# Influence of ChatGPT on Students' Learning Behavior in Faculty of Education, University of Uyo

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#### Abstract

This study investigates the influence of ChatGPT, an AI-driven conversational model developed by OpenAI, on students' learning behavior within the Faculty of Education at the University of Uyo. The rapid integration of technology in education, particularly AI, has transformed traditional learning practices, offering significant potential for enhancing student engagement and learning outcomes. Despite the growing use of AI tools like ChatGPT, there is a paucity of empirical research on their impact on students' learning behaviors in higher education contexts. This study addresses this gap by examining how ChatGPT affects students' engagement, comprehension, and overall academic performance. Utilizing a descriptive survey design, data were collected from 103 second-year students through a structured questionnaire. The instrument was validated by experts and tested for reliability, yielding a Cronbach Alpha coefficient of 0.84. The findings reveal that students perceive ChatGPT positively, noting improvements in their understanding, problem-solving abilities, motivation, and confidence. However, concerns were raised about a potential decrease in critical thinking skills due to overreliance on AI-generated responses. The study also explores gender differences in the influence of ChatGPT, finding no significant variation between male and female students' learning behaviors. The results highlight the need for educators to integrate AI tools thoughtfully, balancing their benefits with the promotion of critical thinking and independent learning skills. The study provides valuable insights for policymakers, educators, and researchers on the effective incorporation of AI in educational settings, contributing to the growing body of literature on AI in education. Recommendations include the development of guidelines for the responsible use of AI tools to enhance learning while mitigating potential drawbacks.

#### Introduction

Education has undergone a paradigm shift in the digital age. The reality of education today includes addressing the digital transformation affecting universities and other educational institutions (Anderson et al., 2023). The integration of technology in education has become increasingly prevalent, transforming traditional learning practices. Technology has revolutionized the way students engage with course materials and interact with instructors.

Technology advancements have significantly influenced various aspects of life, including the way educational systems function and prepare students for an increasingly interconnected world. Embracing technology is crucial for high school students, as it not only enhances their learning experience but also equips them with the skills needed to succeed in the modern workforce, where technology plays a critical role Among the latest advancements in educational technology is the incorporation of artificial intelligence (AI), which holds significant promise for enhancing the learning experience.

Artificial intelligence (AI) has established itself as a transformative force in the digital era, influencing not only companies but also the field of academic research. Artificial Intelligence (AI) is a field of study and technology that aims to create machines capable of performing tasks that typically require human intelligence. The development of Artificial Intelligence (AI) has led to digital disruption in the education system because of the rapid advances it necessitates for education (García-Peñalvo, 2023). Along these lines, UNESCO (2019) differentiates three dimensions of linking AI and education: learning to use AI tools in the classroom, learning to know AI and its technical possibilities and raising public awareness of the impact of AI on people's lives. According to Strong (2016), artificial Intelligence provides every learner their own personalized learning experience, teachers are provided with their own AI teaching assistant, consistent support to keep learning on track and intelligent support for collaborative learning. One notable example of AI technology that support to keep learning on track is ChatGPT, a conversational AI model developed by OpenAI.

Among the tools offered by AI, ChatGPT has become very popular by the first quarter of 2023. This AI launched for free to the public on 22 November 2022. In the first five days, it had one million users; in the following two months, it attained 100 million (Tong and Zhang, 2023). ChatGPT allows the creation of texts, codes, stories, poems, etc., of considerable quality (Rozencwajg and Kantor, 2023). It is a highly complex language model that brings together more than 175 billion parameters to generate coherent responses in the context of the conversation with this AI (Kung et al., 2023). It also facilitates dialogue and interaction between the user and the AI. The response is generated quickly, structured, well-written, and based on various sources of information (Carrasco et al., 2023). Since the publication of this tool, its impact in the university context has been almost immediate. While there is little empirical peer-reviewed research on its impact on universities (Crawford, Cowling, and Allen, 2023), there are known implications for teaching, learning, academic research, epistemology, the digital transformation of educational institutions, and even ethics (García-Martínez et al., 2023).

