International Journal of Social Science and Human Research

ISSN (print): 2644-0679, ISSN (online): 2644-0695

Volume 09 Issue 03 March 2026

DOI: 10.47191/ijsshr/v9-i3-66, Impact factor- 8.361

Page No: 2273-2279

Exploring Student Engagement and Challenges with ChatGPT for Educational Purposes: The Case of St. Mary's College of Meycauayan

Michael Botis[1], Benjamin Llaneras[2]

[1]Research Coordinator -St. Mary's College of Meycauayan

[2]Jr, Management Representative-St. Mary's College of Meycauayan

ABSTRACT: This study explores student engagement and challenges with ChatGPT for educational purposes at St. Mary's College of Meycauayan. Technology integration in education has reshaped traditional learning, with Artificial Intelligence (AI) emerging as a pivotal tool, exemplified by ChatGPT. Using a descriptive research method, the study examines first-year college students' perceptions and usage patterns of ChatGPT. Analysis reveals students predominantly utilize ChatGPT for idea generation and clarification, with weekly engagement prevalent. Students generally find ChatGPT beneficial, especially for writing assistance, concept clarification, and language learning. Concerns over information reliability, potential overreliance leading to superficial understanding, and the risk of promoting a copy culture were identified. Students expressed a need for enhancements such as improved context awareness, credible references, visual aids, and multi-language support. Recommendations to optimize ChatGPT usage include parental consent for minors, responsible use guidelines, curriculum integration, and regular monitoring to ensure response accuracy. Balancing AI benefits with critical thinking and independent learning is emphasized. In conclusion, ChatGPT offers significant potential to enhance learning, but careful consideration of limitations and ethical implications is crucial. Adopting prudent policies and promoting responsible usage can leverage AI's transformative power to empower students in the digital era.

KEYWORDS: technology, artificial intelligence, technology for learning, St. Mary's College of Meycauayan

INTRODUCTION

The rise of new technologies in 21st-century education paved the way for greater convenience in the tasks that learners and educators must perform to meet academic standards. It transcends knowledge, enabling the prosperity of new developments and the cultivation of skills, competencies, and talents. Through innovation, technology rises above challenges and overcomes battles against traditional learning concepts that could otherwise weaken the advancement of future knowledge, information, and discoveries. In line with these thoughts, Haris and Al-Bataineh (2016) noted that through new technological engagements, students gained more knowledge than in traditional classroom settings. Moreover, according to the study by Raja and Nagasubramani (2018), the use of new technologies in the classroom is a key factor driving increased student learning and interaction. Thus, there was a convenient transfer of ideas, concepts, and thoughts, which made it more effective and efficient. Consequently, this was confirmed by the study by Carstens, Mallon, Bataineh, and Al-Bataineh (2021), which found that students' willingness to engage in classroom activities increases significantly with the use of new technology, thereby enriching the knowledge learned. Part of this new technology is the use of the internet. We cannot deny that internet connectivity can bring many benefits to our daily lives. It gives us instant information and wisdom about relevant facts and issues that may concern our own realities, truths, and veracities. As time goes by, this so-called internet has taken us into the world of Artificial Intelligence.

The technology behind Artificial Intelligence creates a computer system that functions like human intelligence, capable of reasoning, problem-solving, understanding language, and perception. AI can perform specific tasks and can also recognize and learn any knowledge- or cognitive-based task that a human can perform. Nowadays, artificial intelligence has several types which includes the following: Narrow - designed to perform a specific task or a narrow range of tasks; General -ability to understand, learn, and perform any intellectual task that a human being can; Machine Learning - involves the use of algorithms to enable systems to learn from data and improve their performance over time without being explicitly programmed; Deep Learning - specialized form of machine learning where artificial neural networks, inspired by the structure of the human brain, are used to learn and make decisions; Reinforcement Learning - the system learns to make decisions by maximizing cumulative rewards over time; Natural Language Processing (NLP) - involves the interaction between computers and humans using natural language, enabling machines to understand, interpret, and generate human-like text; Expert Systems - AI programs that mimic the decision-making abilities of a human expert in a specific domain; Robotics - AI is extensively used in robotics to enable machines to perform tasks autonomously

or semi-autonomously. With these types of Artificial Intelligence at hand, Baker and Smith (2019) were able to cite a good definition of this technology, and according to them, AI is "computers which perform cognitive tasks, usually associated with human minds, particularly learning and problem-solving" (p. 10). According to the study of Richter, Marín, Bondand Gouverneur (2019), it only explains that AI is not solely a discovered new technology, but it has a much broader functions like machine learning, natural language processing, data mining, neural networks, and algorithms, thus according to Verma (2018), "It makes machines smarter and more useful" because it can give solutions to complicated ideas or problems which a human person can also do the same. One common good example of this Artificial Intelligence is the so-called ChatGPT.

