

Chat GPT In Student Development: A Blessing Or A Curse?

*Athena Eunice G. Mabiassen¹, Avery Keith B. Malingan², Shaniah Faye L. Organo³, Khnyght Zhayrre
Leander A. Domatog⁴, Samantha Nicole P. Daang⁵, Cherry Ann P. Caytap⁶
Senior High School Department, Lepanto National High School, Philippines
Corresponding author: Cherry Ann P. Caytap*

Abstract

The study explored the influence of the ChatGPT AI tool on the academic development of junior high school students. Using a phenomenological approach, the researchers employed snowball and purposeful random sampling to select 20 participants. Semi-structured, one-on-one interviews were utilized in gathering the data. The findings showed that ChatGPT significantly influences the academic development of junior high school students wherein it was found to enhance critical thinking, vocabulary, and knowledge through personalized support, contributing positively to students' academic development. The tool's human-like conversational abilities provided a comfortable interaction pace and instant access to information, enhancing the learning experience. However, its use also led to pressure, addiction, decreased motivation, focus, and independence, as students mentioned the high chance of over-reliance on the tool for answers. This reliance raised concerns regarding over-dependence on the AI, which undermined their ability to think independently and engage fully in learning. Overall, it was found to be both a blessing and a curse, revealing both positive and negative influences on student development. However, the negative effects or the curse had a more significant impact on the students. Therefore, the study's findings underscore the importance of understanding ChatGPT's role in student development, highlighting the need for a balanced approach in learning.

Keywords: ChatGPT, academic development, junior high students, artificial intelligence, student engagement

INTRODUCTION

Artificial Intelligence (AI) platforms are increasingly being recognized as valuable tools in education which help students' learning experiences. Over time, technology advancements have continuously evolved globally, allowing digital tools to enable an interactive learning experience. A research by Parveen and Ramzan (2024) suggests that this technology has made educational resources more accessible, enabling students to adjust learning to their needs, engage at their own pace, and develop essential digital skills. In the Philippines, AI tools are starting to gain recognition as transformative tools in education, addressing traditional challenges like low student engagement and limited personalized learning (Asirit & Hua, 2023).

Among various platforms, ChatGPT has emerged as a popular choice, gaining significant attention from adolescent students due to its unique capabilities, such as retained

memory and personalized explanations. ChatGPT is an advanced AI language model developed by OpenAI, based on the Generative Pre-Trained Transformer (GPT) architecture, specifically GPT-3.5. It is designed for natural language processing tasks, such as text generation and conversation, enabling it to produce human-like responses. With its ability to analyze a large dataset of text, ChatGPT serves as a versatile tool in different applications, enhancing interactions between humans and machines (Ray, 2023).

The benefits of using the tool are that it improves accessibility to education, helps with homework, provides assistance for educators, personalizes learning, and helps with exam preparation (Javaid et al., 2023). However, alongside all benefits, concerns have been raised regarding the potential downsides of integrating ChatGPT into learning. It is argued that frequent use of AI-driven tools may promote laziness and over-reliance which can hinder students' development of critical thinking skills, independent thought, and impede their ability to engage with course material (Waqarul & Siddiqui, 2024).

Despite the widespread adoption of AI tools in education, there is still limited empirical evidence of their impact on student development, especially within localized high school settings. This research aimed to fill the gap by examining the relationship between the use of ChatGPT and student academic performance. Specifically, this study aims to investigate the perceived impact of the ChatGPT AI tool on the academic development of junior high school students, exploring both the positive and negative effects on their academic performance and engagement.

METHODS

Research design

The research employed a qualitative research approach utilizing a phenomenological design. This approach is focused on understanding lived experiences and subjective perceptions of individuals. A qualitative method allowed researchers to gain in-depth insights into the intricate ways in which ChatGPT affects students' learning processes, study habits, and academic outcomes. By conducting in-depth interviews with students, researchers uncovered the unique ways in which ChatGPT shapes their learning journey, mirroring qualitative frameworks used to investigate students' perceptions of AI chatbots in educational settings (Stöhr, Ou, & Malmström, 2024).

