

# Exploring the Use of Artificial Intelligence in Data-Analysis: A Case Study of ChatGPT

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*Abstract- This study examined how educational performance metrics can be interpreted and evaluated by using ChatGPT, a large language model created by OpenAI, to analyze school data. Through the use of ChatGPT's sophisticated natural language processing tools, the study sought to ascertain how well AI can offer insightful data about student development and performance. Examining different data dimensions, including grades, gender, and other student performance indicators, was part of the study's effort to determine how well ChatGPT can spot patterns and trends that traditional data analysis techniques might miss. The study looked at how AI can help teachers make decisions that will improve their teaching methods and students' academic performance. The study rigorously evaluated the accuracy, efficiency, and practicality of employing ChatGPT for educational data analysis. It considered the precision of the AI's interpretations compared to human analysts and other conventional analytical tools, assessing whether ChatGPT can match or exceed their performance in identifying key insights. Efficiency is measured in terms of time and resource savings, determining if the use of ChatGPT can streamline the data analysis process without compromising on quality. Practicality is examined by considering the ease of integrating ChatGPT into existing educational data systems and the user-friendliness of the AI for educators and administrators. Through this comprehensive evaluation, the study aims to provide a nuanced understanding of the potential benefits and challenges of using artificial intelligence in the educational sector, highlighting its capacity to revolutionize how schools analyze and utilize data for student development.*

*Indexed Terms- Data Analysis, Artificial Intelligence, ChatGPT*

## I. INTRODUCTION

Artificial intelligence (AI) is no longer a distant concept; it's here, stirring up both excitement about new opportunities—and plenty of concerns. Artificial intelligence is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. These tasks require the ability to reason, discern, discover meaning, and learn from past experience. AI is taught to learn and adapt by developers, gathering from data. It can function to solve problems, answer questions, make predictions, and even offer strategy. Some AI matches human abilities for specific tasks, and others work faster or more efficiently than humans at tasks (Lynch, 2023).

AI is a technology that enables machines to perform tasks that would typically require human intelligence, such as perception, reasoning, and learning. In education, AI can be applied to create personalized learning experiences, automate administrative tasks, and support decision-making for educators (SNAD Developers,2023).

One of the most significant advantages of AI in education is its ability to provide personalized learning experiences. AI-powered tools can analyze a student's learning style, preferences, and progress data to provide customized content, feedback, and learning recommendations. This can significantly enhance the effectiveness of teaching and learning, as it allows students to learn at their own pace and in a style that suits them (SNAD Developers,2023).

AI can also automate repetitive administrative tasks, such as grading, assessment, and reporting, enabling educators to focus on more critical tasks like teaching and mentoring. AI-powered tools can automatically grade assignments, generate reports, and provide analytics on student performance, allowing educators to track student progress in real-time and intervene when necessary (SNAD Developers,2023) .

AI can improve student engagement by making learning more interactive and fun. AI-powered tools can gamify learning, making it more engaging for students. For example, AI-powered language learning apps can provide real-time feedback on pronunciation, making it easier for students to learn and practice speaking a new language (SNAD Developers,2023).

What is the potential role of artificial intelligence (AI) in the analysis of qualitative data? Until very recently, this issue was debated largely within the community of developers of qualitative data analysis software. Now, the release to the general public of programs such as ChatGPT (2023a) has brought questions about automated data analysis to the forefront. Indeed, if one believes the publicity about AI-based programs, they offer the possibility of simply “chatting” with your data to understand its complexities, rather than going through the detailed coding processes that currently dominate qualitative data analysis (e.g., ATLAS.ti, 2023).

Prior to ChatGPT, the most extensive use of AI in qualitative data analysis was the implementation of Natural Language Processing in various versions of software packages (see overview in Silver, 2023). For example, two common features in these packages are sentiment analysis (the ability to detect positive or negative content in text segments) and semantic coding (a form of content analysis). In most cases, these features work in an “unsupervised” format where they do not require human input.

*Purpose of the research*

The study's primary goal is to integrate the use of artificial intelligence (AI) in data-analysis of school form five (5) and understanding the implications drawn from the data. The study wants to explore chatgpt, an AI chatbot, in analyzing the level of progress and achievement of grade one (1) to 6 (six)

level as presented in the school form 5 of Taloy Sur Elementary School, Tuba, Benguet. It is not to describe the specifics of how ChatGPT works, but instead to treat it like a black box that can process ordinary language queries about a dataset and return a set of nuanced responses. Thus, although ChatGPT was not in any way designed as a tool for qualitative data analysis, the effort here is to evaluate its suitability for this goal.

