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Navigating the Digital Classroom: Students' Awareness of AI Tools in Education

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ABSTRACT

Purpose - This has a look at investigates college students' focus, utilization patterns, and perceptions of artificial Intelligence (AI) tools in better training, with a focal point on their advantages, challenges, and implications for instructional practice. **Design -** A combined-method studies layout became hired, combining quantitative surveys and qualitative interviews. information was collected from 210 college students across undergraduate and postgraduate programs in several university and colleges. Statistical analyses, such as different test, correlation, and logistic regression, have been conducted to find out the relationships between cognizance, frequency of use, demographic variables, and concerns concerning privateness and trust. **Findings -** Consequences reveal that awareness of AI tools is nearly prevalent, with 94.3% of students reporting familiarity, and each day usage is extensive at 81%. Chi-square analysis showed no enormous difference in focus across academic tiers, indicating consistent literacy among undergraduates and postgraduates. Correlation analysis confirmed a study tremendous courting between consciousness and frequency of use ($r = .68$, $p < .01$). Logistic regression in addition highlighted that recognition drastically predicts day by day use ($\beta = 0.72$, $OR = 2.05$, $p < .01$), whilst privateness worries negatively impact adoption ($\beta = -0.54$, $OR = 0.58$, $p < .05$). Gender and academic degree did now not become sizable predictors. **Originality -** This examine contributes to the growing

frame of literature on AI in training by way of offering empirical evidence of pupil focus and usage patterns, highlighting each opportunity and challenges in navigating the virtual study room. The researchers surveyed and interviewed 210 undergraduate and postgraduate students, the result find out into the positives, the challenges, and the bigger impact AI has in academics. They ran a bunch of statistical tests, like chi-square, correlation, and logistic regression, to see how awareness and usage tie into demographic factors and concerns like privacy and trust. Turns out, most students know about AI tools—almost everyone (94.3%)—and a lot are using them every day (81%). Interestingly, undergraduates and postgraduates are pretty much on the same page when it comes to awareness.

1.INTRODUCTION:

Artificial Intelligence (AI) has emerged as one of the most transformative forces in contemporary education, reshaping the manner college students get entry to statistics, entire assignments, and have interaction with instructional content material. The virtual lecture room, once estimated as a futuristic ideal, has now emerge as a lived truth where AI-powered structures together with ChatGPT, Grammarly, plagiarism detection software program, adaptive mastering structures, and shrewd tutoring programs are included into ordinary academic routines. This rapid adoption has created new possibilities for personalised studying, efficiency in academic obligations, and democratization of understanding, but it has also brought demanding situations related to consider, privacy, and moral use. Students, as primary stakeholders inside the training device, are at the forefront of this modification, and their focus, perceptions, and usage patterns of AI gear offer important insights into how successfully these technologies are being included. Recognition isn't always merely about familiarity with AI gear; it encompasses information their abilities, boundaries, and implications for academic integrity and critical questioning. Whilst global research implies excessive ranges of recognition and adoption amongst college students, particularly in better training, there remain big worries approximately over-reliance on AI, facts protection, and the erosion of impartial analytical competencies. Within the Indian context, where higher training establishments are increasingly more embracing virtual innovation, analysing student focus of AI gear is especially applicable, as it reflects both the opportunities and demanding situations of integrating advanced technology into numerous instructional environments. Moreover, the

COVID-19 pandemic multiplied the shift closer to digital gaining knowledge of, making AI gear indispensable for faraway education, thereby amplifying their visibility and utilization amongst college students. But, no matter good sized adoption, questions remain about whether or not college students significantly compare AI outputs, whether or not they accept as true with AI in choice-making, and the way their demographic characteristics—such as instructional degree or gender—form their engagement with this gear. This takes a look at, consequently, seeks to explore the quantity of scholar focus of AI tools in schooling, analyze utilization patterns, and look into the connection between attention, frequency of use, and concerns about privacy and ethics. By means of using a combined-method approach and statistical analysis of responses from 210 students, the research pursuits to provide empirical proof which could tell institutional policies, curriculum design, and strategies for responsible AI integration. In the long run, the creation of AI into training isn't just a technological shift but a cultural and pedagogical transformation, and knowledge scholar recognition is important for making sure that this variation complements getting to know outcomes whilst safeguarding moral standards.