Participants and Sampling

The study was conducted in a national high school in Benguet, Philippines. The respondents consisted of a total of 20 junior high school students from grades 7 to 10. A mixed purposeful sampling method was employed, which utilized purposeful random sampling and snowball sampling. Purposeful random sampling was used to select students who use ChatGPT from each grade level, a strategy known to increase credibility even within small samples (Palinkas et al., 2015). Snowball sampling was also used to identify additional participants through referrals from initial participants, effectively accessing this specific demographic (Naderifar, Goli, & Ghaljaei, 2017).

Instrument

The primary instrument for data collection was a semi-structured, one-on-one interview guide comprising open-ended questions. The interview questions were designed to explore the positive effects, negative effects, and overall observable improvements or declines in academic performance since the integration of ChatGPT. Audio recording via

mobile phone was utilized to capture the interviews, offering a less intrusive approach that created a comfortable atmosphere for participants to express themselves openly.

Data collection

The data collection process commenced with securing the respondents' permission through a formal letter that explained the study's purpose, ensuring transparency and obtaining informed consent. One-on-one interviews were conducted and audio-recorded to ensure accuracy in capturing comments and verbal cues. The study adhered to strict ethical considerations; all participants were informed of the voluntary nature of their participation and assured of strict confidentiality regarding their identities and responses. The institutional ethics review committee approved the study protocol prior to implementation.

Data analysis

Data analysis followed a rigorous qualitative process. First, the recorded interviews were transcribed verbatim. Next, thematization was conducted through a careful review of the positive and negative effects on academic performance, identifying academic behaviors related to ChatGPT use. Finally, the researchers employed coding to sort and categorize the data into overarching themes. This thematic analysis framework is widely used in qualitative research to systematically identify, analyze, and interpret patterns of meaning within qualitative data (Clarke & Braun, 2017).

RESULTS

The results of the study illustrate the profound impact of the ChatGPT AI tool on the academic development of junior high school students. The thematic analysis generated two major categories: the positive effects (ChatGPT Blessing) and the negative effects (ChatGPT Curse). These themes and sub-themes are summarized in Table 1.

Table 1. Thematic categorization of ChatGPT's impact on students

Major Category	Identified Themes
ChatGPT Blessing (Positive Effects)	1. Quick Grasp 2. Mentor Aid 3. Intellectual Growth 4. Academic Triumph
ChatGPT Curse (Negative Effects)	1. Reliance Overload 2. Drive Decline 3. Focus Disruption 4. Mental Strain 5. Intellect Erosion 6. Blind Trust 7. Perfect Obsession

ChatGPT Blessing

Blessings are defined as beneficial qualities that bring a positive impact. In the context of ChatGPT, this refers to the advantages students experience.

Quick Grasp: This pertains to the fast interaction pace and quick access to information. Respondent 1 noted, *"Mas madali siyang ma-access like if you're just going to type then the answer is already there, and it helps me with my activities."* Respondent 10 added, *"It quickly provides answers with my activities which make it easier."*

Mentor Aid: ChatGPT acts as a virtual teacher, guiding students in their learning. Respondent 16 shared, *"Agisursuro ngay kanyak tano haan ko maawatan dagijay lessons mi... it also answers the questions that we cannot understand."* Respondent 4 emphasized its help in writing tasks: *"I couldn't make that long essays but actually helped me so far."*

Intellectual Growth: This theme indicates an overall development in thinking skills and knowledge. Respondent 7 stated, *"Mas napalawak na daytuy ti knowledge ko on things nga kayat ku maamuan."* Respondent 18 echoed this, indicating it helped them learn to summarize and identify important facts.

Academic Triumph: Achieving success and higher grades was prevalent. Respondent 10 highlighted, *"I noticed huge changes in my past grades that were so low."* Respondent 1 noted, *"My scores in quizzes and activities were always high."*

ChatGPT Curse

Curses refer to the potential drawbacks and negative consequences of using the AI tool.

Reliance Overload: Excessive dependence negatively affected students' ability to function independently. Respondent 3 admitted, *"Uray diyay bassit lang nga question o nalaka lang nga question... kailangan paylang ti ChatGPT."* Respondent 11 shared, *"May mga times na inaasa ko na lang sa ChatGPT mostly sa pag gawa ng mga assignments."*

Drive Decline: Laziness induced by over-reliance was a strong theme. Respondent 7 confessed, *"Sinmadutak en ti studies ko like sinmaduttak nga mang answer nga on my own kase ada ti mas nalaklaka nga way."* Respondent 8 also noted a lack of participation in discussions due to this reliance.