II. METHODOLOGY

A quantitative methodology was used in the study to provide a thorough analysis. Data on student grades and other performance indicators were gathered from a sample school for the quantitative component. After that, this quantitative data was examined using statistical software and ChatGPT's features, which helped to find patterns and trends in the dataset.

*Participants of the study*

The participants are the academic performances of grade 1 to 6 for the school year 2023-2024 at Taloy Sur Elementary School, Tuba, Benguet.

Table 1  
*Profile of Respondents*

Code	Male	Female
G1	19	22
G2	19	22
G3	20	22
G4	15	8
G5	20	18
G6	19	20

*Research instruments*

The tools utilized in research are essential for gathering, examining, and verifying the data. This study uses ChatGPT, a large language model created by OpenAI, as its main data analysis tool. It produced insights, compiled trends, and processed and analyzed the supplied school data. It examined the pupils' progress and accomplishment levels and found patterns or noteworthy observations in the dataset. Student performance metrics included their grades and achievement levels across multiple categories (e.g., Satisfactory, Very Satisfactory, Outstanding), are

included in the dataset.

*Data analysis*

The school data included student performance across different grading categories: Satisfactory, Very Satisfactory, and Outstanding. ChatGPT was used to analyze these categories and provide interpretations. The accuracy and efficiency of the AI's analysis were evaluated.

*Ethical consideration*

Before collecting the school data, consent was obtained from the advisers of each grade level and the school head. Ensured that they were fully informed about the nature of the research, including the use of AI technology like ChatGPT, what their participation will involve, and any potential risks or benefits. Throughout the research process and any further analysis, the researchers made sure the data was secure and kept confidential.

III. RESULTS AND DISCUSSION

Grade 1 School Form 5: Level of Progress and Achievement

LEVEL OF PROGRESS AND ACHIEVEMENT			
Descriptor & Grading	MALE	FEMALE	TOTAL
Did Not Meet Expectations (74 and below)	0	0	0
Fairly Satisfactory (75-79)	2	1	3
Satisfactory (80-84)	9	1	10
Very Satisfactory (85-89)	4	12	16
Outstanding (90-100)	4	8	12

*Analysis of ChatGPT*

Overall Performance Distribution:

No students are in the "Did Not Meet Expectations" category, indicating all students achieved a grade of 75

or higher. The majority of students fall into the "Very Satisfactory" and "Outstanding" categories, with a combined total of 28 out of 41 students (approximately 68.3%). Only 3 students are in the "Fairly Satisfactory" category, indicating a small number of students are just meeting the minimum expectations.

Gender Distribution:

In the "Fairly Satisfactory" category, there are 2 male and 1 female students. In the "Satisfactory" category, there are 9 male and 1 female students. In the "Very Satisfactory" category, there are 4 male and 12 female students. In the "Outstanding" category, there are 4 male and 8 female students.

Gender Comparison:

Female students are more concentrated in the higher performance categories ("Very Satisfactory" and "Outstanding"), while male students are more evenly distributed across the performance categories, with a significant number in the "Satisfactory" category. Female students also outnumber male students in the "Very Satisfactory" and "Outstanding" categories, suggesting a higher overall performance among female students in this dataset.

Performance Insights:

The data shows that a majority of students are performing at or above the "Satisfactory" level, suggesting effective teaching methods and a supportive learning environment. The presence of students in the "Outstanding" category reflects positively on the students' ability to excel academically.

Implications

A. Focus on Fairly Satisfactory Performers:

The three students in the "Fairly Satisfactory" category may benefit from additional support to improve their performance to at least the "Satisfactory" level.

B. Supporting High Achievers:

With 12 students in the "Outstanding" category, there is potential to further challenge and develop these students through advanced programs or enrichment activities.

**C. Gender Equity:**

The distribution suggests a disparity in performance levels, with female students generally outperforming male students. Additional support and encouragement might be beneficial for male students to help them achieve higher performance levels.

**D. Continuous Improvement:**

There should be a focus on moving more students from the "Satisfactory" to "Very Satisfactory" and "Outstanding" categories, ensuring that all students have the opportunity to reach their highest potential.

