between lecturers and students in class, difficulties teachers face in lesson preparation and classroom management, and teachers' comments on students' learning attitudes.

3.4. Research scope

The article *explores I-based technologies to enhance students' motivation to study Intercultural Communication* at the Faculty of English, Hanoi Open University. It uses the survey results from 100 second-year full-time and second-degree students of the Faculty of English - Hanoi Open University.

3.5. Research tasks

The article presents two research tasks that are 1) surveying the situation of applying Chatbot technologies in studying Intercultural Communication and 2) exploring AI-based technologies to improve students' inspiration in studying Cultural Communication for students of the Faculty of English, Hanoi Open University.

3.6. Research methods

The article uses quantitative and qualitative methods to conduct a systematic survey about applying Chatbot technologies in studying Cultural Communication at the Faculty of English - Hanoi Open University and to collect in-depth insights of teachers and learners in objectively evaluating materials, curricula, programs, etc., which are being used to teach this subject.

3.7. Research tools

The research is mainly based on the information obtained from students' assessment of the lessons carried out with different teaching activities and methods, including traditional methods and the technique of applying Chatbot technologies. The content of the survey questions focused on:

1. Students' attitudes towards the subject after the lessons with different teaching activities

2. Student's motivation for the lessons and the material being used for the course

3. Benefits of applying ChatGPT in learning

4. Disadvantages of using ChatGPT in learning

5. Limits and challenges of the use of ChatGPT in learning

IV. Findings and Discussion

4.1. The perception of using Chat GPT in studying the subject Intercultural Communication

The study's objective is to evaluate the adequacy of utilizing the chatbot in the classroom and study the students' point of view of this apparatus. The

overview comprised five close inquiries connected with the students' analysis, remembering its handiness for criticizing their undertakings and its effect on their general growth opportunity. Members were approached to rate their concurrence with each inquiry on a 5-point Likert scale, with 1 demonstrating solid conflict and 5 showing solid understanding. It additionally contains three open inquiries regarding the benefits and impediments of chatbots in the classroom. The research was managed on the web, and cooperation was intentional and anonymous.

The survey revealed that 94 out of 100 students agreed or strongly agreed with this statement, indicating that most students (94 percent) found the chatbot a helpful learning assistant in their course. Essentially, most understudies (92%) announced that the chatbot gave supportive input on their errands. Furthermore, 88% of the students questioned felt that chatbots had an excellent effect on their general growth opportunities. These outcomes propose that using chatbots as a learning right hand can impact understudies' growth opportunities.

The students' reactions to the inquiry in the review about the advantages of working with a Chatbot were more specific than the reactions to the investigation regarding the disadvantages. The most widely recognized benefits referenced were rate and efficiency (96%). This suggests that users value ChatBots' ability to solve problems quickly and effectively. Besides, the respondents also mention the ease of search (76%), correction of mistakes and improvement of work (84%), constant interaction with the learners (80%), diverse specification (82%), relevant information (70%), instant response (82%) which means students can get the answers at any time during the day. Subsequently, it may

be well guaranteed that using artificial intelligence as a procedure for rousing understudies is a thrilling and quickly creating area of examination in training, with the possibility to give customized growth opportunities that can upgrade inspiration, involvement, and learning results.

Responding to the drawbacks of using ChatGPT in learning, the students state the loss of problem analysis and problem-solving skills (88%) when the abilities and decisive reasoning expected for successful critical thinking are replaced by the ChatBot. The users need more emotion (76%), which could make the experience less personal and engaging for users and make them lazy to think (68%). They also face the risk of errors (70%) when the ChatBot's learning degree may need to be revised, possibly prompting blunders or erroneous reactions. Besides, the students wonder if ChatGPT can produce inaccurate or false factual references (56%) and if ChatGPT is unable to examine the quality and reliability of sources (60%). Several students even worried about being redundant when AI will replace many jobs worldwide (72%).