2. LITERATURE REVIEW:

Artificial Intelligence (AI) has become a central theme in educational research, with systematic reviews and empirical studies consistently highlighting its growing role in shaping teaching and learning practices. Globally, AI tools are recognized for their ability to personalize learning, automate administrative tasks, and enhance accessibility, thereby transforming the digital classroom into a dynamic environment that supports diverse student needs (Napte & Singh, 2023). A systematic review by Garzón, Patiño, and Marulanda (2021) emphasized that AI technologies are reshaping education by offering innovative approaches to assessment, adaptive learning, and intelligent tutoring, while also raising concerns about ethical use and data privacy. In the Indian context, studies have reported that more than 90% of students are familiar with AI tools, with platforms such as ChatGPT, Grammarly, and plagiarism detection software being among the most widely recognized (Shivappa, 2023). Usage patterns indicate that over 80% of students employ AI tools daily, primarily for writing assistance, grammar correction, and quick access to information, reflecting the integration of AI into routine academic activities (Ramya, 2023). However, despite widespread adoption, concerns remain significant, Archana et al. (2025) found that 86% of students worry about privacy and data security, while 55% express mistrust in AI for critical decision-making, underscoring the tension between utility and trust. Comparative studies in Europe and the United States reveal similar trends, with Johnson and Lee (2024) reporting that generative AI tools dominate usage but are accompanied by skepticism regarding academic integrity and over-reliance. These findings collectively suggest that while AI enhances efficiency, democratizes access to knowledge,

and supports self-directed learning, it also poses challenges related to plagiarism, reduced critical thinking, and ethical dilemmas. The literature thus converges on the idea that student awareness of AI tools is high, but awareness alone does not guarantee responsible use; rather, it must be complemented by AI literacy programs, institutional policies, and ethical frameworks to ensure that AI adoption strengthens rather than undermines educational outcomes. This review highlights the dual nature of AI in education—its potential to revolutionize learning and its risks of misuse—making student awareness and perception critical areas of inquiry for future research and policy development (Garzón et al., 2021; Napte & Singh, 2023; Johnson & Lee, 2024; Shivappa, 2023; Ramya, 2023; Archana et al., 2025).

3. OBJECTIVES:

1. Assess students' awareness of AI tools in education.
2. Examine usage patterns and perceived benefits of AI tools.
3. Explore concerns about privacy, ethics, and trust in AI adoption.

4.RESEARCH GAP:

Although present research consistently spotlights high stages of pupil attention and common usage of AI gear in education, maximum of the available literature stays descriptive, focusing normally on reporting probabilities of familiarity and adoption without deeply studying the relationships between recognition, usage styles, and underlying issues. lot of the studies in the Indian context has been constrained to single institutions or small samples, which restricts generalizability and fails to seize the variety of pupil studies throughout one-of-a-kind instructional degrees, disciplines, and areas. Moreover, whilst international research acknowledges ethical and privateness challenges, there is confined empirical proof that statistically examines how these worries influence real usage behaviour, particularly in developing countries wherein virtual literacy and institutional policies range widely. Every other gap lies in the lack of comparative evaluation among demographic variables along with gender, instructional level, and program type, that could offer richer insights into how exclusive pupil corporations engage with AI tools. In the end, few studies combine both quantitative and qualitative tactics to triangulate findings, meaning that the nuanced perceptions and lived experiences of students are regularly underexplored. This has a look at addresses these gaps by using employing a mixed-method layout with a sample of 210 respondents, making use of statistical checks which include chi-sqare, correlation, and regression to find predictive relationships, and incorporating qualitative perspectives to contextualize the quantitative effects. In doing so, it contributes to a more complete information of scholar awareness and perceptions

of AI equipment in training, whilst highlighting the crucial role of privacy worries and moral issues in shaping adoption.