Focus Disruption: ChatGPT was found to disrupt attention. Respondent 4 mentioned, *"You can get distracted during class discussions,"* while Respondent 6 stated it *"may lead to distraction and lack of focus on activity."*

Mental Strain: The psychological pressure of using the tool. Respondent 7 felt guilt over receiving high grades through AI, stating it may affect my emotional health. Respondent 15 cited *"Anxiety, the fear of being caught"* as a significant negative effect.

Intellect Erosion: This signifies a decline in thinking skills. Respondent 1 articulated, *"Nakaasa nalang sa answers nung AI like hindi yung mahahasa yung katalinuhan."* Respondent 7 similarly expressed that critical thinking was no longer enhanced.

Blind Trust & Perfect Obsession: Students exhibited blind trust by accepting inaccurate information. Respondent 19 noted copying answers despite knowing there were errors. Furthermore, Perfect Obsession was seen where students continuously confirmed known answers just to secure perfect scores, as noted by Respondent 12.

DISCUSSION

The discussion explores the duality of ChatGPT's impact, integrating local findings with international literature. The theme of 'Quick Grasp' aligns with findings by Gilson et al. (2023), stating that ChatGPT's ability to generate feedback with prompts aids students in staying engaged and understanding course material more efficiently. Similarly, the 'Mentor Aid' theme supports Özçelik and Ekşi (2024), who posited that ChatGPT suggests ideas for content, improves language usage, and helps students learn at their own pace. Furthermore, the 'Intellectual Growth' observed in students corroborates Albdarani and Al-Shargabi (2023), highlighting the tool's capacity to build vocabulary and provide a personalized learning experience. The reported 'Academic Triumph' also aligns with Kasneci et al. (2023), who found that students successfully complete assignments using ChatGPT and achieve notably higher scores.

Conversely, the negative effects present significant challenges. The 'Reliance Overload' and 'Drive Decline' reported by the participants strongly reflect Castillo et al. (2023), who argued that ChatGPT promotes high levels of laziness, leading students to rely on AI to handle their work without genuine learning. De Silva, Ranasinghe, and Rihan (2023) further validate this, asserting that over-dependence limits students' capacity to independently assess knowledge. The 'Focus Disruption' theme is consistent with Abdelaal, Mills, and Gamage (2019), who cited distraction from traditional learning environments as a primary concern. The 'Mental Strain' and 'Intellect Erosion' findings map closely to Kalam et al. (2024), who correlated AI dependency with school difficulties and mental strain, as well as Memarian and Doleck (2023), who noted that AI-generated information hinders the development of problem-solving skills. The phenomena of 'Blind Trust' and 'Perfect Obsession' echo Lyon (2023) regarding the dangers of AI hallucination, and Karamat et al. (2023), detailing reassurance-seeking behavior that undermines self-reliance.

Limitations of the study include its confined geographical and demographic scope, as it only explored the experiences of 20 junior high school students from a single institution in the Philippines. Additionally, the study was limited primarily to students' self-reported perceptions of critical thinking and academic performance, which may be subject to personal biases.

CONCLUSION

The study concludes that ChatGPT significantly influences the academic development of junior high school students, functioning as a double-edged sword. It serves as a "blessing" by enhancing vocabulary, expanding knowledge, and facilitating academic achievement through personalized, instant support. Conversely, it acts as a "curse" by fostering over-reliance, laziness, mental strain, and an erosion of independent critical thinking. While the tool offers substantial educational benefits, the negative effects proved to have a more prominent impact on students' study habits and intrinsic motivation. Therefore, a balanced and highly regulated usage of the tool is essential to maximize its benefits while mitigating its detriments.

Based on the findings, it is recommended that educational institutions guide students to utilize ChatGPT strictly as a supplementary tool rather than a primary source of answers. Teachers should encourage responsible usage and implement limits on AI tool usage, especially for tasks requiring analytical skills. Furthermore, traditional learning methods,

such as utilizing textbooks and scholarly articles, should be maintained alongside AI to promote a more comprehensive understanding of topics. Future research should explore the longitudinal effects of various AI tools across broader demographics.

Acknowledgments

The researchers would like to express their sincere gratitude to Lepanto National High School, the participants who shared their experiences, and to the school principal for her invaluable guidance and support throughout the conduct of this study.

Conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript.

References

- Abdelaal, E., Mills, J. E., & Gamage, S. W. (2019). Artificial intelligence is a tool for cheating academic integrity. Australasian Association for Engineering Education. <https://www.researchgate.net/publication/337894173>
- Albdrani, R., & Al-Shargabi, A. (2023). Investigating the effectiveness of ChatGPT for providing personalized learning experience: A case study. *International Journal of Advanced Computer Science and Applications*, 14(1). <https://doi.org/10.14569/IJACSA.2023.01411122>
- Asirit, L. B. L., & Hua, J. H. (2023). Converging perspectives: Assessing AI readiness and utilization in Philippine higher education. *Polaris Global Journal of Scholarly Research and Trends*, 2(3), 1-50. <https://doi.org/10.58429/pgjsrt.v2n3a152>
- Ashok, M., Madan, R., Joha, A., & Sivarajah, U. (2022). Ethical framework for artificial intelligence and digital technologies. *International Journal of Information Management*, 62, 102433. <https://doi.org/10.1016/j.ijinfomgt.2021.102433>
- Attwood, A. I. (2020). Changing social learning theory through reliance on the Internet of Things and artificial intelligence. *Journal of Social Change*, 12(1). <https://doi.org/10.5590/JOSC.2020.12.1.08>
- Bengtson, S. S., & Jensen, G. S. (2015). Online supervision at the university: A comparative study of supervision on student assignments face-to-face and online. *Medier, Læring og*, 2015(13), 1-23.
- Castillo, A., Silva, G., Arocutipa, J., Berrios, H., Marcos Rodriguez, M., Reyes, G., Lopez, H., Teves, R., Rivera, H., & Arias-González, J. (2023). Effect of Chat GPT on the digitized learning process of university students. *Journal of Namibian Studies: History Politics Culture*, 33, 1-15. <https://doi.org/10.59670/jns.v33i.411>
- Chanda, T., Sain, Z., Shogbesan, Y., Phiri, E., & Akpan, W. (2024). Digital literacy in education: Preparing students for the future workforce. *International Journal of Research*, 11, 327-344. <https://doi.org/10.5281/zenodo.13347718>
- Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297-298. <https://doi.org/10.1080/17439760.2016.1262613>
- De Silva, A. H. D. B., Ranasinghe, R. S. P., & Rihan, M. R. M. (2023). Negative effects of integrating ChatGPT in the higher education system concerning achieving resilience through digitalization, sustainability, and sectoral transformation. General Sir John Kotelawala Defence University. <https://ir.kdu.ac.lk/handle/345/7345>