The students are also concerned about some limits and challenges of the use of ChatGPT in learning, such as Lack of Emotional Intelligence (68%), Technical Issues (70%), Maintenance and Updating (76%) …

Chatbots can be a helpful teaching tool in the classroom, but it's essential to understand their limitations and use them correctly to make learning more enjoyable for students.

4.2. Improving the students' motivation by exploring AI-based technologies - Chat GPT

The application of AI as a technique to motivate students is a thrilling and

quickly creating area of exploration in training, with the possibility to give customized growth opportunities that can upgrade inspiration, commitment, and learning results.

Even though students found different issues involving ChatGPT in their examinations, all said they would keep on involving ChatGPT as a help device. They made a few proposals to beat boundaries and further develop the productivity of this instrument. They concede that whenever utilized carefully, a chatbot can upgrade students' inspiration and invigorate their responsibility in their way of learning. They advance understudy independence when they are the entertainers of their studying process. They additionally build up the experience-based instructional method and advance it through experimentation. One day, the students' capacities can arrive at the assessment of the outcomes given by the chatbot, the determination of the significant data, the level of estimation of the excellent arrangements, and the legitimization of their decisions. Chatbots are versatile since they can evaluate the ability levels of understudy profiles and their mood. Mentors, experts, tutors, and coaches for students can also benefit greatly from conversational agents. Since this kind of artificial intelligence is generally accessible and open, it can assist students and ensure they learn everything. The end drawn close to the completion of this experience is that using a chatbot updated the students' inspiration and pushed all of them to track down each novel thought. They argue with one another considering the educator's input. Every individual attempts to find the keywords and reword his inquiry before his partners to find the right solution. Even so, we have seen that the help of a teacher is fundamental, especially when managing new ideas.

Educators must give successful learning criticism to assist students with advancing precisely how they veered off-track and how they can work on sometime later. It may be difficult for students to see precisely how they have come far, particularly with subjects that are challenging for them. Tracking can prove to be helpful in the classroom, for educators, as well as for students. Instructors can involve tracking as a method for further developing understudy inspiration, permitting them to see outwardly precisely the amount they are learning and working on as the year goes on. Educators should ensure all learners can utilize their natural abilities and feel included and esteemed. It has the potential to make a huge difference and boost student motivation.

A fascinating and rapidly developing area of education research is using AI to motivate students. It can give customized growth opportunities that can help inspiration, commitment, and learning results. To effectively explore the potential of AI chatbots, Wissal Neji et al. (2023) suggest that teachers should:

• Convey the reason for utilizing chatbots to understudies, accentuating their job as valuable learning instruments.

• Choose chatbot platforms that are secure, age-appropriate, and put privacy and security first.

• Support decisive reasoning by provoking understudies to assess chatbot reactions, analyze data from different sources, and participate in free critical thinking. Monitor student progress through chatbot data, involving it as an essential developmental evaluation instrument.

• Keep a harmony between human communication and chatbot use, underlining that the last option should be enhanced instead of supplanting human help.

• Consistently assess the adequacy of chatbots in the classroom, gathering criticism from students and educators. Make necessary transformations given this criticism to streamline the growth opportunity.

Most of the students also suggested double-checking ChatGPT's responses by verifying them from trustworthy sources like scientific articles to address the information reliability issue. Instead of copying its answers, ChatGPT should be used as a reference or consulting service. This advances understudies' decisive reasoning and keeps them from weighty reliance on this artificial intelligence innovation. Then, a reasonable rule of ChatGPT's utilization ought to be created and acquainted with understudies, ensuring that they know about satisfactory and non-acceptable use of this apparatus in school.