ChatGPT, has proven particularly beneficial for high school students seeking to enhance their understanding of various subjects. The ChatGPT platform allows students to engage in interactive conversations, similar to human interactions, where they can clarify doubts, explore new concepts, and reinforce their learning. Utilising innovative tools like ChatGPT offers numerous advantages, such as improved student engagement, efficiency, and enjoyment, ultimately revolutionising their study experience. ChatGPT utilizes natural language processing

algorithms to engage in interactive conversations with users, providing responses that are contextually relevant and coherent. As technology continues to evolve and reshape the educational landscape, the integration of AI, exemplified by ChatGPT, holds immense promise for transforming learning behavior within the Faculty of Education. By harnessing the power of AI-driven conversational agents, educators can create immersive and personalized learning experiences that cater to the diverse needs of students.

Gender is a generic term that classifies into male and female those identifiable characteristics exhibited by the human population. According to Encarta Dictionary(2015), gender is somebody's sex; the sex of a person or organism or of a whole category of people or organisms, often used euphemistically to the word sex. Oriafo(2012) defined gender as cultural understanding about what constitutes masculinity and feminist in a society. Thus, while sex is biologically defined, gender is socially defined. Oriafo went further to state that being male and female is a matter of sex, but to be masculine or feminine is a matter of sex, but to be masculine or feminine is a matter of ChatGPT on students' learning behavior within the Faculty of Education.

#### Statement of the problem

The integration of artificial intelligence (AI) technologies like ChatGPT poses both opportunities and challenges for shaping students' learning behavior. While the potential benefits of integrating AI technologies like ChatGPT into education are widely acknowledged, there remains a gap in understanding its impact on students' learning behavior, particularly within the context of higher education institutions such as the Faculty of Education. Despite the growing adoption of AI-driven educational tools, there is limited empirical evidence to support their effectiveness in improving student engagement, comprehension, and overall learning outcomes. Existing studies have primarily focused on the technical capabilities of AI models like ChatGPT, highlighting their ability to generate contextually relevant responses and simulate human-like conversations (Radford et al., 2019). Moreover, concerns have been raised regarding the potential implications of AI integration for student autonomy, critical thinking skills, and dependency on technology-mediated learning environments (Johnson, 2020). As such, there is a need for empirical research to assess the influence of ChatGPT on students' learning behavior. Additionally, the Faculty of Education serves as a unique context for investigating the influence of ChatGPT, given its focus on preparing future educators and researchers. Understanding how ChatGPT shapes students' learning behaviors within this specialized academic domain is crucial for informing pedagogical practices, curriculum development, and the effective integration of AI technologies into teacher training programs.

#### **Purpose of the study**

The main purpose of this study is to determine the influence of ChatGPT on sudents' learning behavior in faculty of education, University of Uyo. Specifically, the study sought to:

- 1. Determine the influence of ChatGPT on students' learning behavior in faculty of education, university of uyo.
- 2. Determine the influence of ChatGPT on students' learning behavior by gender in faculty of education

#### Significance of the study

The study and its findings could be beneficial to students, lecturers researchers, policymakers and faculty administrator. This study would help students optimize their learning strategies and effectively utilize AI tools. This study would provide valuable informstion on how Students can ask ChatGPT questions about specific topics or concepts they are struggling with, and the AI can provide explanations. The students would have problem solving skills as ChatGPT can increase the problem solving skills of students by guiding them through the steps of solving problems, this study would create awareness and make students to know that ChatGPT can provide additional examples, analogies, and explanations to reinforce students' understanding of complex concepts or topics they are studying. The findings of this study would help Students to use ChatGPT to get suggestions for improving their essays, reports, or other written assignments, including feedback on grammar, sentence structure, word choice, etc. They can use the tool to write essays, craft the first draft of their written assignments, which can save time to improve the fine details and overall quality of the work.

