

Analyzing Student Satisfaction Toward the Integration of ChatGPT as a Digital Learning Resource

Raynaldi Nugraha Prasetya^{1*}, Ridho Dedy Arief Budiman²

¹Universitas Tanjungpura, Indonesia

²Universitas PGRI Pontianak, Indonesia

Keywords:

ChatGPT, Digital Learning Resource, Student Satisfaction

*Correspondence Author:

danuarta5656@gmail.com

Abstract: This study aims to analyze students' satisfaction with the integration of ChatGPT as a digital learning resource at SMP Harapan Ananda, West Kalimantan. A descriptive quantitative approach was employed, involving 80 respondents from grades VII–IX who had used ChatGPT in their learning activities. Data were collected through a five-point Likert scale questionnaire, complemented by semi-structured interviews to strengthen the quantitative findings. Descriptive analysis revealed that students' satisfaction was in the "satisfied" category, with an overall mean score of 4.13. The Ease of Use dimension obtained the highest score (4.35), followed by User Experience (4.25) and Learning Usefulness (4.10). Meanwhile, Information Reliability received the lowest score (3.82), indicating the need for teacher guidance in verifying the accuracy of ChatGPT-generated information. The results confirm that ChatGPT holds significant potential as a digital learning resource that enhances students' motivation and learning autonomy, though its effectiveness still relies on active teacher involvement. This study contributes theoretically to technology acceptance research in education and provides practical implications for schools in designing ethical and contextually relevant AI-based learning strategies.

INTRODUCTION

The development of Artificial Intelligence (AI) technology has brought significant changes to the field of education, particularly through the emergence of digital learning tools such as ChatGPT. In the context of 21st-century learning, critical thinking, collaboration, and digital literacy have become essential competencies that students must develop. UNESCO (2023) reported that more than 65% of schools in Southeast Asia have begun utilizing AI technologies to enhance the quality of both online and face-to-face learning. In Indonesia, the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) has also promoted digital transformation through the Merdeka Belajar (Independent Learning) policy, which emphasizes the use of digital learning resources to enrich the educational process. However, the use of technologies such as ChatGPT in basic education remains relatively new and requires in-depth examination of its impacts—particularly regarding student satisfaction as end users.

ChatGPT, developed by OpenAI, is an AI-based language model capable of answering questions, explaining concepts, and assisting in text composition through an

interactive style. In the educational context, ChatGPT has the potential to serve as a digital learning resource that enriches students' learning experiences through personalized and responsive dialogues. According to a Pew Research Center (2024) survey, around 30% of secondary-level students in various countries have used ChatGPT to support their learning, either to better understand course materials or to complete assignments. Nevertheless, the adoption of this technology also introduces new challenges, such as the risk of dependency, reduced originality in thinking, and varied perceptions of the reliability of AI-generated information.

Previous studies have shown mixed results regarding the integration of ChatGPT in education. For example, Ardiansyah et al. (2025) found that ChatGPT can enhance students' motivation and conceptual understanding, whereas Nurbaeti et al. (2025) reported that some students perceive ChatGPT's information as inaccurate or misleading at times. Furthermore, Situmorang et al. (2025) emphasized that both teachers and students still require stronger digital literacy to ensure effective AI utilization in learning. However, most of these studies have focused on higher education levels, and few have explored how junior high school students respond to ChatGPT as a digital learning resource.

A research gap thus exists concerning students' perceptions and satisfaction toward ChatGPT at the lower-secondary education level, particularly in schools that are gradually integrating digital technologies. In regions such as West Kalimantan, the adoption of digital learning technologies still faces challenges related to infrastructure and human resource readiness. This raises important questions about how students in such areas perceive the effectiveness and comfort of using ChatGPT as a learning medium. Previous studies have rarely discussed the experiences of students in non-urban school settings, which possess distinct characteristics compared to those in major cities.

Therefore, this study was conducted at SMP Harapan Ananda, West Kalimantan, to analyze students' satisfaction with the integration of ChatGPT as a digital learning resource. The research focuses on understanding the extent to which ChatGPT meets students' learning needs, supports their comprehension of materials, and fosters an enjoyable and meaningful learning experience. The study also explores factors influencing student satisfaction, such as ease of use, information reliability, and perceived pedagogical benefits.

The findings of this research are expected to contribute theoretically to the development of digital literacy and AI-based learning studies at the junior secondary level. Practically, the results will serve as a reference for schools and teachers in designing more adaptive teaching strategies aligned with AI technology, while also guiding education policymakers in formulating ethical and effective guidelines for ChatGPT use in schools. Thus, this research not only enriches the academic discourse in educational technology but also supports an inclusive and equitable digital transformation in Indonesia.