This technology was developed by OpenAI based on the GPT-3.5 architecture. The acronym GPT stands for "Generative Pre-trained Transformer" - it is a language model that represents a kind of AI that can produce human-like manuscripts based on the extensive amount of various data from the internet. It uses Reinforcement Learning with Human Feedback (RLHF) - a technique that trains a reinforcement learning model using human actions as feedback from evaluators or demonstrators. Based on Sánchez's (2023) analysis, ChatGPT has garnered considerable interest among students due to its enrichment of learning experiences. Because it can provide immediate responses, ChatGPT can address student needs, especially by offering substantial feedback to identify complex ideas or concepts. In this regard, this Artificial Intelligence can advocate active student participation to achieve cognitive advancement through continuous knowledge or concept acquisition. Furthermore, the study by Wang, Lund, Marengo, Pagano, Mannuru, Teel, and Pange (2023) states that diverse uses of artificial intelligence in education were explored, including personalized learning experiences, adaptive testing, predictive analytics, and chatbots. As a result, it demonstrates meaningful improvements in learning efficiency through personalized educational support for students and educators. However, it is suggested that the risks and limitations of using this device be considered to protect data privacy, address cultural differences, ensure language proficiency, and address associated ethical implications. Aside from these thoughts, Hao Yu's (2024) study found that the use of ChatGPT offers a remarkable opportunity to reform instructional strategies in education. It can accommodate students' diverse needs by providing the appropriate amount of data for learning, thereby promoting a conducive educational environment for each learner. As the educational landscape is ever-changing, dynamism in the technological era can be achieved through the efficient and effective use of artificial intelligence, which is accessible and aligned with the mandate of the digital age.

Educational technologies in the 21st century were made available to every student, educator, and school administrator to enhance the educational environment, enabling full learning, cultivation, and skills development. Nevertheless, students' technological engagement must be consistent with their use and navigation so they have greater exposure to these available tools, which can be incorporated into the curriculum design and implementation. With this, academic institutions should ensure that their learners and students are workforce-ready as they face more digital endeavors and technological opportunities in the future. By incorporating technology into the classroom, students and learners can explore various digital platforms, use productivity tools, collaborate online, and communicate effectively through digital media. A recent study by Twenge and Martin (2019) found that adolescents who are considered digital media light users have slightly higher well-being than those who are not digital media users. In fact, in a study by Jackson, Von Eye, Witt, Zhao, and Fitzgerald (2011), students with below-average reading competence improved with increased internet use. Likewise, one study by Hurwitz and Schmitt (2020) found that developing digital abilities at an early age can positively affect school performance as individuals grow older. Finally, Gottschalk (2019) found that the use of technology can promote social engagement among online media friends, which could help acquire significant digital literacy for the 21st-century labor market. As technology is introduced into the learning process, students' involvement in the learning environment will increase, allowing them to set their own learning pace (Preston, 2015). Examples of how students gained motivation through the use of educational technologies include the following: using science apps in science class, using iPads to communicate with non-verbal special education students, and using an iPad for digital notes in general education classrooms (Preston, 2015).

In this context, the study will explore student engagement with technology, specifically ChatGPT, in the school setting and how they encounter challenges while using this application within the confines of teaching and learning processes at St. Mary's College of Meycauayan.

Conceptual Framework: The model below outlines how to analyze the relationships among the study's inputs, processes, and outputs.