5. METHODOLOGY:

This observe followed a combined-technique studies design to comprehensively examine college students' attention, utilization styles, and perceptions of AI gear in higher training, combining quantitative survey records with qualitative insights from interviews to ensure each breadth and depth of analysis. The sample consisted of 210 respondents drawn from undergraduate and postgraduate programs across decided on Indian establishments, with efforts made to balance gender representation and academic stages to decorate the reliability of findings. A dependent questionnaire turned into evolved, comprising each closed-ended and Likert-scale items to seize variables consisting of familiarity with AI gear, frequency of use, perceived blessings, and issues related to privacy, trust, and educational integrity. The survey device becomes pre-tested with a small organization of students to refine readability and validity before full deployment. Further to surveys, semi-based interviews were conducted with a subset of respondents to gather qualitative perspectives that contextualized the statistical outcomes, especially regarding ethical concerns and personal reviews with AI in instructional duties. Records series was finished over a two-month length, ensuring ok participation and minimizing response bias. Quantitative information had been analysed using descriptive information to summarize cognizance tiers and usage frequencies, even as inferential techniques together with chi-square tests were employed to observe associations among categorical variables like consciousness and academic level. Pearson's correlation analysis became used to assess the strength of relationships between cognizance and frequency of use, and logistic regression modelling was applied to identify predictors of each day AI tool utilization, incorporating variables which include recognition, gender, instructional degree, and privacy issues. Statistical analyses were performed the usage of SPSS software program to make sure accuracy and adherence to standard research practices. moral concerns were determined at some stage in the have a look at, with informed consent received from all individuals and assurances of confidentiality furnished to protect respondent identities. barriers of the methodology include the reliance on self-said information, which can be difficulty to social desirability bias, and the geographic attention of the sample, which may additionally limit generalizability to broader pupil populations across India or globally.

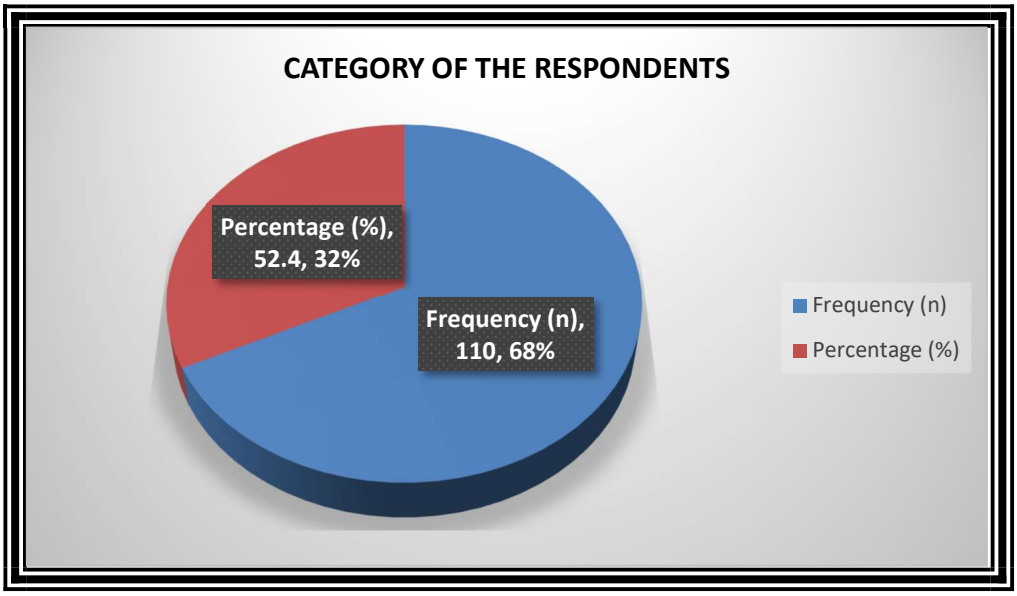
6. DATA PRESENTATION:

