



## *Evaluating The Perceived Usefulness And Ease Of Adoption Of Artificial Intelligence Tools In Teaching*

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### Abstract

Synthetic intelligence is becoming famous in teaching, and many believe that they can enhance their coaching via the use of AI equipment. Instructors play an essential function in shaping future generations and understanding the elements that impact coaching effectiveness. This looks at how teachers consider the usefulness of AI equipment, how smooth it is for them to apply that gear to their teaching and how they view the practicality and ease of enforcing AI tools. The effect of synthetic intelligence on schooling is receiving lots of interest as it continues to revolutionize several industries. The main research query is how instructors are familiar with the benefits of adoption and how the value of AI equipment affects the usage of AI tools in training. The reason for the studies is to explore how these elements are related to the fulfilment of teachers. To analyze this, This study carried out a survey; a quantitative approach was used. From 276 teachers, The study gathered the facts, which were then analyzed using the SPSS software program for descriptive statistics, regression analysis and correlation. This look assumes that if instructors locate the AI is simple to apply and could assist them in training in a better way, they are much more likely to adopt AI gear, and if instructors locate that AI gear is very smooth to comprise into their teaching, then they all used AI tools often. In the end, faculties, schools, universities and all different academic institutions should make AI adoption user-pleasant, and they have to supply education to academics so that they can adopt those sorts of technologies efficiently. Future studies should explore how both ease of use and perceived value influence the effective adoption of AI tools in educational settings.

**Keywords:** Artificial Intelligence Tools, Teaching, Spss, Perceived Usefulness, Ease of Adoption, Educational Institutions, Successful Adoption.



## Introduction

Artificial Intelligence (AI) is increasingly recognized as a transformative force in education, offering new ways to enhance how teachers instruct and how students acquire knowledge (Chen, Chen, & Lin, 2020; Hwang et al., 2020). AI technologies such as intelligent tutoring systems, personalized learning platforms, and automated grading tools are being implemented in classrooms to address challenges like low student engagement, administrative burdens, and the need for individualized instruction (Zou & Huang, 2023). However, even while these tools have potential, there is no assurance that they will be widely used. A number of factors, most notably the perceived utility and ease of adoption of these technologies, affect the success of AI in educational contexts. AI tools are designed to help teachers as they guide them on how to teach their lessons to students. They gave personalized learning to teachers for students and helped them with grading and attendance. It meets all the needs of students, like if they want to write assignments, presentations, and research papers. It guides everyone related to their needs. Some teachers and students face many complications in adopting AI in their education or for personalized learning, so it is important to identify what factors actually stop them from adopting AI in their learning that make AI tools successful in education systems. Previous research (Davis, 1989; Teo, 2011; Zhang & Hou, 2024) shows that two factors are key to adopting AI tools for learning: Perceived usefulness and ease of use. Teachers are more inclined to use AI tools in the classroom when they perceive them as useful. The advantages of AI tools, such as their capacity to deliver individualized learning experiences and automate administrative duties, which save time and boost productivity, frequently motivate their adoption (Johnson et al., 2021). One of the important advantages of AI is its potential to enhance student learning outcomes. AI-powered personalized learning platforms, for example, can adapt the way content is delivered to a student's learning style, offering a personalized learning experience that conventional approaches frequently fall short of. Teachers are more inclined to employ these technologies if they believe they can help them satisfy the various demands of their students. Additionally, by adding interactive components to the learning process, AI solutions can improve student engagement by making lessons more engaging and inspiring (Mouza, 2022). While these studies do not show the training and support to overcome barriers, they only show the importance of these two independent factors.

Even though AI could be very easy to apply and really smooth to undertake, with the aid of automating repetitive administrative responsibilities like challenge grading, student attendance tracking, and development document technology, AI answers can also help instructors. Instructors can spend extra time interacting immediately with students and targeting sports that encourage creativity and important thinking by automating those obligations. Instructors are more inclined to undertake AI technology if they agree that those time-saving benefits are full-size, specifically if the equipment allows them to reduce their workload (Huang & Chang, 2020). However, the problem is that many teachers are still not using it; maybe they assume that it is not always clean to use, it can create complications, or they hesitate that it will replace traditional learning methods through which instructors interact with the students. Even these concerns about why AI is not widely utilized in school rooms and why instructors are adopting it create an opening (Zhang & Zheng, 2021). Moreover, a key element in adoption ease is teachers' self-assurance in their technical abilities. Instructors who possess greater technological expertise are



much more likely to simply accept AI merchandise due to the fact they understand them as user-friendly. However, teachers who have little know-how with generation can find it difficult to keep up with the learning curve of AI tools, which can cause them to be reluctant to apply them (Huang & Chang, 2020). Because of this, the perceived value of AI tools is regularly arbitrary and differs among educators.