METHOD

This study employed a quantitative approach with a descriptive method to analyze students' satisfaction with the integration of ChatGPT as a digital learning resource. The quantitative approach was chosen because it allows the researcher to obtain an empirical

and measurable overview of students' perceptions through the collection of numerical data that can be statistically analyzed (Pandiangan & Albina, 2025). The descriptive method was applied to objectively describe the phenomenon as it occurs in real conditions without manipulating any variables, thereby enabling the findings to reflect students' authentic experiences in using ChatGPT during the learning process (Adiningrat et al., 2025).

The population of this study consisted of all students at SMP Harapan Ananda, West Kalimantan, who had used ChatGPT as part of their learning activities in subjects such as English, Social Studies, and Information Technology. The sample was selected using a purposive sampling technique, with the criterion that participants must have interacted with ChatGPT for at least one month in a school learning context. Based on this criterion, a total of 80 respondents from grades VII to IX were obtained. This number was considered representative to provide a general overview of students' satisfaction with ChatGPT integration.

The data collection instrument was a closed-ended questionnaire designed using a five-point Likert scale ranging from "strongly disagree" to "strongly agree." The questionnaire covered four key dimensions of learning satisfaction: (1) ease of use, (2) information reliability, (3) learning usefulness, and (4) user experience. Before distribution, the instrument underwent validity and reliability testing through a limited trial involving 20 students to ensure the clarity of the items and internal consistency among them, which was assessed using Cronbach's Alpha coefficient.

The collected data were analyzed using descriptive statistical analysis, including the calculation of mean scores, percentages, and standard deviations to describe students' satisfaction levels for each indicator. In addition, a simple correlation analysis was conducted to examine the relationship between the intensity of ChatGPT use and students' learning satisfaction. The results were presented in tables and graphs to facilitate interpretation and support a systematic discussion of the findings.

In addition to the questionnaire, semi-structured interviews with several students and teachers were conducted as supporting data (data triangulation). These interviews aimed to explore deeper insights into the perceived benefits and challenges of using ChatGPT in learning. This procedure was intended to provide qualitative context that strengthens the quantitative analysis results.

The entire research process was carried out over a three-month period, starting from the instrument design phase to data collection and result analysis. During implementation, the researcher adhered to educational research ethics, including maintaining respondent confidentiality and obtaining formal permission from the school. With this methodological design, the study is expected to produce valid, reliable, and relevant findings in understanding students' satisfaction with the use of ChatGPT as a digital learning resource in junior secondary education settings.

RESULT AND DISCUSSION

This study aimed to analyze students' satisfaction with the integration of ChatGPT as a digital learning resource at SMP Harapan Ananda, West Kalimantan. Data were collected through questionnaires distributed to 80 respondents from grades VII, VIII, and

IX. The analysis focused on four main dimensions of learning satisfaction: ease of use, information reliability, learning usefulness, and user experience.

Table 1. Descriptive Analysis Results of Students' Satisfaction with ChatGPT Use

Satisfaction Dimension	Key Indicator	Mean	Category	Standard Deviation
Ease of Use	ChatGPT is easy to access and use in learning activities	4.35	Very Satisfied	0.51
Information Reliability	Information provided by ChatGPT is considered accurate and relevant	3.82	Satisfied	0.64
Learning Usefulness	ChatGPT helps in understanding materials and increasing learning motivation	4.10	Satisfied	0.58
User Experience	ChatGPT provides an interactive and enjoyable learning experience	4.25	Very Satisfied	0.55
Overall Mean		4.13	Satisfied	0.57

Based on Table 1, the overall mean score of students' satisfaction with the use of ChatGPT as a digital learning resource is 4.13, which falls under the "satisfied" category. This indicates that most students have a positive perception of the use of ChatGPT in learning activities.

The dimension with the highest mean score is Ease of Use (4.35), suggesting that students find ChatGPT easy to access through devices available both at school and at home. They stated that ChatGPT's interface is simple and responsive, allowing them to obtain answers or explanations quickly. This finding aligns with Kasneci et al. (2023), who noted that ease of interaction is one of the key factors determining the successful adoption of AI in education.

The User Experience dimension also shows a very high satisfaction level, with a mean score of 4.25. Students felt that ChatGPT provides an interactive learning experience, especially when used to answer questions, complete exercises, or engage in light discussions. This indicates that the interactivity of AI can enhance student engagement in the learning process.