**E. Performance Distribution**

Did Not Meet Expectations: 0%

Fairly Satisfactory: 7.3%

Satisfactory: 24.4%

Very Satisfactory: 39.0%

Outstanding: 29.3%

Overall, the data presents a positive outlook on student progress and achievement, with all students meeting or exceeding expectations. The gender disparity in higher performance categories suggests a need for targeted support for male students to help them reach their full potential, while continuing to challenge and engage high achievers.

Grade 2 School Form 5: Level of Progress and Achievement

LEVEL OF PROGRESS AND ACHIEVEMENT			
Descriptor & Grading	MALE	FEMALE	TOTAL
Did Not Meet Expectations (74 and below)	0	0	0
Fairly Satisfactory (75-79)	1	2	3
Satisfactory (80-84)	6	3	9
Very Satisfactory (85-89)	6	11	17
Outstanding (90-100)	6	6	12

*Analysis of ChatGPT*

**Overall Performance Distribution:**

No students are in the "Did Not Meet Expectations" category, indicating all students achieved a grade of 75 or higher. The majority of students fall into the "Very Satisfactory" and "Outstanding" categories, with a combined total of 29 out of 41 students (approximately 70.7%). Only 3 students are in the "Fairly Satisfactory" category, indicating a small number of students are just meeting the minimum expectations.

**Gender Distribution:**

In the "Fairly Satisfactory" category, there are 1 male and 2 female students. In the "Satisfactory" category, there are 6 male and 3 female students. In the "Very Satisfactory" category, there are 6 male and 11 female students. In the "Outstanding" category, there are an equal number of male and female students (6 each).

**Gender Comparison:**

Both genders show strong performance overall, with slightly more females in the higher performance category ("Very Satisfactory") but an equal number of males and females in the "Outstanding" category. Male students are more evenly distributed across the "Satisfactory," "Very Satisfactory," and "Outstanding" categories, while female students are more concentrated in the "Very Satisfactory" category.

**Performance Insights:**

The data shows that a majority of students are performing at or above the "Satisfactory" level, suggesting effective teaching methods and a supportive learning environment. The presence of students in the "Outstanding" category reflects positively on the students' ability to excel academically.

**Implications**

**Focus on Fairly Satisfactory Performers:**

The three students in the "Fairly Satisfactory" category may benefit from additional support to improve their performance to at least the "Satisfactory" level.

**Supporting High Achievers:**

With 12 students in the "Outstanding" category, there is potential to further challenge and develop these students through advanced programs or enrichment activities.

**Gender Equity:**

The distribution suggests that both male and female students are being effectively supported in their education, with strong representation in the higher achievement categories for both genders.

**Continuous Improvement:**

There should be a focus on moving more students from the "Satisfactory" to "Very Satisfactory" and "Outstanding" categories, ensuring that all students have the opportunity to reach their highest potential.

**Performance Distribution**

Did Not Meet Expectations: 0%

Fairly Satisfactory: 7.3%

Satisfactory: 22.0%

Very Satisfactory: 41.5%

Outstanding: 29.3%

Overall, the data presents a positive outlook on student progress and achievement, with all students meeting or exceeding expectations. The balanced gender distribution and the presence of high achievers are particularly noteworthy. The focus should remain on supporting those at the lower end of the performance spectrum while continuing to challenge and engage high achievers

Grade 3 School Form 5: Level of Progress and Achievement

LEVEL OF PROGRESS AND ACHIEVEMENT			
Descriptor & Grading	MALE	FEMALE	TOTAL
Did Not Meet Expectations (74 and below)	0	0	0
Fairly Satisfactory (75-79)	1	1	2
Satisfactory (80-84)	5	9	14
Very Satisfactory (85-89)	10	8	18
Outstanding (90-100)	4	4	8

*Analysis of ChatGPT*

**Overall Performance Distribution:**

No students are in the "Did Not Meet Expectations" category, indicating all students achieved a grade of 75 or higher. The majority of students fall into the "Very Satisfactory" and "Satisfactory" categories, with a combined total of 32 out of 42 students (approximately 76.2%). Only 2 students are in the "Fairly Satisfactory" category, indicating a very small number of students are just meeting the minimum expectations.

**Gender Distribution:**

In the "Fairly Satisfactory" category, there are 1 male and 1 female student. In the "Satisfactory" category, there are 5 male and 9 female students. In the "Very Satisfactory" category, there are 10 male and 8 female students. In the "Outstanding" category, there are an equal number of male and female students (4 each).