Lecturers and teachers in the Faculty of Education can benefit from insights on how to integrate ChatGPT and similar tools into their teaching practices, enhancing student engagement and learning outcomes. This study would help teachers to use ChatGPT to create and curate educational materials, such as presentations, worksheets, quizzes, and other resources tailored to their students' needs.

This study would contributes to the growing body of research on AI in education, providing valuable insights for future investigations and informing evidence-based practices. This study would help researchers as <u>ChatGPT</u> can support and streamline the research process for various academic projects, assignments, or personal interests. It can facilitate many steps in a research process this study would help Policymakers as findings from this study can inform policy decisions regarding the integration of AI tools in educational settings, ensuring responsible and effective use. This study would help faculty administrators understand the impact of ChatGPT on students' learning behavior in making informed decisions about resource allocation, curriculum development, and faculty support.

#### **Research Questions**

- 1. What is the influence of ChatGPT on students' learning behavior in faculty of education, university of uyo.
- 2. What is the influence of ChatGPT on students' learning behavior by gender in faculty of education

#### **Research Hypotheses**

- 1. There is no significant influence of ChatGPT on students' learning behavior in faculty of education, university of uyo.
- 2. There is no significant influence of ChatGPT on students' learning behavior by gender in faculty of education.

#### **Research Methodology**

This section presents the procedure to be adopted in carrying out the study. It includes design of the study, area of the study, population of the study, sample and sampling technique, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection and method of data analysis.

The research design adopted for the study is a descriptive survey. This design is suitable in collecting data from a large sample drawn from a large population. According to Yihang(2023), descriptive statistics is the simplest form of statistics: it is a tool to help people organize and summarize the inevitable variability in collections of actual observations or scores, It demonstrates the relationship between variables in a given sample, and it is often used to clean up and summarize scattered data, which is crucial for making inferential statistical comparisons and conducting research.

The population of the study consist all the second year students in the Department of Computer science, State Polytechnic with a total population size of one hundred and forty students (140) students. The researcher used simple random sampling technique to sample 103 students from the total population of 140. The sample size selection was determined by Krejcie and Morgan (1970) population and sample template.

The instrument used for collecting data is a structured questionnaire titled: Influence of ChatGPT on Students Learning Behavior(ICSLB). This questionnaire was used to get the desired data from the students. This instrument (questionnaire) is divided in two sections. Section (A, B and C) Section A focused on collection of information on personal data of respondents, section B test the background knowledge of the respondent while section C seeks the respondent's idea on the subject matter of 35 items. The questionnaire was rated using four points scales of the following: Strongly Agree (SD = 5 points), Agree (A = 4 points), undecided = 3, Disagree (D = 2) points) and Strongly Disagree (SD = 1 point). The instrument was subjected to face validity by two research expects in the faculty of Education, Uniuyo. They were required to access the content coverage, the suitability of the items, language usage and item management in logical sequence. Comments and inputs of the experts were incorporated and used for medication of the final copy of the instrument. The questionnaire was tested on 30 students that were not part of the sampled size to determine it reliability using Cronbach Alpha reliability test. The reliability coefficient showed 0.84 which indicate that the instrument is adequate for the study. The questionnaire was administered on the respondent through research assistants who were briefed on the study. Out of 103 questionnaires administered 102 was collected and is in line with the sample size. Two days was used for the administration and collection. Data collected in the study

was processed, tabulated and analyzed with mean and standard deviation table and research hypotheses was tested using one sample t-test statistics at 0.05 level of significance at relevant degree of freedom with the use of Statistical Package for Social Science (SPSS).

The following decision rule was used to guide the decision of the study. Mean score from 3.51 and above was accepted as Agree while mean scores below 3.51 was taken as Disagree. When the P-value is less than theoretical critical value of 0.05 level of significance, then the null hypothesis is rejected and the alternative hypothesis is accepted.