The Learning Usefulness dimension scored 4.10, indicating that students perceived ChatGPT as helpful in improving their understanding of learning materials. Several students mentioned that ChatGPT was particularly useful in clarifying topics they had difficulty understanding in class, especially in English and Social Studies. This finding supports Rudolph et al. (2024), who argued that AI can serve as a personal learning assistant to facilitate independent learning.

Meanwhile, the dimension with the lowest mean score is Information Reliability (3.82). Although still within the "satisfied" category, this result suggests that some students have doubts about the accuracy of ChatGPT's responses. A few respondents mentioned that the information provided was sometimes too general or not fully aligned with their school curriculum. This highlights the importance of teacher guidance to ensure that ChatGPT use remains consistent with official learning materials and curricular goals.

Overall, the findings indicate that students at SMP Harapan Ananda demonstrate a high level of satisfaction with the integration of ChatGPT as a digital learning resource. ChatGPT is perceived as effective in enhancing students' interest and learning autonomy,

although improvements in digital literacy are still needed to help students critically verify information obtained from AI.

Discussion

The study found that students' satisfaction with the integration of ChatGPT as a digital learning resource was high ($M = 4.13$), indicating its strong potential as a technology-based learning innovation at the junior secondary level. Students reported that ChatGPT was easy to access and use, which increased their motivation and engagement. This supports the Technology Acceptance Model (TAM) by Davis (as cited in Arbaien et al., 2025), which highlights perceived ease of use and usefulness as key factors in technology acceptance.

The Ease of Use dimension achieved the highest score ($M = 4.35$), showing that ChatGPT is practical and user-friendly, even for students with varied digital skills. This finding aligns with Bora et al. (2024), who noted that ChatGPT's conversational interface enhances comfort and engagement among young learners. The Learning Usefulness dimension ($M = 4.10$) also reflects ChatGPT's contribution to improving conceptual understanding and supporting independent study, consistent with Tangkas et al. (2025).

The User Experience dimension ($M = 4.25$) indicates that ChatGPT fosters an interactive and enjoyable learning environment, which increases student engagement (Andini et al., 2024). However, the Information Reliability dimension ($M = 3.82$) reveals ongoing challenges related to accuracy and contextual alignment. Some students reported that ChatGPT's responses were too general or inconsistent with the curriculum, confirming the view of Judijanto et al. (2025) that ChatGPT has not yet fully adapted to users' local contexts or educational levels. Therefore, teacher facilitation and digital literacy development are crucial to ensure students critically evaluate AI-generated information.

Pedagogically, these results suggest that AI integration in education should follow a hybrid approach—combining human guidance with technological support. ChatGPT can act as a learning assistant that enriches instruction, while teachers remain essential as contextual moderators and evaluators. This aligns with the human-centered AI perspective (Hasanudin, 2025), which emphasizes that technology should strengthen, not replace, the human role in education.

Overall, integrating ChatGPT at SMP Harapan Ananda has proven effective in enhancing student satisfaction and motivation, although accuracy and contextualization remain areas for improvement. These findings expand understanding of AI adoption in secondary education, especially in non-urban settings like West Kalimantan, and open avenues for future studies on ChatGPT's impact on learning outcomes, creativity, and critical thinking.

CONCLUSION

This study analyzed students' satisfaction with the integration of ChatGPT as a digital learning resource at SMP Harapan Ananda, West Kalimantan. Based on data from 80 respondents, the findings show a high overall satisfaction level (mean = 4.13, "satisfied" category), indicating that ChatGPT is positively received as a supportive learning tool that

enhances students' comfort, motivation, and learning effectiveness. Among the four dimensions examined, Ease of Use received the highest score (4.35), followed by User Experience (4.25) and Learning Usefulness (4.10), showing that students find ChatGPT accessible, engaging, and helpful for independent learning. However, the Information Reliability dimension (3.82) suggests that some students still question the accuracy and contextual relevance of ChatGPT's responses, underscoring the teacher's essential role in guiding and validating AI-assisted learning. Theoretically, the findings support the Technology Acceptance Model (TAM), confirming that perceived ease of use and usefulness are key determinants of student satisfaction with AI-based learning tools. Practically, the study highlights the need for schools and educators to optimize ChatGPT as a complementary—not substitutive—digital resource that enriches the learning process. Overall, integrating ChatGPT in junior secondary education demonstrates strong potential to foster adaptive, participatory, and independent learning. Future research is recommended to explore ChatGPT's broader impact on learning outcomes, creativity, and critical thinking skills. These findings can serve as a foundation for developing policies and strategies to guide sustainable AI integration in Indonesia's basic and secondary education systems.

