

# Pre-service Teachers' Awareness in Utilizing ChatGpt (AI) as a Tool for Learning

Regie A. Batico <sup>1</sup>; Christian Louie Benignos <sup>2</sup>; Charemie L. Casinabe <sup>3</sup>; Queen Charity Anne S. Ducay<sup>4</sup>; Israel A. Ganancial <sup>5</sup>; Ritchelee B. Alugar <sup>6</sup>

Bukidnon State University <sup>12345</sup>  
Malaybalay City, Bukidnon, Philippines  
[ritcheleedalugar@buku.edu.ph](mailto:ritcheleedalugar@buku.edu.ph) <sup>6</sup>

**Abstract:** A generative language model created by OpenAI, ChatGPT language model, has the potential to revolutionize traditional learning methods. This study aims to determine the level of pre-service teachers' awareness in utilizing ChatGPT (AI) as a tool for learning, particularly in the areas of; familiarity with ChatGPT, usefulness, accuracy and reliability, integration in learning, improvement and support and challenges encountered by students in utilizing ChatGPT. This study includes 125 sampled elementary education pre-service teachers in a state university in the Philippines. This study employed a quantitative design, specifically descriptive method to identify the level of awareness of students in using ChatGPT. A researcher made questionnaire was administered to gather data. The findings suggest varying levels of awareness among pre-service teachers, with some expressing enthusiasm about the potential benefits while others may exhibit hesitancy.

**Keywords—**ChatGPT, OpenAI, Generative language, awareness

## 1. INTRODUCTION

The computer systems that can perform tasks with human intelligence are artificial intelligence. Artificial intelligence has become the latest technological advancement, revolutionizing various aspects of our lives. It encompasses a wide range of computer science disciplines aimed at creating machines capable of emulating human intelligence. The roots of AI trace back to the mid-20th century when early pioneers like Turing, A. and McCarthy, J. laid the foundation for this field. The development of the first AI programs and the inception of the Dartmouth Workshop in 1956 marked significant milestones in AI history. Artificial intelligence (AI) has advanced technologically in recent years, and its integration across several industries has risen.

According to Luck (2016), the educational sector is embracing and adjusting to the advantages and difficulties of AI/AI technology. The quickening rate of technological advancement and global interconnection have brought significant changes in society, the economy, and the environment. We refer to these shifts as megatrends. Haluza and Jungwirth (2023) mentioned that as the 21st century progresses. Artificial intelligence has had a significant influence in recent years, giving rise to cutting-edge technologies like Open AI's ChatGPT. The state-of-the-art ChatGPT language model can completely transform the educational landscape. ChatGPT remains the most advanced chatbot ever developed. Unlike other chatbots, it can write excellent language in seconds. As a result, it has created much buzz and sparked predictions about several topics, including student assessment in higher education Rudolph et al.,

(2023). ChatGPT, a state-of-the-art language model, modifies OpenAI's Generative Pretrained Transformer (GPT) language model. Its goal is to produce language that cannot be distinguished from human-authored content. It can have discussions with users in a clear-cut and uncomplicated way.

According to Cope (2021), a global initiative is introducing artificial intelligence (AI) education to the K–12 population. This program prepares our students for a life in the AI-infused world by addressing the need for AI and AI-related future workers. A global initiative is introducing artificial intelligence (AI) education. The necessity to involve students from kindergarten through high school in AI has led to the introduction of the fundamentals of AI and encouraged early consideration of professions in the field as today's kids grow up with it. AI education is focused on training students to comprehend AI concepts as the usage of AI in education (AIEd) grows since it enables learning support, content distribution, and real-time assessment (Chen et al., 2020, 2022). The argument for AI education to be included in K–12 is inevitably fueled by the need to prepare the future designers, developers, and shapers of the AI technologies that already infiltrate every aspect of human existence.

Tlili et al. (2023) investigated early adopters' use of ChatGPT in education through a three-phase instrumental case study. The study examined issues about employing chatbots in education by analyzing user experiences, interviews, and social media posts. According to Tang, Liang, Hare, and Wang (2020), parallel intelligent education is a new concept of education made possible by technology, which has resulted in radically altered methods of instruction and

learning. Moreover, introducing digital technology into the classroom has made tailored pedagogy and learning more significant. Personalized learning, often called adaptive learning, involves providing students with specific direction and assistance for their cognitive and noncognitive needs. To enable dynamic, individualized learning, learner models must be updated and revised based on new information about the learner's behavior, affective states, and knowledge.