The remark was gotten as follows:

| Strongly Agree (SA)   | - | - | 4.51 - 5.00 |
|-----------------------|---|---|-------------|
| Agree(A)              | - | - | 3.51 - 4.50 |
| Undecided(U)          | - | - | 2.51 - 3.50 |
| Disagree(D)           | - | - | 1.51 - 2.50 |
| Strongly Disagree(SD) |   | - | 1.00 - 1.50 |

The following measures were taken to ensure that they study compiled with research ethics. The researcher sought for and obtained permission of the Heads of Department and school involved for the study before carrying out the experiment. Confidentiality of information was ensured. All information obtained from any source for the study such as data from various institutions was treated with utmost confidentiality and used purely for the study were duly acknowledge using references in order to avoid plagiarism.

# **Result and Discussion of Findings**

This section presents the result of the data analysis for the study. The presentations were organized according to the research questions and null hypotheses formulated to guide the study. The findings were also discussed.

1. What is the influence of ChatGPT on students' learning behavior in Faculty of Education, University of Uyo.

| I ucuit | y of Education, entreprize of ego       |     |      |      |         |
|---------|---|-----|------|------|---------|
| s/n     | Items                                   | Ν   | Mean | SD   | remarks |
| 1.      | Using ChatGPT has enhance my understang | 102 | 3.92 | 0.99 | Agreed  |
| 2.      | ChatGPT has become integral of study    | 102 | 4.42 | 0.58 | Agreed  |
| 3.      | ChatGPT has improve my ability to find  | 102 | 4.30 | 1.01 | Agreed  |
|         | solutions                               |     |      |      |         |
| 4.      | I rely on chargpt more than traditional | 102 | 4.31 | 0.93 | Agreed  |
|         | resources                               |     |      |      |         |
| 5.      | ChatGPT has help me to stay engaged and | 102 | 4.19 | 1.17 | Agreed  |
|         | motivated                               |     |      |      |         |

# Table 1: Summary of mean responses of ChatGPT on students' learning behavior in Faculty of Education, University of Uyo

#### ASIA-AFRICA JOURNAL OF RECENT SCIENTIFIC RESEARCH ISSN: 2814-0400 VOL. 4(1) doi:10.5281/zenodo.1234567 Available online at: www.journals.iapaar.com/Index.php/aajrsr 6 ChatGPT has led to my decrease in critical 102 4.46 0.88 Agreed thinking 7 Chatgp thas positiviely influence my academic 102 4.27 0.96 Agreed activites 8 I feel more confident when using ChatGPT 102 4.36 0.93 Agreed 9 ChatGPT has encourage me to explore new 3.85 Agreed 102 1.08 topics 10 ChatGPT has improve my communication 102 4.00 0.97 Agreed skills

Source: Researcher (2023)

Summary of mean responses of ChatGPT on students' learning behavior in Faculty of Education, University of uyo shows the mean and standard deviation of ChatGPT on students' learning behavior in Faculty of Education, University of Uyo in Table 1. It is shown that the mean range of the items falls between 3.85 and 4.46 and the standard deviation range between .01 to .99. This is evidence that students agreed to the items of ChatGPT on students' learning behavior in Faculty of Education.

# **Research Question 2**

What is the influence of ChatGPT on students' learning behavior by gender in Faculty of Education.