- Gilson, A., Safranek, C. W., Huang, T., Socrates, V., Chi, L., Taylor, R. A., & Chartash, D. (2023). How does ChatGPT perform on the United States Medical Licensing Examination (USMLE)? The implications of large language models for medical education and knowledge assessment. *JMIR Medical Education*, 9, e45312. <https://doi.org/10.2196/45312>
- Gill, S. S., Xu, M., Patros, P., Wu, H., Kaur, R., Kaur, K., Fuller, S., ... & Uhlig, S. (2023). Transformative effects of ChatGPT on modern education: Emerging era of AI chatbots. *IoT and CPS Convergence*, 4, 19-23. <https://doi.org/10.1016/j.iotcps.2023.06.002>
- Hanaysha, J. R., Shriedeh, F. B., & In'airat, M. (2023). Impact of classroom environment, teacher competency, information and communication technology resources, and university facilities on student engagement and academic performance. *Journal of Innovation and Emerging Markets*, 6(1), 100188. <https://doi.org/10.1016/j.jime.2023.100188>
- Hayat, K., Shateri, M., & Amini, N. (2020). Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with academic performance in medical students: a structural equation model. *BMC Medical Education*, 20(1), 76. <https://doi.org/10.1186/s12909-020-01995-9>
- Javaid, M. A., Haleem, A. A., Singh, B. R. P., Khan, S. C., & Khan, I. H. (2023). Unlocking the opportunities through ChatGPT tool towards ameliorating the education system. *Bench Council Transactions on Benchmarks, Standards and Evaluations*, 3(2), 100115. <https://doi.org/10.1016/j.tbench.2023.100115>
- Jo, H. (2024). Effects of ChatGPT's AI capabilities and human-like traits on spreading information in work environments. *Scientific Reports*, 14(1), 7806. <https://doi.org/10.1038/s41598-024-57977-0>
- Kalam, K. T., Rahman, J. M., Islam, M. R., & Dewan, S. M. R. (2024). ChatGPT and mental health: Friends or foes? <https://www.researchgate.net/publication/378215413>
- Karamat, A., Hafeez, Q., Zahra, S., & Saleem, S. (2023). Reassurance seeking behavior and interpersonal difficulties in university students: Mediating role of self-esteem. *Pakistan Journal of Psychological Research*, 38(1), 31-49. <https://doi.org/10.33824/PJPR.2023.38.1.03>
- Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., ... & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 102274. <https://doi.org/10.1016/j.lindif.2023.102274>
- Lyon, C. F. (2023). Fake cases, real consequences: Misuse of ChatGPT leads to sanctions. *NY Litigator*, 28(2), 8-12.
- Maheshwari, G., & Shaukat, F. (2019). Impact of poor sleep quality on the academic performance of medical students. *Cureus*, 11(4), e4357. <https://doi.org/10.7759/cureus.4357>
- Memarian, B., & Doleck, T. (2023). ChatGPT in education: Methods, potentials, and limitations. *Computers in Human Behavior: Artificial Humans*, 1(2), 100022. <https://doi.org/10.1016/j.chbah.2023.100022>
- Milloria, B. R. B., Marzon, A. M. D., & Derasin, L. M. C. (2024). Investigating AI-integrated instruction in improving academic performance of high school students in the Philippines. *Journal of Harbin Engineering University*, 45(6).
- Naderifar, M., Goli, H., & Ghaljaei, F. (2017). Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education*, 14(3). <https://doi.org/10.5812/sdme.67670>

- Özçelik, N. P., & Ekşi, G. Y. (2024). Cultivating writing skills: The role of ChatGPT as a learning assistant-a case study. *Smart Learning Environments*, 11(10).
<https://doi.org/10.1186/s40561-024-00296-8>
- Oranga, J. (2023). Benefits of artificial intelligence (ChatGPT) in education and learning: Is ChatGPT helpful? *IRPITAGE*, 3(3). <https://doi.org/10.54443/irpitage.v3i3.1250>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544. <https://doi.org/10.1007/s10488-013-0528>
- Parveen, S., & Ramzan, S. I. (2024). The role of digital technologies in education: Benefits and challenges. *International Research Journal of Applied Engineering and Management*, 12(6), 102-115. <https://doi.org/10.47392/IRJAEM.2024.0299>
- Rajabi, P., Taghipour, P., Cukierman, D., & Doleck, T. (2024). Unleashing ChatGPT's impact in higher education: Student and faculty perspectives. *Computers in Human Behavior: Artificial Humans*, 2(2), 100090.
<https://doi.org/10.1016/j.chbah.2024.100090>
- Ray, P. P. (2023). ChatGPT: A comprehensive review on background, applications, key challenges, bias, ethics, limitations, and future scope. *IoT and Cyber-Physical Systems*, 3, 121-154. <https://doi.org/10.1016/j.iotcps.2023.04.003>
- Rahman, M. M., & Watanobe, Y. (2023). ChatGPT for education and research: Opportunities, threats, and strategies. *Applied Sciences*, 13(9), 5783.
<https://doi.org/10.3390/app13095783>
- Sothan, S. (2018). The determinants of academic performance: Evidence from a Cambodian university. *International Journal of Educational Development*, 60, 121-130. <https://doi.org/10.1016/j.ijedudev.2017.11.002>
- Shahzad, M. F., Xu, S., & Javed, I. (2024). ChatGPT awareness, acceptance, and adoption in higher education: The role of trust as a cornerstone. *International Journal of Educational Technology in Higher Education*, 21(46).
<https://doi.org/10.1186/s41239-024-00445-5>
- Stöhr, C., Ou, A. W., & Malmström, H. (2024). Perceptions and usage of AI chatbots among students in higher education across genders, academic levels, and fields of study. *Computers and Education: Artificial Intelligence*, 7, 100259.
<https://doi.org/10.1016/j.caeai.2024.100259>
- Waqarul, S., & Siddiqui, D. A. (2024). Exploring the impact of AI's Chat GPT on business students' productivity: Insights from teacher and students. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4959589>