Although increasing research has examined the integration of artificial intelligence (AIAI) in educational settings, there remains a clear knowledge gap about students' awareness of and use of particular AI-powered learning technologies, most notably ChatGPT. Most of the research about AI in education has been on more general uses, like intelligent tutoring systems or adaptive learning platforms, and has given little attention to how students perceive and act about ChatGPT. For instance, research "Exploring the Educational Use of Chatbots: A Comprehensive Review" by Alkan and Kokoc (2020) offers a comprehensive review of chatbots in education, including a discussion on the awareness and utilization of such tools among students. It is necessary to conduct a more thorough analysis of how students view and use ChatGPT and the variables that affect their decision to utilize it in class. Studies on contextual variations in students' awareness are also few, potentially due to variances in courses of study, educational levels, and technology competency. To optimize the potential advantages and improve the integration of this cutting-edge AIAI tool in education, addressing these areas of student awareness and utilization of ChatGPT is imperative.

This study aims to expand knowledge by examining students' awareness and use of this cutting-edge AI technology, and it seeks to clarify ChatGPT's place in the educational landscape.

## 2. FRAMEWORK OF THE STUDY

This study was anchored in the concepts of Abramson, A. (2023), who mentioned that the awareness of students regarding the usefulness of ChatGPT as a learning tool is increasing. Many students recognize its value for quick information, generating ideas, and getting assistance with various topics. However, the perception of usefulness can vary based on individual preferences and experiences. Some students may see it as a valuable supplement to their Learning, while others may prefer more traditional methods.

Javiad, M., Haleem, A., Singh, R.P., et al. (2023) perceived that students' awareness regarding the accuracy and reliability of ChatGPT as a learning tool is mixed. While some students appreciate its quick responses and general information, others need to be more cautious about potential inaccuracies or the need for verification mechanisms. Students must approach ChatGPT critically

and cross-check information for academic reliability. Overall, there's ongoing discussion and awareness-building around the tool's limitations in terms of accuracy.

Rueda, M. (2023) said students are increasingly aware of the potential for integrating ChatGPT into their learning process. Many see it as a convenient tool for quick information retrieval, brainstorming ideas, or seeking clarification on various subjects. However, the extent of integration varies among students, with some incorporating it into their study routines while others may be more hesitant or prefer traditional learning methods. The awareness of ChatGPT's role in Learning is growing, prompting discussions about its benefits and limitations.

Lo, C. K (2023) mentioned that students are becoming more aware of ChatGPT as a learning tool for improvement and support. Many recognize its utility for refining writing skills, generating ideas, and receiving assistance in understanding complex concepts. However, some students may still explore leveraging ChatGPT effectively to meet their learning needs. The awareness of ChatGPT's potential to provide personalized support and aid in skill enhancement is increasing as users explore its capabilities in the educational context.

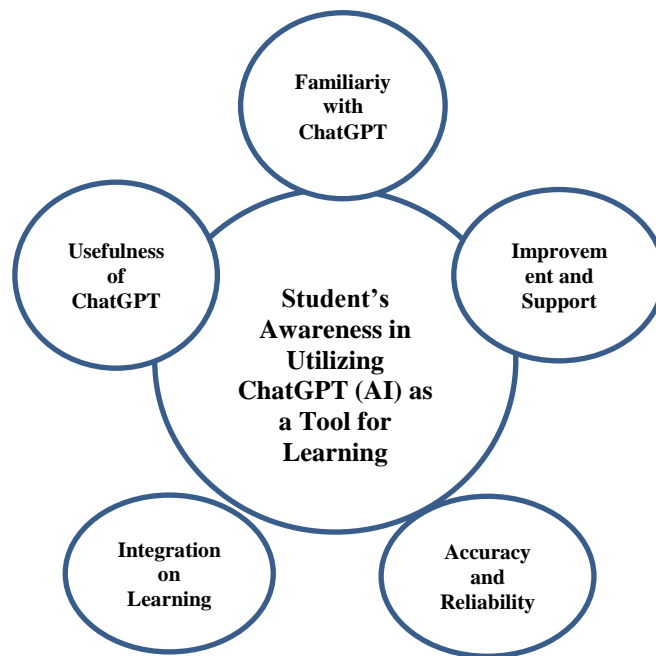


Figure 1. Schematic Diagram of the Study

Incorporating these philosophies into the use of ChatGPT can enhance its role in education, fostering critical thinking, collaborative learning, and individual development. However, it's essential to recognize the limitations and ethical considerations in relying on AI tools for education.