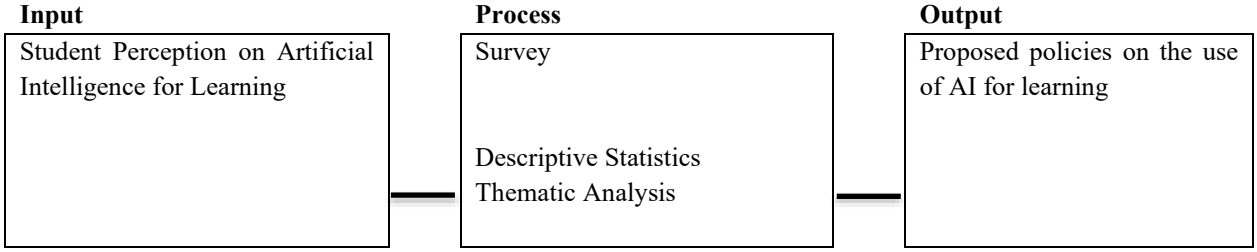


Figure 1. The Research Paradigm of the Study

Statement of the Problem:

This study sought to answer the following research questions:

1. What are the primary academic tasks for which students commonly use ChatGPT, and how frequently do they engage in these tasks?
2. How do the first-year college students rate the various features of ChatGPT, and what positive impact have they experienced with ChatGPT?
3. What policies may be proposed for St. Mary's College of Meycauayan regarding students' use of ChatGPT for educational purposes?

METHOD

Research Design

The study employed a descriptive research design to analyze students' engagement with ChatGPT for educational purposes at St. Mary's College of Meycauayan during the 2023-2024 school year. Kerlinger (1964) considered survey research a social scientific endeavor and focused on people, their vital facts, and their beliefs, opinions, attitudes, motivations, and behavior. Moreover, the qualitative research began with an inquiry process guided by philosophical assumptions about the nature of reality, how they know what is known, the inclusion of their values, the nature of their research, and their writing structures (Creswell, 2007). To better understand students' perceptions of their ChatGPT use, additional questions were added to the questionnaire. The qualitative data are expected to corroborate the quantitative data; that is, the findings from respondents' questionnaire responses are expected to be supported by the testimonies of the key informants. The convergent design is structured to strengthen the findings from the two data sets or reveal the complementarity of the quantitative and qualitative findings. Indeed, this method is intended to enhance the reliability and validity of the study's output.

Research Sampling

The respondents in the study are college students at St. Mary's College of Meycauayan for the 2023-2024 school year. A total of 52 of 55 first-year college students participated in the study.

Procedure

The researchers distributed the questionnaire to the students. This is based on the selected educational features of ChatGPT, as described on the OpenAI website. The evaluation was distributed via Microsoft Forms, where college students were asked to respond. They were guided by the researchers while they answered to ensure that they fully understood the statements. The questionnaire was the primary instrument for collecting data. The four-point Likert scale was used to analyze their responses.

Mean Numerical Rating	Verbal Interpretation
3.27-4.00	Strongly Agree (SA)
2.52-3.26	Agree (A)
1.76-2.51	Disagree (D)
1.00-1.75	Strongly Disagree (SD)

Moreover, attached questions were added for additional information from the respondents:

1. Do you have any concerns about using ChatGPT in your studies? If yes, please specify.
2. In your opinion, has using ChatGPT positively affected your learning outcomes? If yes, please briefly describe the positive impact you've experienced. If no, please explain why.
3. What improvements or features would you like to see in ChatGPT to enhance its usefulness for educational purposes?

Data Analysis

Upon consolidating the gathered data, the researchers employed frequency and percentage distributions. Descriptive statistics were applied, which include the computation of the mean and standard deviation. The researchers used Microsoft Excel to analyze the data. Thematic analysis was also employed to analyze participants' responses to the provided questions.

Ethical Consideration

The respondents were not subjected to any harm, and full consent was obtained from them, as reflected in the questionnaire's preliminary directions.

RESULTS AND DISCUSSION

Table 1: Demographic Profile

	Range/Indicators	Frequency	Percentage
Age	17-21	47	90.38%
	22-25	4	7.70%
	26-30	0	0.00%
	31 and above	1	1.92%
	Total	**52**	**100%**
Frequency in Using ChatGPT	Daily	6	11.54%
	Weekly	24	46.15%
	Monthly	3	5.77%
	Rarely	14	26.92%
	Never	5	9.62%
	Total	**52**	**100%**
Using ChatGPT for Academic Tasks	Research	8	15.38%
	Getting Ideas	15	28.85%
	Clarifications	11	21.15%
	Grammars	8	15.38%
	Homework	8	15.38%
	Others (Concept Building)	2	3.85%
	Total	**52**	**100%**
Helpfulness of ChatGPT for Academic Pursuits	Very Helpful	27	51.92%
	Somewhat Helpful	13	25.00%
	Neutral	12	23.08%
	Not Very Helpful	0	0.00%
	Not Helpful at All	0	0.00%
	Total	**52**	**100%**

Table 1 presents the demographic profile of the respondents regarding age, frequency of ChatGPT use, use of ChatGPT for academic tasks, and the helpfulness of ChatGPT for academic pursuits. It shows that the majority are in the age range of 17 to 21; they use ChatGPT either weekly or rarely; they use it to generate ideas or get clarification, and they find it very helpful for their academic endeavors.