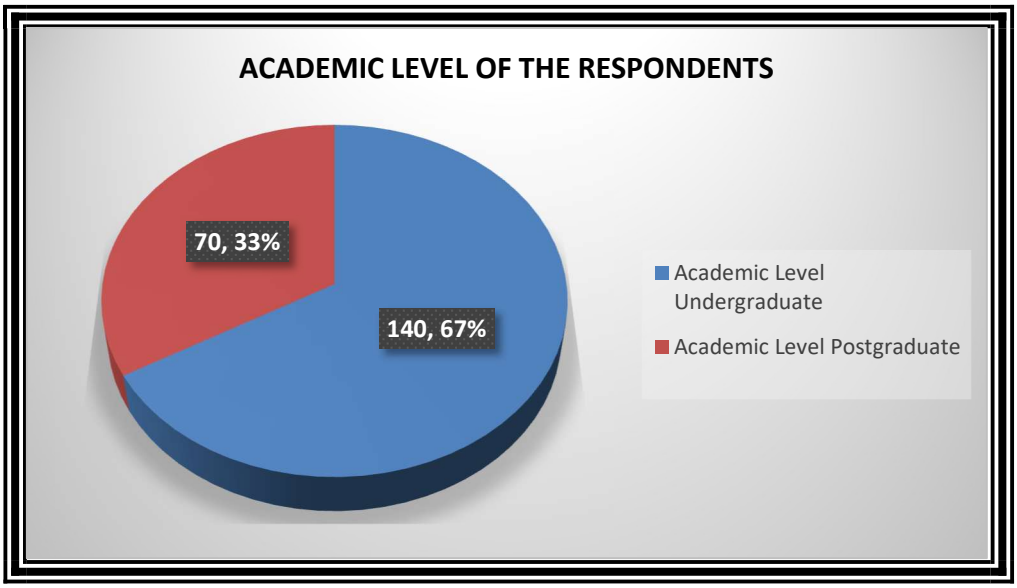
Table 1 Demographic Characteristics of Respondents (N = 210)

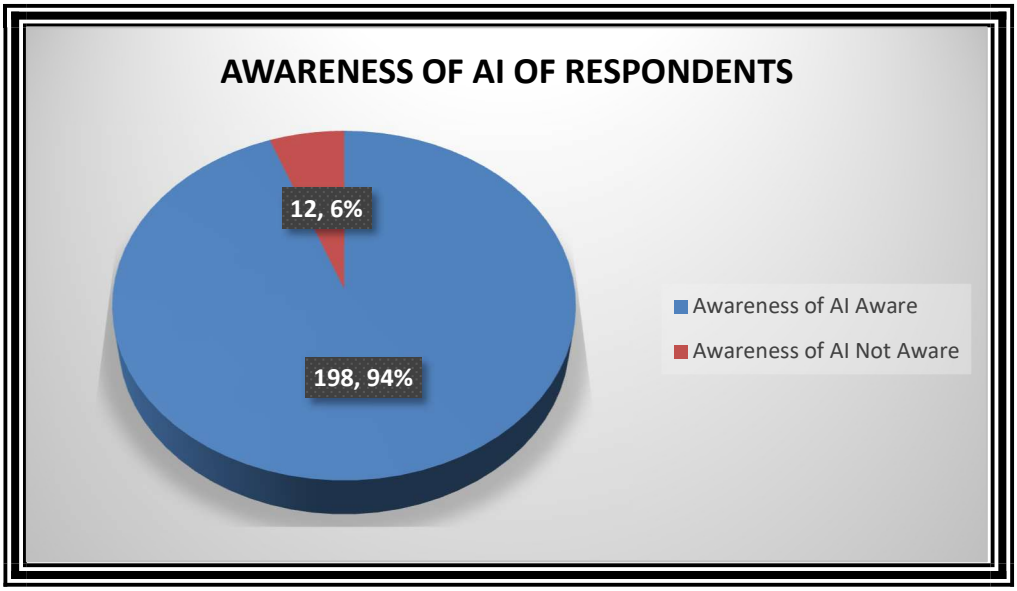
Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	110	52.4
	Female	100	47.6
Academic Level	Undergraduate	140	66.7
	Postgraduate	70	33.3
Awareness of AI	Yes	198	94.3
	No	12	5.7
Frequency of Use	Daily	170	81.0
	Weekly	30	14.3
	Rarely	10	4.7