## 3. STATEMENT OF THE PROBLEM

This study aims to identify the Pre-service teacher's awareness of using ChatGPT as a learning tool during the 1st semester of academic year 2023-2024. Specifically, this research aims to address the following:

1. What is the level of awareness of BEED pre-service teachers in using ChatGPT as a learning tool in terms of:
  - a. familiarity of ChatGPT
  - b. usefulness
  - c. accuracy and Reliability
  - d. integration in Learning
  - e. improvement and Support
2. What are the challenges pre-service teachers encounter when using ChatGPT as a tool for Learning?

#### **4. METHODOLOGY**

This chapter covers the study's methodology. The study encompasses elements such as the research design, sampling strategy, research location, study participants, research instruments, data collection and quantification, scoring methodology, and statistical data analysis.

##### **4.1 Research Design**

To investigate the level of pre-service teachers' awareness regarding the appropriate and skillful use of ChatGPT in educational settings, a quantitative research design, specifically a descriptive survey method, was employed.

##### **4.2 Research Locale**

This study was conducted at a teacher education institution in the province of Mindanao, Philippines. The university offers teacher education courses such as early childhood, elementary education, secondary education with various specializations, and physical education. It is also known for its high performances during the Licensure examination for teachers, producing a high passing rate and numerous topnotchers in different education programs.

##### **4.4 Research Sampling**

The researchers used the convenience sampling method to gather the data needed. Convenience sampling is a method used in statistical research in which each population member can participate. The study participants are 125 pre-service teachers enrolled in Bachelor of Elementary Education, College of Education in Bukidnon State University A.Y 2023-2024. Slovin's formula calculated the number of participants. The researchers determined the sample size required to guarantee a fair level of accuracy in the results by using Slovin's formula.

##### **4.3 Research Instrument**

In this study, a researcher-made questionnaire was used to collect data. The questionnaire was designed specifically for this study and was not adapted from existing instruments. Its development was predicated on a careful examination of pertinent literature and discussions with authorities in the field to ensure its legitimacy. A structured questionnaire assessed the pre-service teacher's awareness and usage of ChatGPT as a learning tool. The questionnaire included questions about familiarity, usefulness, accuracy and reliability, learning integration, improvement, support, and challenges. The experts in the field validated the structured questionnaire. The awareness score was calculated using a Likert Scale. The findings were interpreted to draw conclusions and discuss implications for educational practices.

##### **4.4 Data gathering**

The data for this research was collected through quantitative methods. The structured questionnaire was given to the pre-service teachers to assess their awareness of ChatGPT. The online survey includes questions regarding their familiarity with ChatGPT, usefulness, accuracy and reliability, learning integration, improvement, support, and challenges. The researchers asked the list of enrollees from the Department Head of the Bachelor of Elementary Education AY 2023-2022, as the target population. This study adheres to ethical guidelines, ensuring participants' confidentiality, informed consent, and the secure handling of data. Participants were provided information about the study's purpose and rights, and their anonymity will be protected throughout the research process.

##### **4.5 Scoring Procedure**

The level of awareness of the pre-service teacher's awareness of utilizing ChatGPT as a tool for learning was determined through the scores obtained in their answered research instrument. The researcher made instruments that served as a basis for the interpretation of data. The pre-service teacher's extent of awareness for every statement was expressed in a 5-point- Likert Scale. The responses were Fully Aware, Partially Aware, Neither Aware nor Not Aware, Quite Not Aware, and Fully Not Aware.

| Scale | Intervals | Descriptive                 | Qualitative Description                                  |
|-------|-----------|-----------------------------|--|
| 5     | 4.20-5.00 | Fully Aware                 | Possesses proficiency and knowledge                      |
| 4     | 3.40-4.19 | Partially Aware             | Can adequately understand                                |
| 3     | 2.60-3.39 | Neither Aware nor Not Aware | Can understand some aspects                              |
| 2     | 1.80-2.59 | Quite Not Aware             | Can understand only with guidance of the experts         |
| 1     | 1.00-1.79 | Fully Not Aware             | Can hardly understand even with guidance from the expert |

Table 1. 5- Point Likert Scale

Table 1 presents the rating scale and its corresponding qualitative rating and interpretation. Hence, the researchers used a 5-point Likert scale level of agreement ranging from 5 as fully aware to 1 as entirely unaware.

#### 4.6 Statistical Treatment

The data gathered from the research study was treated with rigorous statistical tools to derive meaningful insights into pre-service teachers' awareness of ChatGPT as a tool for learning. To identify the first problem, the mean and standard deviation were determined. The second problem is frequency and percentage.

#### 4.7 Ethical Considerations

To protect the rights, privacy, and well-being of every participant, this study complied with established ethical guidelines. The researchers took into account the following ethical factors:

An informed consent form and an in-depth explanation of the study's objectives, procedures, and participants' rights before participation were given. Measures protected the identities of the respondents and their personal information. All records were collected and anonymized to preserve the participants' privacy before being stored in a safe database. The participant's participation was voluntary, and they could discontinue without repercussions. Every attempt was made to reduce participants' potential for physical, psychological, or emotional distress.