The main reason for this check is to discover how instructors undertake or reject synthetic intelligence tools. It focuses on two predominant factors: perceived usefulness (how lots of AI equipment allows instructors and their college students to gain knowledge) and ease of adoption (how smoothly instructors feel about undertaking AI and applying it for their study) so this examination will assist in discovering that how these elements impact teachers whether to use or now not AI in the classrooms. So, the research unearths that teacher is much more likely to use AI gear for their learning in the event that they discover these gear are extra smooth to apply and are easily incorporated into contemporary teaching practices. It also highlights that faculties are more likely to give training and help to instructors for the use of AI equipment for his or her mastering. This newsletter has several sections. The first one explains why AI equipment is useful and how it helps instructors with their learning, grading, attendance and many others. The second section explains that what are the challenges the teachers face with the adoption of AI tools, specializing in how smooth and tough it is for teachers to apply AI equipment. Moreover, the final segment tells how academic establishments like faculties and universities deliver education and support to teachers to adopt AI gear. They take a look at lead to a proposal on how they make it easier for instructors to adopt AI in teaching.

### Literature Review

In education, Artificial intelligence is growing very fast, and it can change teachers that how they teach and how their students learn. AI can easily improve learning and offer personalized learning to students so that they can learn whatever they do not understand from teachers; it also reduces the workload of teachers and makes administrative tasks easier for teachers. However, not all teachers are adopting AI tools in their teaching. We have to figure out why they are not adopting it and what are the challenges they are facing when they take help from AI tools.

### Perceived Usefulness

Focusing on two main factors: how useful teachers think that AI tools are and how easy they believe it is to use them. This review is very important because it explores the challenges, barriers, and motivators that influence whether AI tools are used in class or not. The review also helps teachers and educational institutions to understand better the reasons why some teachers use AI tools better while others do not.

A study by Lu et al. (2024) found that the teachers' perceived usefulness of AI is a major driver of their willingness to adopt these tools and technologies; along with teachers who saw AI as a tool to improve their teaching capabilities more likely to use it. In a similar study, Zhang and Hou (2024) found that the usage rates are for AI solutions that are seen as offering definitive advantages, such as an improvement in learning outcomes and productivity. Recent evidence further supports this trend. For example, Kimmons and Rosenberg (2022) found that teachers who believe AI tools can enhance learning outcomes are significantly more open to integrating them into their practice, especially when they see clear connections to pedagogical goals. These results are also the same as those of Semih Çayak (2024), who contend that the usage of AI tools depends upon a teacher's perceptions



of its value in improving the learning of students. However, not all educators see AI as a helpful tool when they first come to know about it. According to Zhai, X. (2024), the adoption of these AI tools may be slowed down by a lack of knowledge by the teachers about the real-world uses of these tools. This indicates that the teachers may be swayed by the potential value given by AI tools by doing awareness campaigns and giving examples of how it may improve teaching. Even while research backs up the notion that perceived utility promotes AI adoption, little is known about how to properly explain the advantages of AI to teachers who are still dubious or uninformed about the technology. Future studies should examine the most effective ways to involve instructors through case studies or training initiatives.

### Ease of Adoption

Another factor influencing AI adoption is the **ease of adoption** of AI tools, which refers to how easily teachers can use AI tools in their teaching practices. This depends on how accessible, easy to use, and intuitive the technology is. Similarly, According to Lu et al. (2024), teachers' likelihood of utilizing AI technologies in the classroom is strongly impacted by their level of comfort with technology and how simple they believe these tools to be to use. Teachers' confidence in their capacity to use new tools or technical self-efficacy is crucial for adoption, according to Semih Kayak (2024). Teachers' opinions on how simple it is to use AI tools are greatly influenced by their past technological experiences.