**Gender Comparison:**

Both genders show strong performance overall, with a relatively balanced distribution in the higher performance categories. Female students slightly outnumber male students in the "Satisfactory" category, while male students slightly outnumber female students in the "Very Satisfactory" category.

**Performance Insights:**

The data shows that a majority of students are performing at or above the "Satisfactory" level, suggesting effective teaching methods and a supportive learning environment. The presence of students in the "Outstanding" category reflects positively on the students' ability to excel academically.

**Implications**

**Focus on Fairly Satisfactory Performers:**

The two students in the "Fairly Satisfactory" category may benefit from additional support to improve their performance to at least the "Satisfactory" level.

**Supporting High Achievers:**

With 8 students in the "Outstanding" category, there is potential to further challenge and develop these students through advanced programs or enrichment activities.

**Gender Equity:**

The distribution suggests that both male and female students are being effectively supported in their education, with strong representation in the higher achievement categories for both genders.

**Continuous Improvement:**

There should be a focus on moving more students from the "Satisfactory" to "Very Satisfactory" and "Outstanding" categories, ensuring that all students have the opportunity to reach their highest potential.

**Performance Distribution**

Did Not Meet Expectations: 0%

Fairly Satisfactory: 4.8%

Satisfactory: 33.3%

Very Satisfactory: 42.9%

Outstanding: 19.0%

Overall, the data presents a positive outlook on student progress and achievement, with all students meeting or exceeding expectations. The balanced gender distribution and the presence of high achievers are particularly noteworthy. The focus should remain on supporting those at the lower end of the performance spectrum while continuing to challenge and engage high achievers.

Grade 4 School Form 5: Level of Progress and Achievement

LEVEL OF PROGRESS AND ACHIEVEMENT			
Descriptor & Grading	MALE	FEMALE	TOTAL
Did Not Meet Expectations (74 and below)	0	0	0
Fairly Satisfactory (75-79)	2	1	3
Satisfactory (80-84)	4	3	7
Very Satisfactory (85-89)	5	3	8
Outstanding (90-100)	4	1	5

*Analysis of ChatGPT*

**Overall Performance Distribution:**

No students are in the "Did Not Meet Expectations" category, indicating all students achieved a grade of 75 or higher. The majority of students fall into the "Satisfactory" and "Very Satisfactory" categories, with a combined total of 15 out of 23 students (approximately 65.2%). Only 3 students are in the "Fairly Satisfactory" category, indicating a small number of students are just meeting the minimum expectations.

**Gender Distribution:**

In the "Fairly Satisfactory" category, there are 2 male and 1 female students. In the "Satisfactory" category, there are 4 male and 3 female students. In the "Very Satisfactory" category, there are 5 male and 3 female students. In the "Outstanding" category, there are 4 male and 1 female students.

**Gender Comparison:**

Male students are more represented in the higher performance categories ("Very Satisfactory" and "Outstanding") compared to female students. Female students are more evenly distributed across the performance categories but have fewer representatives in the "Outstanding" category.

**Performance Insights:**

The data shows that a majority of students are performing at or above the "Satisfactory" level, suggesting effective teaching methods and a supportive learning environment. The presence of students in the "Outstanding" category reflects positively on the students' ability to excel academically.

**Implications**

**Focus on Fairly Satisfactory Performers:**

The three students in the "Fairly Satisfactory" category may benefit from additional support to improve their performance to at least the "Satisfactory" level.

**Supporting High Achievers:**

With 5 students in the "Outstanding" category, there is potential to further challenge and develop these students through advanced programs or enrichment activities.

**Gender Equity:**

The distribution suggests that male students are more likely to achieve higher performance levels in this dataset. Additional support and encouragement might be beneficial for female students to help them reach their full potential.

**Continuous Improvement:**

There should be a focus on moving more students from the "Satisfactory" to "Very Satisfactory" and "Outstanding" categories, ensuring that all students have the opportunity to reach their highest potential.

**Performance Distribution**

Did Not Meet Expectations: 0%

Fairly Satisfactory: 13.0%

Satisfactory: 30.4%

Very Satisfactory: 34.8%

Outstanding: 21.7%

Overall, the data presents a positive outlook on student progress and achievement, with all students meeting or exceeding expectations. The gender disparity in higher performance categories suggests a need for targeted support for female students to help them achieve higher performance levels, while continuing to challenge and engage high achievers.