## 5. RESULTS AND DISCUSSION

This part presented the interpretation and analysis of the data gathered from the respondents regarding their level of awareness of utilizing ChatGPT as a tool for learning.

Table 2. Level of Familiarity of BEE Pre-service Teachers to ChatGPT

| Statements  | N   | M    | SD   | Descriptive Rating |
|---|-----|------|------|--------------------|
| I am aware and am familiar of the term ChatGPT.                                     | 123 | 4.28 | 3.98 | Fully Aware        |
| I am aware that ChatGPT are generated by computer and not human.                    | 125 | 4.41 | 4.08 | Fully Aware        |
| I am aware with the other conversational AI tools or chatbots.                      | 124 | 4.01 | 3.76 | Partially Aware    |
| I am aware that ChatGPT can be used both for positive and negative ends in academe. | 124 | 4.39 | 4.06 | Fully Aware        |
| I am aware what tasks or applications ChatGPT is designed for.                      | 122 | 4.02 | 3.80 | Partially Aware    |
| Overall   |     | 4.22 | 3.93 | Fully Aware        |

Table 2 shows the results of the level of awareness of Bachelor of Elementary Education pre-service teachers in terms of familiarity with ChatGPT and the overall mean score of 4.22 with a descriptive rating of "Fully Aware," which means that the pre-service teachers "Possess proficiency and knowledge," suggests that participants in the study reported a high level of familiarity with ChatGPT. Pre-service teachers are aware and familiar with the term ChatGPT, how ChatGPT works, and its design application, and they are aware that This indicates a general awareness and recognition of the technology among the respondents. Some participants reported lower familiarity scores (closer to 0), while the majority showed higher familiarity (closer to 5). This variability points to individual differences in exposure and knowledge about ChatGPT within the surveyed group.

Meanwhile, the standard deviation of 3.93 highlights significant variability in participants' responses. The wide spread of scores suggests considerable diversity in the levels of familiarity reported by different respondents. This might be attributed to varying degrees of exposure, experiences, or sources of information regarding ChatGPT.

According to Farrakhia et al. (2023), students at higher education institutions use technology, primarily artificial

intelligence (AI), to manage their personal and academic lives in an expanded digital environment. A few learners are moving to online learning environments. Students can personalize their learning experiences with artificial intelligence's guidance, support, and assistance.

Table 3 shows the level of awareness of the Bachelor of Elementary pre-service teachers in terms of the Usefulness of ChatGPT as part of their education. It shows that the overall mean of 4.19 with a descriptive "Partially Aware" rating indicates that participants find ChatGPT relatively useful to their education. Most of the participants are aware that ChatGPT is valuable for their learning experience; they are also mindful that ChatGPT can help them understand complex concepts, ChatGPT also helps them provide information that they need by asking specific questions, they are also aware that ChatGPT can paraphrase long articles. Overall, they are aware of ChatGPT's potential applications in learning. Pre-service teachers can effectively utilize ChatGPT as a learning study tool. The standard deviation of 3.91 reveals a significant variability in participants' perceptions of ChatGPT's usefulness. The wide range of scores implies diverse opinions and experiences among respondents. This suggests a generally positive perception of the technology's practical applicability among the surveyed individuals.

Table 3. Level of Awareness of BEE Pre-service Teachers in the Usefulness of ChatGPT

| Statements  | N   | M    | SD   | Descriptive Rating |
|---|-----|------|------|--------------------|
| I am aware that ChatGPT is a valuable tool for enhancing my learning experience.          | 124 | 4.17 | 3.89 | Partially Aware    |
| I am aware what ChatGPT is and its potential applications in learning.                    | 123 | 4.18 | 3.90 | Partially Aware    |
| I am aware that ChatGPT is helpful in understanding complex concepts.                     | 123 | 4.23 | 3.94 | Fully Aware        |
| I am aware that ChatGPT can provide information that I need by asking specific questions. | 122 | 4.26 | 3.98 | Fully Aware        |
| I am aware that ChatGPT can paraphrase a long article or piece of information.            | 122 | 4.13 | 3.87 | Partially Aware    |
| Overall   |     | 4.19 | 3.91 | Partially Aware    |

Research by Mojadeddi, Z.M & Rosenberg, J (2023) mentioned that ChatGPT is helpful since it saves time for researchers and improves their learning process regarding data analysis, literature reviews, and paper authoring. Similar AI models, like ChatGPT, may quickly search a large body of literature and retrieve pertinent articles in response to user prompts or queries. Because these models can understand and interpret natural language, researchers may successfully explain their search criteria and receive results tailored to their needs.