Additionally, Zhang and Hou (2024) pointed out that the tools are more likely to be embraced if they need less technical know-how or major modifications to instructional practices. Nevertheless, as no Zhai .te (2024), in order to guarantee that teachers feel comfortable utilizing AI tools, training and institutional support are essential. Without these support networks, educators can find AI tools intimidating or might not know how to incorporate them into their lesson plans successfully. The technological interface is only one aspect of adoption ease; another is how simple it is for educators to become proficient with the tools and use them to improve their instruction.

Predicting the teachers' behaviour to use the AI tools and their actual use of these tools in the classroom is the goal of checking the utility and ease of adoption of these tools. According to Semih Çayak (2024), instructors' ability to use AI tools is greatly impacted by their opinions about the utility and ease of integration of the technology with their current teaching methods. This is the same as with the Technology Acceptance Model (TAM), which says that the two most significant predictors of technology adoption are its perceived utility and its ease of use. According to Zhang and Hou (2024), the teachers who thought AI was practical and simple to use were a lot more inclined to use it in their regular lesson plans. On the other hand, teachers were less likely to use AI if they thought that the technology was not helpful or easy to utilize. Zhai, X. (2024) show how training and institutional support can have a favourable impact on converting willingness into adoption. According to Ahmed, Mullah, and Shahen (2024), adoption rates were greater at universities that offered thorough instruction on the use of AI tools in the classroom. In addition to having greater confidence in their ability to use AI tools, teachers at these universities thought these tools could improve their instruction. In a similar vein, Semih Çayak (2024) stress the importance of institutional infrastructure in promoting an AI adoption culture, including the provision of sufficient devices, internet connection, and continuous assistance. Zhai, X. (2024) assert that while many teachers see the value of AI,





they may still be reluctant to embrace it in the absence of these tools. This crucial gap between the theoretical understanding of AI and its real-world implementation in the classroom can be filled by institutional assistance. In contexts where professional development programs focused on digital transformation were offered, AI adoption increased substantially (Hazzan-Bishara et al., 2025). These findings highlight the importance of ongoing training aligned with practical classroom needs. The opinion of the teachers regarding the usability of AI tools may be impacted by the ethical issues surrounding its use in the classroom. According to Popenici and Kerr (2017), issues like academic integrity and data privacy, along with the possibility of exploitation of AI tools, could put teachers at a disadvantage.

This paper uncovers the main elements that sway AI use in education through perceived usefulness, ease of adoption, institutional support, ethical consideration, and behavioural intention towards AI tools. According to the study, educators will embrace AI tools more readily if it is evident to them that these tools are useful and acutely easy to use. Subsequent research should direct its inquiry into the existing gap on how schools and universities should best support teachers, how cultural orientation influences ethical implications related to the use of AI, and in what way it is ensured that teachers apply AI tools in their teaching practices.

### Hypothesis Development

The following theories are developed in this study based on the studied literature:

**H<sub>1</sub>: Instructors' perceptions of the usefulness of AI tools (PUAI) are influenced positively by their perceptions regarding the ease of adopting AI tools (PEAI).**

This theory builds upon the conclusions made by Eutsler and Long (2023) regarding ease of use and ease of adoption, pointing out that a user-friendly interface and previous technical experience shape the perceived ease of use, which affects usefulness. Also, consider Malhan et al. (2023) in their proposed Technology Acceptance Model (TAM), which places emphasis on usability as a determinant of usefulness.

**H<sub>2</sub>: Perceived AI tools' usefulness (PUAI) is a strong predictor of actual AI tools' use (UAI) in teaching practice.**

These findings are corroborated by Lu et al. (2024) and Zhang and Hou (2024), who highlighted the relevance of instructors' perspectives concerning the utility of AI tools, pointing out that perceptions significantly affect the likelihood of being adopted. Moreover, Kimmons and Rosenberg (2022) remarked that teachers' decisions regarding the integration of technology into their lessons are most often dominated by the perceived usefulness of the technology.

**H<sub>3</sub>: The relationship between Perceived Ease of Adoption (PEAI) and Usage of AI tools (UAI) is mediated by the Perceived Usefulness of AI tools (PUAI).**

Mediation theorizing informed by the TAM framework (Malhan et al., 2023) and supported by studies like Zhai (2024) and Semih Çayak (2024), which argue that while ease of use drives technology adoption, its effect on actual usage is largely mediated through perceived usefulness.