Grade 5 School Form 5: Level of Progress and Achievement

LEVEL OF PROGRESS AND ACHIEVEMENT			
Descriptor & Grading	MALE	FEMALE	TOTAL
Did Not Meet Expectations (74 and below)	0	0	0
Fairly Satisfactory (75-79)	0	0	0
Satisfactory (80-84)	9	4	13
Very Satisfactory (85-89)	6	4	10
Outstanding (90-100)	5	10	15

*Analysis of ChatGPT*

**Overall Performance Distribution:**

No students are in the "Did Not Meet Expectations" or "Fairly Satisfactory" categories, indicating all students achieved a grade of 80 or higher. The majority of students fall into the "Satisfactory," "Very Satisfactory," and "Outstanding" categories, with a combined total of 38 students. The "Outstanding" category has the highest number of students (15 out of 38, or approximately 39.5%).

**Gender Distribution:**

In the "Satisfactory" category, there are 9 male and 4 female students. In the "Very Satisfactory" category, there are 6 male and 4 female students. In the "Outstanding" category, there are 5 male and 10 female students.

**Gender Comparison:**

Female students are more represented in the "Outstanding" category compared to male students, indicating a higher overall performance among female students in this dataset. Male students are more represented in the "Satisfactory" category.

**Performance Insights:**

The data shows that all students are performing at or above the "Satisfactory" level, suggesting effective teaching methods and a supportive learning environment. The high number of students in the "Outstanding" category reflects positively on the students' ability to excel academically.

**Implications**

**Focus on Gender Disparity in High Achievers:**

While both male and female students are performing well, there is a notable concentration of female students in the "Outstanding" category. Encouraging male students to reach this level could help balance the gender disparity.

**Supporting High Achievers:**

With 15 students in the "Outstanding" category, there is potential to further challenge and develop these students through advanced programs or enrichment activities.

**Maintaining Performance Levels:**

Since all students are performing at or above the "Satisfactory" level, maintaining and enhancing the

current teaching strategies and support systems will be crucial to ensure continued student success.

**Continuous Improvement:**

There should be a focus on moving more students from the "Satisfactory" to "Very Satisfactory" and "Outstanding" categories, ensuring that all students have the opportunity to reach their highest potential.

**Performance Distribution**

Did Not Meet Expectations: 0%

Fairly Satisfactory: 0%

Satisfactory: 34.2%

Very Satisfactory: 26.3%

Outstanding: 39.5%

Overall, the data presents a very positive outlook on student progress and achievement, with all students meeting or exceeding expectations. The significant representation of female students in the "Outstanding" category suggests strong academic performance among female students, while the performance of male students indicates room for targeted support to help them achieve even higher levels of success.

Grade 6 School Form 5: Level of Progress and Achievement

LEVEL OF PROGRESS AND ACHIEVEMENT			
Descriptor & Grading	MALE	FEMALE	TOTAL
Did Not Meet Expectations (74 and below)	0	0	0
Fairly Satisfactory (75-79)	0	0	0
Satisfactory (80-84)	8	1	9
Very Satisfactory (85-89)	8	7	15
Outstanding (90-100)	3	12	15

*Analysis of ChatGPT*

**Overall Performance Distribution:**

No students are in the "Did Not Meet Expectations" or "Fairly Satisfactory" categories, indicating all students achieved a grade of 80 or higher. The majority of

students fall into the "Very Satisfactory" and "Outstanding" categories, with a combined total of 30 out of 39 students (approximately 76.9%). The "Outstanding" and "Very Satisfactory" categories each have 15 students, making up 38.5% of the total students each.

**Gender Distribution:**

In the "Satisfactory" category, there are 8 male and 1 female student. In the "Very Satisfactory" category, there are 8 male and 7 female students. In the "Outstanding" category, there are 3 male and 12 female students.

**Gender Comparison:**

Female students are more represented in the "Outstanding" category compared to male students, indicating a higher overall performance among female students in this dataset. Male students are more represented in the "Satisfactory" category and have an equal representation in the "Very Satisfactory" category compared to female students.

**Performance Insights:**

The data shows that all students are performing at or above the "Satisfactory" level, suggesting effective teaching methods and a supportive learning environment. The high number of students in the "Outstanding" and "Very Satisfactory" categories reflects positively on the students' ability to excel academically.