Table 4 shows the results of the Bachelor of Elementary pre-service teachers' level of awareness in terms of the accuracy and reliability of ChatGPT with the mean of 4.06 with a descriptive rating of "Partially Aware," with a qualitative interpretation of "Can adequately understand." Indicates that learners always perceive ChatGPT as needing to be more accurate and reliable. They are partially aware that some of ChatGPT's given information is inaccurate, while they are partially aware that other search engines can consult ChatGPT's provided information. Participants are fully aware that misinformation may sometimes appear in ChatGPT, and lastly, they are partially mindful that some topics have decreased in inaccuracy. Overall, participants know that some ChatGPT-given information is only sometimes accurate and reliable. The standard deviation of 3.72 indicates a significant variability in participants' perceptions of the accuracy and reliability of ChatGPT.

Table 4. Level of Awareness of BEE Pre-service Teachers in the accuracy and reliability of ChatGPT

| Statements  | N   | M    | SD   | Descriptive Rating |
|---|-----|------|------|--------------------|
| I am aware that the information provided by ChatGPT for my academic needs is accurate.                          | 123 | 3.83 | 3.89 | Partially Aware    |
| I am aware that some information in ChatGPT are inaccurate  | 124 | 4.11 | 3.90 | Partially Aware    |
| I am aware that I can check the accuracy of ChatGPT information by consulting other search engines in internet. | 123 | 4.07 | 3.94 | Partially Aware    |
| I am aware that misinformation can sometimes appear in ChatGPT.   | 124 | 4.20 | 3.98 | Partially Aware    |
| I am aware that there are types of questions or topics that has decrease in inaccuracy                          | 122 | 4.90 | 3.87 | Partially Aware    |

|         |  |      |      |                 |
|---------|--|------|------|-----------------|
| Overall |  | 4.06 | 3.72 | Partially Aware |
|---------|--|------|------|-----------------|

While the mean score indicates a positive overall perception, the standard deviation suggests room for improvement. It underscores the iterative nature of model development, focusing on continuous enhancements to address user concerns and further elevate the accuracy and reliability of ChatGPT. Even if ChatGPT provides excellent chances for individualized instruction, tutoring support, and interactive Learning, utilizing it carefully and critically is crucial. To ensure an accurate and reliable learning experience, instructors and students can leverage ChatGPT's benefits by fusing AIAI capabilities with human expertise.

AlContentfy (2023), ChatGPT is an artificial intelligence model capable of generating and understanding human text and responding to various questions and prompts. However, like any other technology, ChatGPT has its limitations; it may sometimes generate inaccurate or inappropriate responses, especially when given incomplete or ambiguous information. ChatGPT may sometimes generate repetitive or irrelevant responses, particularly when it encounters a topic it has yet to be trained on.

Table 5 reveals the level of awareness of Bachelor of Elementary Education, pre-service teachers for integration of learning with an overall mean of 4.18 with a descriptive rating of "Partially Aware," with a qualitative interpretation of "Can adequately understand". The mean integration of 4.18 suggests that participants perceive ChatGPT as a high possibility of being integrated into learning environments. Participants are aware that they can incorporate ChatGPT as a learning tool. ChatGPT has positively impacted pre-service teachers' understanding of their course material. They are also mindful that ChatGPT is only one AIAI tool and that ChatGPT can be integrated into the education field and valuable in educational settings for learning purposes.

Table 5. Level of Awareness of BEE Pre-service Teachers of ChatGPT in the Integration of Learning

| Statements   | N   | M    | SD   | Descriptive Rating |
|--|-----|------|------|--------------------|
| I am aware that I can incorporate ChatGPT as a learning tool.                            | 123 | 4.20 | 3.93 | Fully Aware        |
| I am aware that ChatGPT has positively impacted my understanding of the course material. | 124 | 4.15 | 3.89 | Partially Aware    |
| I am aware that ChatGPT tool is only one kind of AI tool and I can use other AI          | 122 | 4.13 | 3.86 | Partially Aware    |

|  |     |      |      |                 |
|--|-----|------|------|-----------------|
| tools along with ChatGPT.  |     |      |      |                 |
| I am aware that ChatGPT can be integrated into the field of education                  | 124 | 4.14 | 3.90 | Partially Aware |
| I am aware that ChatGPT can be used in educational settings and for learning purposes. | 125 | 4.28 | 4.0  | Fully Aware     |
| Overall  |     | 4.18 | 3.90 | Partially Aware |

Pre-service teachers and educators can leverage artificial intelligence (AIAI) to create personalized, dynamic, and productive learning environments by incorporating ChatGPT into the classroom. To get the most out of ChatGPT, traditional teaching methods must be used in conjunction with it as a supplementary tool.