### Methodology

The reason for this study was to investigate how teachers view the value and the usability of using AI tools in the classroom. Even while AI technologies are being actively used in educational settings, more and more people, especially educators, are using them widely. An online poll was created and sent to educators from different institutions to learn how



they view AI tools and what factors affect their acceptability to use them. This study uses an established questionnaire to gather the records. A combination of closed-ended and Likert-scale questions can be used within the survey to check the subsequent vital factors: the primary segment includes demographic data like age, gender, teaching stage, teaching level and many others.

Construct	Definition	Measurement Approach	Key References
<b>Perceived Usefulness (PUAI)</b>	The degree to which educators trust AI gear will beautify teaching effectiveness pupil mastering, and reduce administrative work.	Measured via Likert-scale items evaluating beliefs about AI's impact.	Davis (1989); Lu et al. (2024); Zhang & Hou (2024)
<b>Ease of Adoption (PEAI)</b>	The perceived simplicity and ease with which educators can include AI tools in teaching practices.	Likert-scale measuring comfort level, prior tech experience, and perceived complexity.	Venkatesh et al. (2003); Eutsler & Long (2023)
<b>Usage of AI Tools (UAI)</b>	The actual use of AI tools by educators, considering behavioural intention and observed practices.	Self-reported Likert-scale items on frequency and context of AI use.	Kimmons & Rosenberg (2022); Zhai (2024)

SPSS (Statistical Package for the Social Sciences) for evaluating quantitative data, will be used for the analysis after the data has been collected. The statistical methods listed below will be used: Descriptive Statistics, Correlation Analysis and Multiple Regression Analysis.

### Results And Analysis

**Table 1: Reliability Statistics**

Scale	No. of Items	Cronbach's Alpha
PUAI	5	0.87
PEAI	5	0.82
UAI	5	0.85

Within the context of my findings, to ensure the best of the measurement units, internal reliability was assessed for every variable. Reliability, in this context, refers to how continually more than one gadget degrees the equal underlying concept. The three core constructs of this look at—PUAI (Perceived Usefulness of AI), PEA (Perceived Ease of AI), and UAI (Use of AI gear)—all validated strong internal coherence, as meditated in their Cronbach's alpha values. PUAI ( $\alpha = 0.87$ ): This excessive value shows that the items related to usefulness have been carefully aligned and captured the equal average notion. PEA ( $\alpha = 0.82$ ): The items measuring perceived ease showed dependable consistency. UAI ( $\alpha = 0.85$ ): Responses about the real utilization of AI tools had been also internally stable. Normally, those findings verify that the contraptions have been statistically dependable and suitable for drawing legitimate conclusions within the subsequent evaluation.



Table 4: Discriptive Analysis

	Mean	Std. Deviation	Minimum	Maximum	N
PUAI	3.89	0.64	2	5	276
PEAI	3.72	0.58	2	5	276
UAI	3.56	0.61	1.8	5	276

This suggests that once educators understand AI gear as useful, they are appreciably more willing to incorporate them into their coaching practices. Moreover, there was a moderate yet statistically huge association between Perceived Ease of AI (PEAI) and PUAU ( $r = .187$ ,  $p < .01$ ), indicating that instructors who find AI gear smooth to use will also be much more likely to view them as beneficial. However, the relationship between PEAU and UAU changed into susceptible and no longer statistically good sized ( $r = .05$ ,  $p = .159$ ), suggesting that ease of use, on its personal, does no longer considerably have an impact on actual tool adoption.

Table 3: Pearson Correlation Matrix

Variables	PUAI	PEAI	UAI
PUAI	1	0.187	0.379
PEAI	0.187	1	0.085
UAI	0.379	0.085	1

Note:  $p < .01$

The correlation matrix gives a clear view of how the three core variables are associated in terms of route and energy. A noteworthy wonderful correlation was determined between the Perceived Usefulness of AI (PUAI) and the Use of AI tools (UAI), with a coefficient of  $r = .379$  ( $p < .01$ ).