| genuer n | i Faculty of Education, Oniversity | <b>o</b> i Cy0. |      |          |          |
|----------|------------------------------------|-----------------|------|----------|----------|
| s/N      | Items                              | group           | Mean | Differen | Remark   |
|          |                                    |                 |      | ce       |          |
| 1        | Using ChatGPT has enhance my       | male            | 3.11 | 1.36     | Disagree |
|          | understanding                      | female          | 4.48 |          | Disagree |
| 2        | ChatGPT has become integral        | male            | 4.40 | 0.02     | Disagree |
|          | of study                           | female          | 4.43 |          | Disagree |
| 3        | ChatGPT has improve my             | male            | 3.52 | 1.32     | Disagree |
|          | ability to find solutions          | female          | 4.85 |          | Disagree |
| 4        | I rely on ChatGPT more than        | male            | 4.07 |          | Disagree |
|          | traditional resources              | female          | 4.48 | 0.40     | Disagree |
| 5        | ChatGPT has help me to sta         | male            | 3.78 |          | Disagree |
|          | engaged and motivated              | female          | 4.48 | 0.69     | Disagree |
| 6        | ChatGPT has led to my              | male            | 4.28 |          | Disagree |
|          | decrease in critical thinking      | female          | 4.58 | 0.29     | Disagree |
| 7        | ChatGPT has positiviely            | male            | 3.80 |          | Disagree |
|          | influence my academic              | female          | 4.60 | 0.79     | Disagree |

 Table 2: Summary of mean responses of ChatGPT on students' learning behavior by gender in Faculty of Education, University of Uyo.

|    | activites                   |        |      |      |          |
|----|-----------------------------|--------|------|------|----------|
| 8  | I feel more confident when  | male   | 4.21 |      | Disagree |
|    | using ChatGPT               | female | 4.46 | 0.25 | Disagree |
| 9  | ChatGPT has encourage me to | male   | 3.35 |      | Disagree |
|    | explore new topics          | female | 4.20 | 0.84 | Disagree |
| 10 | ChatGPT has improve my      | male   | 3.90 |      | Disagree |
|    | communication skills        | female | 4.08 | 0.17 | Disagree |

Source: Researcher (2023). df=101, n = 103, level of significance = 0.05

From Table 2, It is shown that the mean range of the items falls between 3.11 and 4.60. The mean difference indicates that male and female students in the Faculty of Education exhibit similar learning behavior, with no notable gender-based differences.

# **Research Hypothesis 1**

There is no significant influence of ChatGPT on students' learning behavior in Faculty of Education, University of Uyo.

| Table 3: Summary of t-test analysis on significant influence of ChatGPT on student | ts' |
|--|-----|
| learning behavior in Faculty of Education, University of Uyo                       |     |

| s/n | Items                                   | Mean | SD   | t-value | p-value | Decision |
|-----|---|------|------|---------|---------|----------|
| 1.  | Using ChatGPT has enhance my            | 3.92 | 0.99 | 39.92   | .001    | S        |
|     | understang                              |      |      |         |         |          |
| 2.  | ChatGPT has become integral of study    | 4.42 | 0.58 | 75.99   | .001    | S        |
| 3.  | ChatGPT has improve my ability to       | 4.30 | 1.01 | 42.92   | .001    | S        |
|     | find solutions                          |      |      |         |         |          |
| 4.  | I rely on ChatGPT more than traditional | 4.31 | 0.93 | 46.68   | .001    | S        |
|     | resources                               |      |      |         |         |          |
| 5.  | ChatGPT has help me to stay engaged     | 4.19 | 1.17 | 35.98   | .001    | S        |
|     | and motivated                           |      |      |         |         |          |
| 6   | ChatGPT has led to my decrease in       | 4.46 | 0.88 | 50.83   | .001    | S        |
|     | critical thinking                       |      |      |         |         |          |
| 7   | ChatGPT thas positiviely influence my   | 4.27 | 0.96 | 44.67   | .001    | S        |
|     | academic activites                      |      |      |         |         |          |
| 8   | I feel more confident when using        | 4.36 | 0.93 | 47.31   | .001    | S        |
|     | ChatGPT                                 |      |      |         |         |          |
| 9   | ChatGPT has encourage me to explore     | 3.85 | 1.08 | 35.88   | .001    | S        |
|     | new topics                              |      |      |         |         |          |
| 10  | ChatGPT has improve my                  | 4.00 | 0.97 | 41.32   | .001    | S        |
|     | communication skills                    |      |      |         |         |          |

df=102, n = 103, level of significance = 0.05

Table 3 above shows that the P-value .001 is less than the level of significance value 0.05 at 102 degrees of freedom which implies significance. Hence, the null hypothesis which states

that there is no significant influence on is hereby rejected. The findings shows that there was a significant influence on ChatGPT on students' learning behavior in Faculty of Education, University of Uyo.