The standard deviation of 3.90 highlights a significant variability in participants' perceptions of ChatGPT's integration in Learning. The wide range of scores implies diverse opinions and experiences among respondents. This high mean result indicates a favorable agreement among the respondents regarding their awareness of the potential benefits of incorporating ChatGPT in education.

Research by Rueda, M (2023) states that ChatGPT can potentially improve student learning, there has been much interest in its application in education. This system can respond quickly and individually to meet the needs of each learner. It develops into a useful tool that encourages student engagement and cognitive growth.

Table 6. Level of Awareness of BEE Pre-service Teachers of ChatGPT in its Improvement and Support

| Statements   | N   | M    | SD   | Descriptive Rating |
|--|-----|------|------|--------------------|
| I am aware that I would benefit from additional guidance and training on how to use ChatGPT in learning. | 123 | 4.19 | 3.91 | Partially Aware    |
| I am aware that feedback would be valuable for the educational use of ChatGPT.                           | 123 | 4.14 | 3.87 | Partially Aware    |
| I am aware that there is a need more comprehensive guidance for effectively using ChatGPT.               | 123 | 4.13 | 3.88 | Fully Aware        |

|   |     |      |      |                 |
|---|-----|------|------|-----------------|
| I am aware that ChatGPT can adapt to user feedback and improve over time.                                   | 123 | 4.07 | 3.83 | Partially Aware |
| I am aware that there should be more customization options for tailoring ChatGPT to individual preferences. | 124 | 4.07 | 3.83 | Partially Aware |
| Overall   |     | 4.12 | 3.72 | Partially Aware |

Table 6 shows the level of awareness of Bachelor of Elementary Education pre-service teachers in terms of improvement and support of ChatGPT with a mean of 4.12 with a descriptive rating of "Partially Aware," which means that pre-service teachers "Can adequately understand." The mean suggests that participants perceive ChatGPT needs more comprehensive improvement and guidance for pre-service teachers to utilize ChatGPT as a learning tool. Participants are partially aware that ChatGPT needs improvement and support in terms of training and workshops on how to utilize ChatGPT in Learning; feedback is valuable for educational use, more comprehensive guidance, and more customization options for tailoring ChatGPT. The standard deviation 3.72 showed considerable variability in participants' perceptions regarding improvement and support for ChatGPT. It bodes well for the ongoing development of the technology, suggesting that users perceive the efforts to enhance and support ChatGPT positively.

AIContentfy (2023) states that ChatGPT could significantly impact the customer service industry. ChatGPT's potential for improving customer service is essential. Students could inquire ChatGPT about a specific topic, and they may receive an instant response with explanations.

Table 7 summarizes the level of awareness of BEED students using ChatGPT as a learning tool. Regarding the pre-service teachers' familiarity with ChatGPT, its usefulness, accuracy, reliability, integration in Learning, and improvement and support, most participants use ChatGPT due to its benefits in their learning experience.

Table 7. Summary of level of awareness of BEE Pre-service Teachers in using ChatGPT as a learning tool

| Statements                | M    | SD   | Descriptive Rating | Qualitative Interpretation          |
|---------------------------|------|------|--------------------|-------------------------------------|
| Familiarity with ChatGPT. | 4.22 | 3.93 | Fully Aware        | Possesses proficiency and knowledge |

|                          |      |      |                 |                           |
|--------------------------|------|------|-----------------|---------------------------|
| Usefulness of ChatGPT    | 4.19 | 3.91 | Partially Aware | Can adequately understand |
| Accuracy and Reliability | 4.06 | 3.72 | Partially Aware | Can adequately understand |
| Integration in Learning  | 4.18 | 3.90 | Partially Aware | Can adequately understand |
| Improvement and Support  | 3.72 | 3.72 | Partially Aware | Can adequately understand |
| Overall                  | 4.15 | 3.83 | Partially Aware | Can adequately understand |

Regarding familiarity with ChatGPT, with a mean of 4.22, participants are "fully aware" of what ChatGPT is and its potential benefits. They possessed a general awareness and recognition of the technology. The usefulness of ChatGPT indicates that participants find ChatGPT relatively valuable for their education, with a mean of 4.19 with "partially aware." It helps them provide information by asking specific questions and understanding complex concepts. Inaccuracy and reliability: pre-service teachers perceive ChatGPT as relatively accurate and reliable, with a mean of (m=4.06) and a descriptive rating of "partially aware." Regarding integration in Learning, a mean of 4.18 with a descriptive rating of "partially aware" suggests that participants perceive ChatGPT could integrate into learning environments. It indicates a generally positive acknowledgment of the role of ChatGPT in educational settings. While improvement and support with a mean of 4.12, the results suggest that participants perceive ChatGPT needs more comprehensive improvement in their customer service—comprehensive guidance for learners to utilize ChatGPT and meet their individual needs.