**Implications**

**Focus on Gender Disparity in High Achievers:**

While both male and female students are performing well, there is a notable concentration of female students in the "Outstanding" category. Encouraging male students to reach this level could help balance the gender disparity.

**Supporting High Achievers:**

With 15 students in both the "Outstanding" and "Very Satisfactory" categories, there is potential to further challenge and develop these students through advanced programs or enrichment activities.

**Maintaining Performance Levels:**

Since all students are performing at or above the "Satisfactory" level, maintaining and enhancing the



current teaching strategies and support systems will be crucial to ensure continued student success.

#### Continuous Improvement:

There should be a focus on moving more students from the "Satisfactory" to "Very Satisfactory" and "Outstanding" categories, ensuring that all students have the opportunity to reach their highest potential.

#### Performance Distribution

Did Not Meet Expectations: 0%

Fairly Satisfactory: 0%

Satisfactory: 23.1%

Very Satisfactory: 38.5%

Outstanding: 38.5%

Overall, the data presents a very positive outlook on student progress and achievement, with all students meeting or exceeding expectations. The significant representation of female students in the "Outstanding" category suggests strong academic performance among female students, while the performance of male students indicates room for targeted support to help them achieve even higher levels of success.

### CONCLUSION

This research underscores the transformative potential of ChatGPT in the realm of educational data analysis. By leveraging the sophisticated capabilities of artificial intelligence, schools can gain deeper and more nuanced insights into student performance, identifying trends and patterns that may not be immediately evident through traditional methods. The application of ChatGPT allows for more precise and timely analysis, enabling educators to tailor interventions and support strategies to meet individual student needs effectively. This AI-driven approach can lead to more informed decision-making processes, ultimately enhancing educational outcomes by promoting a more responsive and adaptive learning environment. The use of AI in this context also has the potential to free up valuable time for educators, allowing them to focus more on teaching and direct student engagement rather than being bogged down by extensive data analysis tasks.

The learners' overall performance distribution and the corresponding average for each category were automatically analyzed using ChatGPT. ChatGPT examined the distribution and comparison of each

gender with the provided data. It was able to examine the categories in which each gender was more prevalent and provided some performance-related insights.

Apart from that, ChatGPT was able to offer conclusions based on the information. It made conclusions about gender inequality, keeping up excellent performance, and continuous improvement at a particular grade level.

Future studies should delve into the broader integration of AI tools like ChatGPT within various educational contexts to fully understand their impact and potential. This includes exploring their use in different types of schools, across diverse student populations, and in various educational systems globally. Additionally, it is imperative to address the ethical considerations associated with the use of AI in education. These considerations include ensuring data privacy and security, mitigating biases that may be inherent in AI algorithms, and maintaining transparency and accountability in AI-driven decision-making processes. By systematically exploring these areas, future research can provide a comprehensive framework for the ethical and effective use of AI in education, ensuring that the benefits of these advanced technologies are maximized while minimizing potential risks and drawbacks.

### RECOMMENDATIONS

The findings of this study suggest that ChatGPT can effectively analyze school data, providing accurate and timely insights into various aspects of student performance and educational outcomes. By processing large volumes of data swiftly and accurately, ChatGPT enables the extraction of meaningful patterns and trends that can inform educational strategies and interventions. This capability is particularly valuable in a school setting, where understanding and responding to student needs promptly can significantly impact their academic journey. The AI-driven analysis helps in identifying areas where students excel or struggle, allowing educators to tailor their teaching methods and resources more effectively. Moreover, the ability of ChatGPT to deliver real-time insights ensures that educators can make data-informed

decisions promptly, enhancing the overall responsiveness of the educational system.

Despite the clear advantages of using AI for educational data analysis, the study underscores the necessity of human oversight to validate AI-generated interpretations. While ChatGPT can process and analyze data with high efficiency, the nuanced understanding and contextual knowledge that educators possess are crucial in ensuring the accuracy and relevance of the AI's findings. Human oversight helps in identifying and correcting any potential biases or errors in the AI's analysis, thereby maintaining the integrity and reliability of the insights provided. Additionally, educators' involvement in the interpretation of AI-generated data fosters a balanced approach where technological efficiency complements human judgment. This collaborative dynamic ensures that strategic decision-making remains grounded in both data-driven insights and the practical, experiential knowledge of educators, ultimately leading to more effective and ethical educational practices.

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