REFERENCES

- Adiningrat, N., Albina, M., Padila, W., & Tanjung, E. R. (2025). Penelitian Deskriptif Dalam Pendidikan. *Jurnal Intelek dan Cendekiawan Nusantara*, 2(3). Retrieved from <https://jicnusantara.com/index.php/jicn/article/view/4107>
- Andini, P., Karo, Z. B., Herawati, H., & Syahrial, S. (2024). Analisis Peningkatan Keterlibatan Siswa Melalui Pendekatan TPACK dalam Proses Belajar Mengajar. *Morfologi: Jurnal Ilmu Pendidikan, Bahasa, Sastra dan Budaya*, 2(3), 181-190. <https://doi.org/10.61132/morfologi.v2i3.635>
- Arbaian, M. F. N., Nurkaromah, S. R., Sutarman, S., & Apriyani, H. (2025). Penerimaan dan Penggunaan SuperApp BYOND BSI: Ekstensi Teori Technology Acceptance Model. *Jurnal Maps (Manajemen Perbankan Syariah)*, 8(2), 90-103. <https://doi.org/10.32627/maps.v8i2.1190>
- Ardiansyah, M., Nugraha, M. L., & Santoso, B. (2025). Analisis Dampak Penggunaan ChatGPT terhadap Motivasi Belajar Siswa. *Jurnal Insan Peduli Pendidikan (JIPENDIK)*, 3(1), 7-11. Retrieved from <https://ejournal.lppinpest.org/index.php/jipendik/article/view/170>
- Bora, M. A., Lawi, A., Wijaya, I. M. S., & Salsabilla, T. A. (2024). Mengoptimalkan Kenyamanan Kognitif: Analisis Ergonomis terhadap Interaksi Pengguna dengan AI Chatbots. *Ranah Research: Journal of Multidisciplinary Research and Development*, 6(4), 710-723. <https://doi.org/10.38035/rrj.v6i4.869>
- Hasanudin, C. (2025). *Revolusi Media Pembelajaran di Era Society 5.0 untuk Mendorong Pembelajaran berbasis Teknologi*. Seval Literindo Kreasi.
- Judijanto, L., Selviana, R., Rahmawati, E., Magdalena, L., Amilia, I. K., Fanani, M. Z., ... & Putra, B. P. P. (2025). *Optimalisasi ChatGPT: Panduan dan Penerapan untuk*

- Belajar, Mengajar, dan Membuat Konten Tanpa Batas*. PT. Green Pustaka Indonesia.
- Nurbaeti, A., Annisa, A., & Al Kaisar, F. (2025). Pemanfaatan ChatGPT dalam Pendidikan Studi: tentang Manfaat dan Risiko bagi Pembelajaran. *Jurnal Ilmu Pendidikan*, 1(1). Retrieved from <https://journal.al-aarif.com/index.php/jurnalilmupendidikan/article/view/34>
- Pandiangan, D. F., & Albina, M. (2025). Model dan Tahapan Penelitian Kuantitatif: Pendekatan Teoretis dan Praktis dalam Kajian Pendidikan. *IHSAN: Jurnal Pendidikan Islam*, 3(3), 724-730. <https://doi.org/10.61104/ihsan.v3i3.1494>
- Situmorang, K. J., Sundari, S., Rismadi, B., & Pakpahan, M. (2025). Peran Sekolah dalam Peningkatan Literasi Digital Kecerdasan Buatan Guna Mendukung Generasi Emas 2045. *JiIP-Jurnal Ilmiah Ilmu Pendidikan*, 8(7), 8339-8346. <https://doi.org/10.54371/jiip.v8i7.8853>
- Tangkas, B. P., Wijaya, D. A. S., Maulana, D. F., & Sudrajat, S. (2025). The Effect of Autonomous Learning Based on ChatGPT Based Autonomous Learning on Improving Students' divergent Thinking. *Jurnal Penelitian dan Pendidikan IPS*, 19(1), 57-65. <https://doi.org/10.21067/jppi.v19i1.11210>
- UNESCO. (2023). *AI and education: Guidance for policy-makers (2nd ed.)*. United Nations Educational, Scientific and Cultural Organization. <https://unesdoc.unesco.org/ark:/48223/pf0000385718>