Table 8 reveals the frequency distribution and percentage of the respondents for the challenges that pre-service teachers have encountered in utilizing ChatGPT. Aside from its potential benefits in educational settings, ChatGPT users may encounter several challenges.

Table 8. Frequency distribution of the challenges that pre-service teachers encountered in utilizing ChatGPT

| Challenges                           |     | Frequency (F) | Percentage (P) |
|--------------------------------------|-----|---------------|----------------|
| Misinformation                       | Yes | 101           | 80.8%          |
|                                      | No  | 19            | 19.2%          |
| Inaccurate Information               | Yes | 97            | 77.6%          |
|                                      | No  | 28            | 22.4%          |
| Limited Understanding of the Subject | Yes | 106           | 84.8%          |
|                                      | No  | 19            | 15.2%          |

|                                       |     |     |       |
|---------------------------------------|-----|-----|-------|
| Over-Reliance on ChatGPT              | Yes | 106 | 84.8% |
|                                       | No  | 19  | 15.2% |
| Privacy Concerns                      | Yes | 103 | 82.4% |
|                                       | No  | 22  | 17.6% |
| Bias in response                      | Yes | 93  | 75.6% |
|                                       | No  | 30  | 24.4% |
| Lack of Context Awareness             | Yes | 97  | 77.6% |
|                                       | No  | 28  | 22.4% |
| Concerns about Authenticity           | Yes | 103 | 82.4% |
|                                       | No  | 22  | 17.6% |
| Difficulty in Evaluating Sources      | Yes | 109 | 87.2% |
|                                       | No  | 16  | 12.8% |
| Limited Engagement and Motivation     | Yes | 104 | 83.2% |
|                                       | No  | 21  | 16.8% |
| Language Barriers                     | Yes | 100 | 80%   |
|                                       | No  | 25  | 20%   |
| Lack of Real-Time Interaction         | Yes | 104 | 83.2% |
|                                       | No  | 21  | 16.8% |
| Inability to Ask Clarifying Questions | Yes | 96  | 76.8% |
|                                       | No  | 29  | 23.2% |
| Technical Issues                      | Yes | 101 | 81.5% |
|                                       | No  | 23  | 18.5% |
| Limited Feedback for Improvement      | Yes | 100 | 81.3% |
|                                       | No  | 23  | 18.7% |

The 125 respondents must answer yes or no if they encountered the challenges mentioned. According to the results, most students have faced challenges in utilizing ChatGPT. The highest rating of the challenges is the "Difficulty in Evaluating Sources," which has 87.2%; pre-service may find it challenging to verify the accuracy of information provided by ChatGPT. Followed by "Limited Understanding of the Subject" with 84.8%, ChatGPT processes text in chunks, and users may not understand the response, and "Over-Reliance on ChatGPT," excessive dependence on ChatGPT for information may discourage pre-service teachers from developing critical thinking skills. Next are "Limited Engagement and Motivation" and "Lack of Real-Time Interaction," with 83.2%; ChatGPT primarily provides text-based responses; the static nature of the interaction may lead to a lack of engagement, especially for pre-service teachers who prefer dynamic and interactive learning experiences. "Privacy Concerns" with 82.4%, pre-service teachers are aware of potential privacy implications, and "Concerns about Authenticity," ChatGPT does not provide source attribution for the information it generates. Next is "Technical Issues," with 81.5%; users with unstable internet connections may face difficulties establishing and maintaining a connection with the ChatGPT server.

Next is "Limited Feedback for Improvement," with 81.3%; users may encounter issues related to the system's behavior at a broader level, such as concerns about bias or ethical considerations. Next is "Misinformation," with 80.8%; the model may inadvertently generate incorrect, misleading, or outdated information. Next is "Language Barriers," with

80%; the model may not fully understand or incorporate cultural nuances specific to certain languages. Next is "Inability to Ask Clarifying Questions," with 76.8%; when faced with unclear language or ambiguous terms, the model cannot proactively request additional context or details to understand the user's query better. Next is "Inaccurate Information," with 77.6%, ChatGPT may respond to prompts or false information, and "Lack of Context Awareness," the model may struggle to understand the context of a conversation fully. Lastly, for "Bias in Response," with 75.6%, ChatGPT is trained on diverse data, which may include biases. As a result, pre-service teachers might receive responses that unintentionally reflect or perpetuate societal biases.