Besides, it is advisable to create a threat-free environment. Students are much more likely to become and remain motivated to complete their work when teachers create a safe and supportive environment and affirm their belief in a student's abilities rather than outlining the consequences of not doing so. They should additionally be given liability. Educators dole out student's classroom responsibilities to fabricate a local area and provide students with inspiration. Most students will see classroom occupations as an honor instead of weight and will endeavor to guarantee that they and different students are measuring up to assumptions. It can likewise be valuable to permit students to alternate driving exercises or aiding so that each feels significant and esteemed. It prompts their enthusiasm to cooperate.

V. Conclusion

The study has shown promising outcomes for using artificial intelligence in persuading students in different fields. The application of AI for personalized learning, student performance prediction, plagiarism detection, and intelligent tutoring systems is essential. The investigation discovered that artificial intelligence could further develop learning opportunities for students by customizing content conveyance and giving versatile input. Artificial intelligence can likewise support decision-making by providing knowledge about student performance and foreseeing future achievement.

From the current situation of teaching the subject and the needs of the students mentioned above, the article has proposed applying AI technology to the process of teaching and learning this subject with the hope of enhancing the students' learning inspiration, improve the effectiveness of studying the subject, promote students' autonomy and creativity, and help teachers and students have valuable and exciting learning hours.

References:

[1]. Ngo, T.T.A. (2023). *The Perception by University Students of the Use of ChatGPT in Education.* International Journal of Emerging Technologies in Learning (iJET),

[2]. Tetzlaff, L., Schmiedek, F., & Brod, G. (2021). *Developing personalized education: A dynamic framework.* Educational Psychology Review, *33*, 863-882. https://doi.org/10.1007/s10648-020-09570-w

[3]. Thadphoothon, J. (2020). *Chatbots as conversational partners in the EFL/ESL context.*

[4]. Wissal Neji et.al. (2023). *Exploring New AI-based Technologies to Enhance*

Students' Motivation. The Informing Science Institute.

[5]. Zhai, X. (2022). *ChatGPT user experience: Implications for education.* ResearchGate.

[6]. Zhang, B. (2023). *Preparing educators and students for ChatGPT and AI technology in higher education: Benefits, limitations, strategies, and implications of ChatGPT & AI technologies*. ResearchGate. https://doi.org/10.13140/RG.2.2.32105.98404

KHAI THÁC CÔNG NGHỆ AI ĐỂ TĂNG ĐỘNG LỰC HỌC TÂP MÔN GIAO THOA VĂN HÓA CỦA SINH VIÊN KHOA TIẾNG ANH TRƯỜNG ĐẠI HỌC MỞ HÀ NỘI

Lê Thị Vy[†], Lê Phương Thảo[†], Lê Thị Ánh Tuyết[†], Lê Quỳnh Mai[†]

Tóm tắt: *Ngày nay, chatbot đóng một vai trò quan trọng trong cuộc sống của sinh viên và được sử dụng trong nhiều môi trường khác nhau. Chúng ta quan tâm đến việc tích hợp các công cụ này vào quá trình giảng dạy để tận dụng lợi thế của chúng, giúp đỡ và cố vấn cho sinh viên để tăng động lực học tập. Trong bài viết này, phương pháp phân tích định tính và định lượng đã được áp dụng cùng với các tài liệu, kết quả nghiên cứu của các học giả đi trước và kết quả từ bảng câu hỏi thu được từ 100 sinh viên (khóa 2021-2025) đã theo học bộ môn Giao thoa văn hóa tại Khoa Tiếng Anh năm học 2022-2023. Mục đích của nghiên cứu là điều tra xem việc sử dụng chatbot dựa trên AI làm công cụ giảng dạy có giúp học sinh có động lực hơn, đánh giá ưu điểm và nhược điểm của các chatbot đàm thoại này, cho thấy chatbot quan trọng như thế nào trong việc nâng cao động lực của học sinh và cải thiện kỹ thuật dạy học trong quá trình học tập môn Giao thoa văn hóa.*

Từ khóa: *AI, chatbot, công cụ số, động lực học tập.*

[†] Trường Đại học Mở Hà Nội