Table 4: Regression Summary (Model 4 – Mediation)

Path	Coefficient (B)	SE	t	p
PEAI → PUAU (a-path)	0.228	0.073	3.12	.002
PUAI → UAU (b-path)	0.456	0.069	6.61	<.001
PEAI → UAU (c-path)	0.052	0.070	0.74	.460
Indirect effect (a*b)	0.104	Boot CI [.045, .185] – Significant		

To examine the hypothesized relationships drawn from the Technology Acceptance Model (TAM), a mediation analysis was performed using Hayes' PROCESS Macro Model 4. This model is well-suited for testing whether the effect of one variable on another occurs indirectly through a mediator. In this case, the goal was to determine if the Perceived Usefulness of AI (PUAI) serves as a mediator between the Perceived Ease of AI (PEAI) and the Use of AI Tools (UAI). The analysis found a statistically considerable courting between PEAU and PUAU ( $B = 0.228$ ,  $p = .002$ ). This indicates that when instructors view AI equipment as smooth to apply, they are more likely to additionally locate them as beneficial, a finding constant with the foundational good judgment of TAM. A strong, significant effect was also observed from PUAU to UAU ( $B = 0.456$ ,  $p < .001$ ). The result indicates that perceived usefulness directly influences whether teachers adopt and apply AI tools in their instructional practices. It reinforces the idea that usefulness is the most influential driver of behavioural intention and actual use. The direct path from PEAU to UAU was not statistically significant ( $B = 0.052$ ,  $p = .460$ ), indicating that ease of use, on its



own, does not significantly impact usage. Teachers are unlikely to adopt a tool simply because it is easy to use; its perceived value must also be clear. The indirect effect calculated as the product of path a and b was 0.104, with a bootstrapped 95% confidence interval of [0.045, 0.185]. Since this interval does not include zero, the mediation is statistically significant. This confirms that PUAJ fully mediates the relationship between PEAI and UAI. This pattern represents indirect-only mediation, where the impact of PEAI on UAI operates entirely through PUAJ. In practical terms, this means that even if teachers find AI tools easy to use, they will only incorporate them into their teaching if they also believe the tools offer real instructional value.

As outlined by Preacher and Hayes (2008), Model 4 of the PROCESS macro is designed to assess simple mediation, where the influence of an independent variable (X) on a dependent variable (Y) is transmitted through a single mediating variable (M). One of the key recommendations by Preacher and Hayes is the use of bootstrapped confidence intervals to determine whether the indirect effect is statistically significant, a method widely accepted as robust in mediation analysis. In this analysis, the bootstrap-generated 95% confidence interval for the indirect effect was [0.045, 0.185], which does not include zero. The results confirm that the mediation effect is significant. Based on these results, it is evident that the relationship between ease of use and actual AI usage by teachers is not direct but rather indirect, fully explained by how useful the tools are perceived to be.

### Discussion

This research investigated the impact of teachers' perceptions of the ease and helpfulness of AI tools on their actual use of such tools in teaching practices. The results indicated that AI tools' use and perceived ease of use were significantly mediated by AI's perceived usefulness (PUAJ) (UAI and PEAI). Perceived easiness of the AI tools to use had more than average effect on usefulness, which resulted in strong prediction to usage but did not predict output directly (in this case, use). CUAJ provided an indirect route, which confirmed mediation through PUAJ. These findings supported other works that have claimed that the utility of technology, more than ease of use, drives its adoption, such as Zhang and Hou (2024) and Lu et al. (2024).

A tool is more likely to be adopted when it is perceived as both useful and easy to follow in an instructional context. This is consistent with the Technology Acceptance Model (TAM), which emphasizes that utility almost always has more relevance for adoption than usability (Davis, 1989). This statement is consistent with Zhai's (2024) work, which noted that marketing the acceptance of AI needs an understanding of its useful application. Similarly, Semih Çayak (2024) highlighted the impact of perceived utility, as noted in this study, along with practically fostering support from the institutions to enhance the use of AI.

The current results are consistent with earlier research in educational technology adoption. For instance, Teo (2011) and Al-Azawei et al. (2019) emphasized that perceived usefulness is a stronger and more consistent predictor of actual technology use than perceived ease. Furthermore, Park (2009) noted a similar trend among instructors, suggesting that professionals evaluate digital tools more critically than students do. The results also echo Preacher and Hayes' (2008) model of mediation, supporting the idea that perceived usefulness can channel the effect of ease into a behavioural intention.