However, recent research has highlighted various issues concerning the use of ChatGPT, including the risks of privacy and ethical issues, according to Chukwuere, Lund & Wang (2023), misinformation about science or distribution of fake or inaccurate content according to Liebrez et al. (2023), biased responses or outputs by Halaweh, Kitamura, Lund, et al. (2023), a lack of creativity and originality of AI-generated responses by Chakravarti, Dwivedi et al (2023), and the restricted use of training data for ChatGPT by Gilson, Talan & Kalinkara (2023). More specifically, as Dergaa et al. (2023) noted, given the limited data in the training data set and ChatGPT's inability to distinguish between reliable and unreliable sources, responses produced by ChatGPT contained misleading accuracies and misrepresentations, potentially causing a detrimental effect on users. Thus, although ChatGPT continually obtains updated data via user engagement to improve its capabilities, concerns arise from this fast AIAI development.

These challenges highlight potential areas for improvement in the user experience and communication effectiveness with ChatGPT. Understanding students' challenges allows for targeted adjustments and refinements to enhance ChatGPT's usability and effectiveness in educational settings.

## 6. FINDINGS

The study results revealed that pre-service teachers' awareness of ChatGPT was above average, with an overall mean of 4.15. Familiarity with ChatGPT with an overall mean of 4.22, with a descriptive rating of fully aware. The usefulness of ChatGPT shows an overall mean of 4.19, with a descriptive rating of partially aware. Accuracy and Reliability with an overall mean of 4.06, with a descriptive rating of partially aware. Integration in Learning with an overall mean of 4.18, with a descriptive rating of partially aware. Lastly, Improvement and Support has an overall mean of 4.12, with a descriptive rating of partially aware. Pre-service teachers revealed that ChatGPT can be a valuable tool for enhancing their learning experiences and has potential applications in Learning. ChatGPT is an invaluable resource in the field of education, offering all-encompassing support for all aspects of Learning. ChatGPT makes learning more dynamic, individualized, and approachable by acting as a virtual tutor,



writing assistant, coding buddy, brainstorming partner, or knowledge source. The importance of revolutionary tools like ChatGPT in empowering students on their academic journey becomes increasingly crucial as technology continues to define the future of education.

However, despite the benefits of ChatGPT, ChatGPT also presents with challenges and risks, such as misinformation at 80.8%, inaccurate information at 77.6%, limited understanding of the subject at 84.8%, over-reliance on ChatGPT at 84.8%, privacy concerns with 82.4%, bias in response with 75.6%, lack of context awareness with 77.6%, concerns about authenticity with 82.4%, difficulty in evaluating sources with 87.2 %, limited engagement and motivation with 83. 2%, language barriers with 80%, lack of real-time interaction with 83.2%, inability to ask clarifying questions with 76.8%, technical issues with 81.5%, and limited feedback for improvement with 81.3%. With the presented challenges, results revealed that learners are well aware of the risks of utilizing ChatGPT as a tool for Learning. Educators should provide training to educate them on its functions and ensure they can use the tool properly.

## 7. CONCLUSION

This study aimed to determine the level of awareness of the Bachelor of Elementary pre-service teachers in utilizing ChatGPT as a tool for Learning. According to the data gathered from the pre-service teachers, in terms of familiarity with ChatGPT, pre-service teachers possessed a general awareness and recognition of the technology. For the usefulness of ChatGPT pre-service teachers find ChatGPT valuable for their learning experience. For accuracy and reliability, pre-service teachers are aware that not all information given by ChatGPT is accurate and reliable, and misinformation is inevitable. For integration in Learning, pre-service teachers perceived that ChatGPT could be integrated into learning environments, which indicates a generally positive acknowledgment of the role of ChatGPT in educational settings. Lastly, ChatGPT needs improvement, support for academic use, and more comprehensive guidance. Aside from its benefits, pre-service teachers also encounter challenges in utilizing ChatGPT.

Data analysis concluded that there is a varied awareness level among the pre-service teachers population. The data shows a significant variation in response, indicating various perspectives on integrating ChatGPT into the learning process.

## 8. RECOMMENDATIONS

From the conclusion derived from the data gathered, the researchers offer the following recommendations:

1. Educational institutions may use the results of this study to provide awareness and understanding to the pre-service teachers to enhance their knowledge about ChatGPT as a learning tool.

2. The results of this study may be used to design tasks that encourage learners to use ChatGPT responsibly, providing guidelines for responsible usage of ChatGPT.

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