Table 2: Responses in Terms of the Usefulness of ChatGPT in Their Studies

		Mean	Interpretation	SD
1	Conversational Ability	3.12	Agree	0.676
2	Context Awareness	3.19	Agree	0.658
3	Multilingual Capabilities	3.19	Agree	0.658
4	Source of Information	3.19	Agree	0.572
5	Task Assistance	3.23	Agree	0.757
6	Handling of Noisy Input	3.04	Agree	0.559
7	Information retrieval	3.19	Agree	0.687
8	Writing Assistance	3.37	Strongly Agree	0.715
9	Language Learning	3.27	Strongly Agree	0.689
10	Concept Clarification	3.37	Strongly Agree	0.742
	Average	**3.23**	**Agree**	**0.671**

Table 2 shows the responses regarding the usefulness of ChatGPT in their studies, with an overall mean of 3.23, indicating agreement. The students' response in terms of the mentioned features is supported by the following top three indicators; to wit: a.)writing assistance and concept clarification (M=3.37) which is indicative that the students prefer ChatGPT mainly in generating ideas, proofreading or providing suggestions for writing assignments and essays and in clarifying concepts by providing explanations and answering questions, contributing to better understanding; b.)language learning (M=3.27) and c.) task assistance

(M=3.23). Sánchez (2023) noted that ChatGPT has garnered considerable interest among students because of its ability to provide immediate responses and address student needs, especially by providing substantial feedback to identify complex ideas or concepts. It is, however, worth noting that among the features, the indicator handling of noisy input (M=3.04) was rated lowest, although the interpretation remains agreed. This indicates that the students need more features from ChatGPT to handle ambiguous input to some extent, while maintaining the flow of conversation, even with incomplete information.

Meanwhile, the following are the results for the additional questions provided:

1. Do you have any concerns about using ChatGPT in your studies? If yes, please specify.

The vast majority of students who answered this question said they have no concerns about using ChatGPT because all the information they found came from the AI application. However, some students raised concerns about the use of ChatGPT. According to them, though this AI application is helpful, some of the information presented is lacking, and it gives generic responses. Unless a particular user subscribes to the premium-based service, the application can provide specific information, data, and answers. These concerns were also raised in the study of Lo, Chung Kwan (2023). Incorrect or false information provided by this application can compromise an individual's academic integrity. Aside from this, Dempere, Modugu, Hesham, and Ramasamy (2023) noted that the use of ChatGPT poses risks to privacy and accessibility, unethical use, data collection, misinformation, technology overreliance, cognitive bias, and the replacement of human interaction. In this regard, Lo (2023) suggested that academic institutions should develop policies to protect academic integrity and prevent plagiarism.

2. In your opinion, has using ChatGPT positively affected your learning outcomes? If yes, please briefly describe the positive impact you've experienced. If no, please explain why.

The researchers were able to produce emerging themes based on the given responses of the students:

A. **CONVENIENCE:** One of the positive impacts ChatGPT has on students is its accessibility and breadth of information. It made their work easier by providing convenience for every task the students needed to accomplish. According to Dempere, Modugu, Hesham, and Ramasamy (2023), this AI application served as an educational aid, responding to every student's query, sharing comments, and having some helpful virtual dialogues.

B. **COLLABORATION:** Group collaboration is an essential part of students' learning. It allows students to work together to solve problems, to cooperate on each task, and to comprehend and analyze concepts. Because students are grouped, learning becomes more socially engaged, making them more connected to one another and enabling them to understand and construct new ideas through systematic interactions, discussions, and the sharing of thoughts with classmates. Nevertheless, dynamic group work and collaboration can be achieved if the team has useful communication and continuous exchange of ideas. In this sense, ChatGPT can play a significant role in student learning. According to the BridgeText (2023) article, ChatGPT can engage students in a more human-like manner by providing answers to questions, offering explanations, assisting in class discussions, and even offering real-time comments. The group of students completing a particular task can use ChatGPT as a virtual group member, allowing it to participate by generating ideas, providing varied assessments, and processing complex ideas.