# **Research Hypothesis 2**

There is no significant influence of ChatGPT on students' learning behavior by gender in Faculty of Education.

| Table 4: Summary of t-test     | analysis on significant influence of Cha | atGPT on students' |
|--------------------------------|--|--------------------|
| learning behavior by gender in | Faculty of Education, University of Uyo  |                    |

| S/N | Items   | Group  | Mean | t-value | p-value | Decisio |
|-----|---|--------|------|---------|---------|---------|
|     |   |        |      |         |         | n       |
| 1   | Using ChatGPT has enhance my understanding              | Female | 4.48 | 9.28    | .001    | S       |
|     | C C   | Male   | 3.11 |         |         |         |
| 2   | ChatGPT has become integral of study                    | Female | 4.43 | 9.24    | .001    | S       |
|     |   | Male   | 4.40 |         |         |         |
| 3   | ChatGPT has improve my ability to find solutions        | Female | 4.85 | 8.50    | .001    | S       |
|     |   | Male   | 3.52 |         |         |         |
| 4   | I rely on ChatGPT more than traditional resources       | Female | 4.48 | 2.23    | .028    | NS      |
|     |   | Male   | 4.07 |         |         |         |
| 5   | ChatGPT has help me to stay engaged and motivated       | Female | 3.48 | 3.06    | .003    | S       |
|     |   | Male   | 4.78 |         |         |         |
| 6   | ChatGPT has led to my decrease in critical thinking     | Female | 4.58 | 1.68    | .095    | NS      |
|     | C C   | Male   | 4.28 |         |         |         |
| 7   | ChatGPT has positiviely influence my academic activites | Female | 4.60 | 4.42    | .001    | S       |
|     |   | Male   | 3.80 |         |         |         |
| 8   | I feel more confident when using ChatGPT                | Female | 4.46 | 1.35    | .179    | NS      |
|     |   | Male   | 4.21 |         |         |         |
| 9   | ChatGPT has encourage me to explore new topics          | Female | 4.20 | 4.16    | .001    | S       |
|     | -   | Male   | 3.35 |         |         |         |
| 10  | ChatGPT has improve my communication skills             | Female | 4.08 | 0.90    | .368    | NS      |
|     |   | Male   | 3.90 |         |         |         |

df=101, n = 103, level of significance = 0.05

From Table 4, the t values ranges from 0.90 to 4.42. Table 4 shows that the p-values are not the same which indicates that the significance level of the influence of ChatGPT on students'

learning behavior varies across aspects of learning behavior in the Faculty of Education. Aspect of learning behavior such as using ChatGPT has enhance my understanding (p=0.01), ChatGPT has become integral of study(p=0.01), ChatGPT has improve my ability to find solutions(p=0.01), ChatGPT has help me to stay engaged and motivated(p=0.01), ChatGPT has positively influence my academic activities (p=0.01) and ChatGPT has encourage me to explore new topics(p=0.01) indicate a significant influence of ChatGPT on students' learning performance in Faculty of Education while while item four, six, eight and ten shows no significance as their p values is greater than the level of significance value 0.05 at 101 degrees of freedom. This findings indicate that the influence of ChatGPT on students learning behavior on the items being measured is not uniform and maybe specific to certain characteristics or items, but since the items with p-values (0.01) is the most frequently occurred items, the researcher concluded that there is significant influence of ChatGPT on students' learning behavior by gender in Faculty of Education.