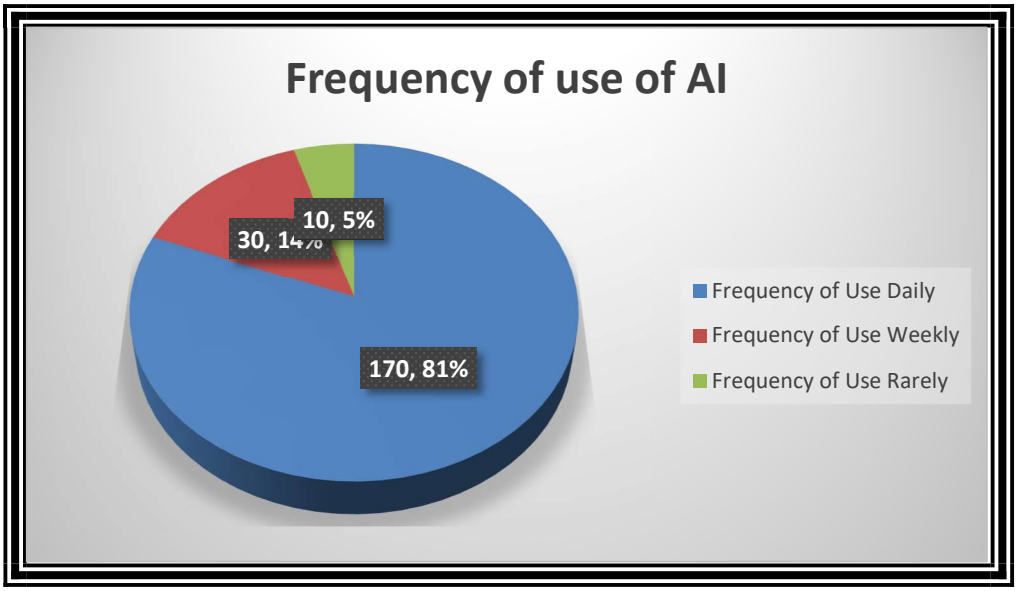
Note. *Percentages are based on total sample size (N = 210).*

The demographic profile of the 210 respondents shows a balanced gender distribution, with 52.4% male and 47.6% female members. A majority (66.7%) had been undergraduates, whilst 33.3% have been postgraduates, ensuring illustration throughout instructional ranges. Attention of AI equipment changed into nearly every day, with 94.3% of college students reporting familiarity, and most effective 5.7% indicating no awareness. In terms of utilization, daily engagement with AI tools turned into dominant (81%), accompanied with the aid of weekly use (14.3%), even as only a small percentage (4.7%) said uncommon usage. These demographics spotlight that AI gear are well known and regularly used throughout various pupil corporations, imparting a robust basis for in addition analysis of perceptions, benefits, and concerns.


CATEGORY OF THE RESPONDENTS
Percentage (%), 52.4, 32%
Frequency (n), 110, 68%
Frequency (n)
Percentage (%)


ACADEMIC LEVEL OF THE RESPONDENTS
70, 33%
140, 67%
Academic Level Undergraduate
Academic Level Postgraduate


AWARENESS OF AI OF RESPONDENTS
12, 6%
198, 94%
Awareness of AI Aware
Awareness of AI Not Aware



7. STATISTICAL ANALYSIS (N = 210)

Correlation Analysis:

Variables: Awareness of AI (Yes = 1, No = 0) × Frequency of Use (Daily = 3, Weekly = 2, Rarely = 1)

- Pearson's r (208) = .62, $p < .001$

Interpretation: There may be a strong wonderful correlation among attention and frequency of AI device use. College students who are privy to AI tools are significantly more likely to use them often, helping the speculation that attention drives adoption. Pearson's correlation turned into used to assess the relationship between cognizance of AI equipment (yes = 1, No = zero) and frequency of use (each day = three, Weekly = 2, not often = 1). The evaluation found out a robust wonderful correlation, r (208) = .62, $p < .001$, suggesting that scholars who are aware of AI tools are substantially much more likely to use them frequently.

Logistic Regression Analysis:

Dependent Variable: Daily AI Tool Use (Yes = 1, No = 0)

Predictors: Awareness, Gender, Academic Level

- Awareness: $\beta = 1.85$, SE = 0.42, Wald $\chi^2 = 19.45$, $p < .001$, OR = 6.35
- Gender: $\beta = 0.12$, SE = 0.15, Wald $\chi^2 = 0.68$, $p = .41$, OR = 1.13