C. **COMPREHENSION:** ChatGPT has a vast collection of data and information. With proper prompts, individuals can have the right access to their services. With this kind of process, students nowadays can make learning more fun by deeply understanding their topics, given the amount of information provided by this AI technology. Students can gain deep knowledge of their course while being more engaged in the learning process. ChatGPT served as an assistive tool to support students' studies. It can supply a generative amount of academic information, which can help in comprehending the topics of discussion in the classroom. However, students need clear, specific prompts, should evaluate the tool's responses, and use additional resources to gain a well-rounded understanding. Based on the study by Du, Teng, Chen, Ma, Wang, Gou, Li, Ma, Miao, Na, and Ye (2023), ChatGPT can recognize context in text-based conversations. By analyzing sentences and phrases, this AI tool can produce significant, consistent responses that make interactions more organic and engaging for users.

D. **CULTIVATION & IMPROVEMENT:** The use of ChatGPT enables students to accomplish difficult tasks through problem-solving, analysis, and the development of knowledge-application capacities in real-life situations. Using the AI application helps learners enhance their skills in processing, critical thinking, and reasoning by following instructions to scaffold the task process. Topsakal & Topsakal (2022) cited examples of how this AI application can improve a learner's skills. In an essay-writing task, ChatGPT can provide a well-structured essay sample, allowing the learner to immerse themselves in how this application organizes their thoughts and develops arguments. Biswas (2023) said that in Programming, ChatGPT can provide greater support in creating code, alongside thorough instructions and explanations that even educators cannot provide. Aside from this, Zhu, Sun, Luo, Li, and Wang (2023) found that assisting with follow-up questions in sustained dialog may increase critical thinking, as ChatGPT can promote and strengthen answers and respond to challenging questions. This AI application can help students engage in and advance critical thinking activities in the teaching-learning process, such as debates with chatbots and the analysis and evaluation of the application's output.

E. **COPY CULTURE:** Students tend to rely solely on ChatGPT's features to provide information because it can deliver an enormous amount of data. However, excessive use of this AI application can lead to copy-and-paste. Zhu, Sun, Luo, Li, and Wang (2023) noted that this culture of copy-and-paste may overlook inaccuracies and unfair responses from ChatGPT, an AI application, and can impede the cultivation of critical thinking and comprehension, thus slowing down learning progression.

3. What improvements or features would you like to see in ChatGPT to enhance its usefulness for educational purposes?

The following themes were identified based on the responses of the participants:

A. Providing Updated and Relevant Information: This AI application can supply responses about various topics, making it a great assistive tool for students searching for immediate and reliable data. Nonetheless, ChatGPT's thought processes are based solely on patterns that can be influenced by external sources. In this regard, this AI Application can sometimes give erroneous answers. The rate of recurrence of those incorrect answers may change depending on the specific questions, available training data, and the intricacy of the searched topic (Botpress Community, 2023). In the field of Science, Rao, A. et al. (2023) stated that "ChatGPT was about 72 percent accurate and that it was best in making a final diagnosis, where it was 77 percent accurate. It was the lowest performing in making differential diagnoses, where it was only 60 percent accurate."

B. Portraying of Images as Illustration: Visual learners would be satisfied if they could see the images about the topic that they have searched. Students learned more easily when pictures were used to illustrate the ideas being discussed. Macie Hall (2013) mentioned that teachers using illustrations in the teaching-learning process are useful for laying the foundation of knowledge, such as in discussing art history. Courses in general may take advantage of visual materials through lectures, homework, exercises, and resources. Using pictures in classroom lessons increases students' engagement with their peers. Aside from this thought, communication is enhanced by images and media. Concepts and information are communicated well through this medium, and adding illustrations to the text can boost comprehension.

C. Citing Reliable References: The credibility of text materials may add value and integrity to a certain academic writing. Reliable text materials are free from bias, backed up with pieces of evidence, and written by trustworthy authors or organizations. In this kind of writing, authors can support their claims and arguments by including credible sources; this helps ensure the information is valid and avoids plagiarism.

D. Other Language Used as Option: Since this AI Application is used to ease the difficulty in searching for relevant texts and articles, learners need to understand its content for cognitive development and progression. The majority of the text materials that can be searched through ChatGPT are translated into English. According to a study by Xiao and Zhi (2023), ChatGPT is a significant AI tool for language-related tasks. As evidence, learners manifested "critical judgment in evaluating the quality of ideas and outputs generated by ChatGPT", and this also has the capacity to change prompts to boost learning opportunities.