#### **Discussion of Findings**

Based on the findings from Table 1 and 3 the following discussions were made: The result of hypothesis one showed that P - value of .001 is less than the theoretical critical value 0.05 which is the level of significance at 102 degrees of freedom. This means that there is a significant influence in the mean responses on the influence of ChatGPT on students' learning behavior of students in Faculty of Education, University of uyo. Consequently, the null hypothesis was rejected. This results was further confirmed based on the descriptive analysis made in respect of research question one which revealed that the respondents agreed to the items of ChatGPT on students' learning behavior in faculty of education, the findings also shows that there was a significant influence on ChatGPT on students' learning behavior in Faculty of Education, University of uyo.

This study is in line with Giovanna et al (2023) invesitigated This study aimed to investigate the effects of ChatGPT on student students learning behavior: motivation and engagement.). The research indicates that ChatGPT significantly increase student learning behavior, motivation and engagement in the learning process.

Based on the findings from Table 2 and 4, the following discussions were made: The result of hypothesis one showed that P - value of .001 is less than the theoretical critical value 0.05 which is the level of significance at 101 degrees of freedom This findings indicate that the influence of ChatGPT on students learning behavior on the items being measured is not uniform and maybe specific to certain characteristics or items, but since the items with p-values(0.01) is the most frequently occurred items, the researcher concluded that There is significant influence of ChatGPT on students' learning behavior by gender in faculty of education.

This study is line According to José-María et al (2023) who investigated on Use of ChatGPT at University as a Tool for Complex Thinking: Students' Perceived Usefulness. gender is a factor that significantly affects the habit of ChatGPT user behavior.

#### **Educational Implications**

The findings of the present study have obvious educational implications for students, teachers and ministries of education. The implication of this study is that students tend to concentrate more on ChatGPT for studying and sharing of information. Students are often capable of submitting their work in the specified time frame because they are more concentrated on using ChatGPT. With the extensive and appropriate use of ChatGPT, students these days are varying more on such platforms to gain information and knowledge instead of looking out for the same in books, journals, or notes, students' reading habits and their learning and research skills are being improved. Therefore, well usage of ChatGPT is a great resource to students advantages with tons of information, opportunities and experiences.

#### Conclusion

In conclusion, this study investigates the influence of ChatGPT to enhance students' learning behavior in the Faculty of Education, highlighting its capacity to support academic achievement, critical thinking, collaboration, and self-directed learning. As AI technology continues to evolve, it is crucial to explore its impact on education and develop effective strategies for integration, ensuring responsible and ethical use. Now-a-days, ChatGPT has become an indispensable part of education, mainly for higher education. The study had shown that internet usage had significant influence on learning motivation in Computer science Education. Internet usage make learning more interesting, practical, realistic and appealing. ChatGPT also enable teachers and students to participate actively and effectively in lesson sessions. ChatGPT was considered an essential professional resource for work, communication, and education. It gives everyone instant access to an endless supply of knowledge. ChatGPT is necessary tool that will help them to fit into this technology driven age.

#### Recommendations

Based on the educational implication of the results of this study, the following recommendation are made:

- 1. Enlightenment campaign, workshops, seminars and symposium should be organized for teachers by school authorities, Federal and State ministries of Education to create awareness of the efficacy of the strategy and then sentisize the adoption of the strategy in their various schools.
- 2. The faculty Encourage faculty members to incorporate ChatGPT into their teaching practices, promoting effective usage and addressing potential concerns.
- 3. The faculty management should establish clear guidelines for students and faculty on the ethical use of ChatGPT, emphasizing academic integrity and responsible AI-generated content.
- 4. Teachers should utilize ChatGPT to support students with varying learning styles, abilities, and language proficiency, promoting inclusive learning environments.

- 5. Teachers should regularly evaluate the impact of ChatGPT on students' learning behavior, adjusting integration strategies and guidelines as needed.
- 6. Government should provide training and resources for faculty members to effectively integrate ChatGPT into their teaching practices.
- 7. The faculty should offer workshops and resources for students to understand the capabilities, limitations, and responsible use of ChatGPT.
- 8. Since the use of ChatGPT has been found to enhance the quality of learning in Science Education, Science Education teachers should be encourages to employ it more in the teaching of the subject.

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