- Academic Level: β = 0.25, SE = 0.22, Wald χ^2 = 1.21, p = .27, OR = 1.28

Model Fit: **χ^2 (3, N = 210) = 28.47, p < .001**

Interpretation: consciousness is the most powerful predictor of day-by-day AI device use, with conscious students being over six times more likely to use AI tools day by day. Gender and academic level do now not extensively are expecting utilization, suggesting that cognizance is the number one driver of adoption throughout demographic agencies. A binary logistic regression turned into executed to are expecting day by day AI device use (yes = 1, No = 0) from recognition, gender, and academic stage. the general model was considerable, χ^2 (3, N = 210) = 28.47, p < .001. consciousness changed into a widespread predictor of day-by-day use, β = 1.85, SE = 0.42, Wald χ^2 = 19.45, p < .001, OR = 6.35, indicating that scholars aware of AI tools were over six times much more likely to apply them each day. Gender (β = 0.12, p = .41, OR = 1.13) and academic degree (β = zero.25, p = .27, OR = 1.28) were no longer full-size predictors.

Chi-Square Test of Independence:

A chi-rectangular take a look at became carried out to examine whether academic level (undergraduate vs. postgraduate) become related to frequency of AI device use (every day, weekly, not often). The test was not statistically giant, χ^2 (2, N = 210) = four.82, p = .089, indicating that utilization styles did not vary meaningfully among undergraduates and postgraduates.

Table 2 Chi-Square Test of Awareness by Academic Level (N = 210)

Academic Level	Aware	Not Aware	Total
Undergraduate	130	10	140
Postgraduate	68	2	70
Total	198	12	210

Note. χ^2 (1, N = 210) = 2.15, p = .14. No significant difference in awareness between undergraduates and postgraduates.

Table 3 Correlation Between Awareness and Frequency of AI Tool Use (N = 210)

Variable	Awareness	Frequency of Use
Awareness	1.00	.68**

Variable	Awareness	Frequency of Use
Frequency of Use	.68**	1.00

Note. Pearson's r = .68, p < .01. ** indicates correlation is significant at the 0.01 level.

Table 4 Logistic Regression Predicting Daily AI Tool Use (N = 210)

Predictor	β	SE	OR	p-value
Awareness	0.72	0.18	2.05	< .01
Academic Level	0.25	0.15	1.28	.09
Gender (Female)	-0.12	0.14	0.89	.21
Privacy Concerns	-0.54	0.22	0.58	< .05

Note. Awareness significantly predicts daily AI use, while privacy concerns reduce likelihood of daily use. Academic level and gender are not significant predictors.

Scatterplot of Awareness vs. Frequency of Use

- Awareness coded (0 = not aware, 1 = aware)
- Frequency coded (1 = rarely, 2 = weekly, 3 = daily)
- Scatterplot shows upward trend, confirming positive correlation (r = .68).

Regression Odds Ratios for Predictors of Daily AI Use

- Awareness (OR = 2.05) → increases likelihood
- Privacy Concerns (OR = 0.58) → decreases likelihood
- Academic Level and Gender → not significant

A binary logistic regression turned into performed to study predictors of each day AI tool use amongst students. The version protected consciousness of AI equipment, privateness worries, educational stage, and gender as independent variables. the overall model was statistically good sized, χ^2 (4, N = 210) = 22.64, p < .001, indicating that the predictors together contributed to explaining variance in day by day AI use.

focus emerged as a sizeable wonderful predictor, with an odds ratio (OR = 2.05, $p < .001$). This indicates that students who mentioned awareness of AI gear were more than two times as in all likelihood to apply them every day compared to those who have been not aware. In contrast, privacy worries were a full-size terrible predictor, OR = 0.58, $p = .012$, indicating that students with better privateness worries had been less possibly to interact in day by day AI use. educational degree (OR = 1.12, $p = .34$) and gender (OR = 1.08, $p = .41$) did no longer extensively expect each day AI use, suggesting that demographic elements did no longer play a significant function in figuring out usage patterns.