CONCLUSION

The researchers conclude that:

The students are mainly using ChatGPT for academic tasks, such as generating ideas and seeking clarifications. Mostly, they use ChatGPT weekly. Moreover, the students agreed with ChatGPT's features for academic purposes, particularly for writing assistance, concept clarification, and language learning. Most students have no concerns about using ChatGPT as they find it helpful for providing information. However, some express reservations, citing its tendency to offer generic responses and a lack of specific information unless users subscribe to a premium service. It also revealed that students had a positive experience with ChatGPT, as it provides easy access to vast amounts of information, fostering collaboration among students and deepening learning. While it aids problem-solving and critical thinking, overreliance may lead to shallow understanding and a tendency to copy and paste without thorough comprehension.

RECOMMENDATIONS

The researchers recommend the following policies on the students' utilization of ChatGPT for educational purposes:

1. Parental consent may be asked for students under the legal age.
2. Use ChatGPT responsibly and avoid excessive reliance on it. Usage should be moderate and aligned with academic matters.
3. ChatGPT may be used for research, obtaining ideas, seeking clarifications, refining grammar, and completing homework. Other academic tasks, such as concept building, are allowed but within acceptable reasons.
4. The school must provide training sessions or resources to help students maximize the benefits of ChatGPT for academic tasks.
5. Students encountering difficulties or having questions about using ChatGPT are encouraged to seek guidance from teachers or support staff.
6. Students are encouraged to use ChatGPT under the supervision of teachers or educational staff, especially for tasks related to Writing Assistance, Language Learning, and Concept Clarification.

7. Students are permitted to use ChatGPT for Conversational Ability and Task Assistance, with the understanding that it should supplement their own efforts rather than replace independent learning.
8. Students are advised to refrain from sharing sensitive personal information while using ChatGPT and to be aware of the platform's data security and privacy policies.
9. Regular monitoring and evaluation of ChatGPT responses will ensure the accuracy and specificity of the information provided to students.
10. Integration into educational curricula as an assistive tool to supplement traditional learning methods.

REFERENCES

1) Barker, T. (2011). An automated individual feedback and marking system: An empirical study. Electronic Journal of E-Learning, 9(1), 1–14 https://www.learntechlib.org/p/52053/.
2) Creswell, J. W. (2007). Qualitative inquiry and research design: Choosing among five approaches. Thousand Oaks, CA: Sage.
3) García Sánchez, O.V. Uso (2023). Percepción de ChatGPT en la Educación Superior. Rev. De Investig. En Tecnol. De La Inf.
4) Hurwitz LB, Schmitt KL. (2020). Can children benefit from early internet exposure? Short-and long-term links between internet use, digital skills, and academic performance. Computers Educ.
5) Gottschalk F. (2019). Impacts of Technology Use on Children: Exploring Literature on the Brain, Cognition, and Well-being. OECD Education Working Paper No. 195.
6) Jackson LA, Von Eye A, Witt EA, Zhao Y, Fitzgerald HE. (2011). A longitudinal study of the effects of Internet use and videogame playing on academic performance and the roles of gender, race, and income in these relationships. Computers Hum Behav.
7) Kerlinger, Fred N. (1964). Foundation of Behavioural Research, Second Edition, Holt, Rinehart and Winston, Inc.
8) Twenge JM, Martin GN. (2020). Gender differences in associations between digital media use and psychological wellbeing: evidence from three large datasets. J Adolesc.
9) Wang, T.; Lund, B.D.; Marengo, A.; Pagano, A.; Mannuru, N.R.; Teel, Z.A.; Pange, J. (2023). Exploring the Potential Impact of Artificial Intelligence (AI) on International Students in Higher Education: Generative AI, Chatbots, Analytics, and International Student Success. Appl. Sci.
10) Yangyu Xiao and Yuying Zhi. (2023). An Exploratory Study of EFL Learners' Use of ChatGPT for Language Learning Tasks: Experience and Perceptions; School of Humanities and Social Science, The Chinese University of Hong Kong, Shenzhen 518172, China; College of Foreign Languages, University of Shanghai for Science and Technology, Shanghai 200093, China; OpenAI. ChatGPT. https://openai.com/chatgpt.

There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (https://creativecommons.org/licenses/by-nc/4.0/), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.