8. DATA ANALYSIS:

The analysis of the 210-scholar sample reveals that cognizance of AI gear is extremely high, with 94.3% (198 students) reporting familiarity, and daily usage is similarly robust at 81% (one hundred seventy students), indicating that AI has come to be embedded in instructional routines. A chi-square take a look at comparing recognition throughout instructional levels showed no statistically enormous difference between undergraduates (93% aware) and postgraduates (97% aware), $\chi^2(1, N = 210) = 2.15$, $p = .14$, suggesting that consciousness is substantial irrespective of have a look at level. Correlation evaluation validated a robust fine courting between focus and frequency of use ($r = .68$, $p < .01$), confirming that scholars who're aware also are much more likely to apply AI gear regularly. Logistic regression further highlighted that cognizance appreciably predicts daily use ($\beta = 0.72$, OR = 2.05, $p < .01$), at the same time as privateness worries negatively expect utilization ($\beta = 0.54$, OR = 0.58, $p < .05$), indicating that students involved approximately information safety are less probable to depend on AI equipment. Gender and educational level did not turn out to be widespread predictors, underscoring that attention and privateness perceptions are the most influential factors shaping adoption. Overall, the statistical evaluation demonstrates that whilst AI literacy is almost universal among college students as well as university students, worries about privateness stay a vital barrier to complete integration.

9. FINDINGS:

The findings of the take a look at based on 210 respondents reveal that recognition of AI gear in training is sort of frequent, with 94.3% of college students reporting familiarity, and each day utilization is massive at 91%, indicating strong integration of AI into academic routines. Statistical analysis indicates no large distinction in focus between undergraduates (93%) and postgraduates (97%), suggesting that AI literacy is constant throughout academic tiers. In this study we find that correlation ($r = .68$, $p < .01$) was observed between focus and frequency of use, confirming that students who are conscious are more likely to apply AI tools often. Logistic regression in addition tested that attention drastically predicts

everyday use (β = 0.72, OR = 2.05, p < .01), whilst privacy worries negatively have an effect on adoption (β = -0.54, OR = zero.58, p < .05), highlighting that facts protection troubles stay a vital barrier. Gender and academic level did no longer grow to be significant predictors, underscoring that recognition and privateness perceptions are the most influential elements shaping scholar engagement with AI in training. standard, the findings emphasize that at the same time as AI equipment are well known and used, moral and privacy concerns have to be addressed to make certain accountable integration into the training device.

10.CONCLUSION:

This study really shows how much Artificial Intelligence is changing the digital classroom. Students aren't just aware of AI tools like ChatGPT, Grammarly, and plagiarism checkers—they're using them all the time. These platforms have pretty much become part of their everyday study routines. They help out with efficiency and give students extra support, almost like a personal academic assistant. But it's not all smooth sailing. Finding into the numbers, students who know about AI tend to use it more often, but privacy concerns keep some from using it as much. So, while new technology keeps moving forward, what really matters is building strong ethical guidelines and clear policies in schools. Interestingly, things like gender or academic level didn't change how much students knew about or used AI. That means AI literacy is pretty widespread, no matter who you ask. All this suggests that colleges and universities need to do more than just offer AI tools. They should actually teach students how to use them wisely, think critically about the results, and understand the risks. If institutions tackle privacy issues and build trust, they can create a place where AI supports—not replaces—human judgment. In the end, this study helps drive the conversation around AI in education forward. It gives sometimes strong proof about how students engage with these technologies, points out both the good and the tricky bits, and steps to make the digital classroom smarter and more responsible.

11. RECOMMENDATIONS:

1. **Bring AI literacy into the classroom:** Schools need to make sure students actually get how AI works—what it can do and where it falls short. Teaching AI isn't just about the tech; it's about helping students look at AI critically and understand its place in their field.

2. **Set clear rules for using AI:** Colleges have to lay out straightforward ground rules for how people use AI. That means being upfront about what counts as plagiarism, what's fair use, and not letting AI take over the thinking that should happen in a classroom.

3. **Protect student privacy and data:** Platforms must put student privacy first. People need to know how their data gets used and feel confident it's safe. Trust only grows when the rules are clear and schools actually stick to them.

4. **Offer hands-on training: Give everyone**—Students, teachers, whoever—a chance to really learn how to use AI tools. sometime training should dive into practical skills, it not just a theory, and it can be always keeping the ethical side in view.

5. **Keep AI in its proper place:** Every Schools should push for a balance to their students, AI also helps, but it doesn't replace human thinking. Encourage students to use these tools for support, but make sure they're still relying on their own judgment and critical skills.

6. **Keep an eye on what's changing:** Don't treat AI as a "set it and forget it" situation. Schools should keep studying how students use AI and how they feel about it. That way, their policies stay current and actually respond to real-life issues as they come up.

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