Even though this study gives useful results, there are some limitations to keep in mind. First of all, it depends only on what teachers said in the survey, and sometimes people





might not answer honestly or might forget things. Second, because it was done at one point in time, it is hard to say if one thing causes another. A longer-term study would help us understand the changes better. Third, the research only looked at three main things, but there are other important factors, too, like how confident teachers feel using AI, what kind of support their schools give, or whether they get training. Also, since the study was done in a specific area, the results might not be the same everywhere.

The study offers practical insights for both educators and policymakers. First, it suggests that teacher training programs should focus not only on teaching how to use AI tools but also on demonstrating how these tools can positively impact teaching outcomes. Second, developers of AI-based educational technology must prioritize designing features that directly contribute to classroom efficiency and learning quality. Third, institutions must foster a culture where usefulness is emphasized over novelty, and tools are selected based on how well they support instructional goals. These implications extend to curriculum planners and EdTech vendors who aim to encourage meaningful AI integration in schools. This is consistent with Salmon and Ross (2024), who argue that AI integration should not be seen as a technical upgrade but as a pedagogical shift requiring mindset change through well-structured development programs.

While the mediation model fits well, alternative explanations should be considered. For instance, teachers who are already tech-savvy may naturally rate AI tools as both easy and useful, introducing a third variable, technological self-efficacy, that was not measured here. It is also possible that prior exposure to AI tools or institutional pressures played a role in usage, independent of perceived usefulness or ease. Although these possibilities were not directly assessed, they point to the value of extending the model in future research.

The findings are in line with the initial hypothesis that PUA mediates the relationship between PEAI and UAI. The lack of a direct effect from PEAI to UAI supports the prediction that usefulness is the key mechanism driving behaviour. The significant indirect effect aligns with the idea that ease of use supports technology adoption only when it enhances the user's perception of value. Thus, the research questions have been adequately addressed, and the study offers clear empirical support for an extended interpretation of TAM within the context of AI tool adoption in education. At last, this discussion consolidates the study's contribution to educational technology research by emphasizing that the value teachers assign to AI tools is the strongest predictor of actual adoption.

### Conclusion

This study was conducted to examine how key perceptual elements, Perceived Ease of Use (PEAI) and Perceived Usefulness (PUAI), have an effect on the real Use of AI equipment (UAI) in teaching. Grounded within the technology acceptance model (TAM) and supported by means of Preacher and Hayes' mediation framework (version four), the study aimed to offer empirical insight into the behavioural styles that determine AI adoption among educators. Using a quantitative survey-based method, data were collected from 276 teachers throughout various educational levels. The analysis included reliability checks, descriptive information, Pearson correlations, linear regression, and mediation modelling. This research emphasizes a crucial point about instructional technology: people do not adopt technologies just because they are simple to use. Instead, teachers mostly use a tool when they trust that it offers real value in terms of improving teaching or learning. In other



words, ease of use alone is not enough. Teachers must also see a clear benefit when ease supports usefulness and the likelihood of adoption increases. This has practical importance for both developers of AI tools and educational institutions. Developers must go beyond making user-friendly interfaces and instead design tools that genuinely improve learning outcomes or reduce teacher workload. Similarly, training programs should not only teach how to use these tools but also how they support teaching goals. The research adds to the existing literature by giving empirical support for PUAJ's role as a full mediator in the TAM framework. While previous studies have examined the separate effects of PEAI and PUAJ, this research helps clarify their relationship. By using Hayes' mediation approach, the study confirms that usefulness acts as the primary pathway between ease and actual use. This is a valuable contribution, as it suggests that usefulness is not just a supporting factor but a necessary condition for adoption. Teachers need to believe a tool will make a meaningful impact on their daily work before they decide to use it regularly. Although the findings are strong, the study has limitations. The use of self-reported survey data may affect accuracy, as participants might overstate or misjudge their usage. In addition, because the study was cross-sectional, it cannot show how perceptions or behaviours change over time. Also, it only looked at three variables, PUAJ, PEAI, and UAI, leaving out other important influences like access to training, school support, or attitudes toward AI. These should be explored in future studies. Further research might also compare adoption patterns in different regions or faculty types, such as city versus rural or public, as opposed to private.

Practically, it suggests that educational institutions must not depend completely on the technical high-quality of AI equipment. Instead, they have to pay attention to making these tools meaningfully beneficial within the regular work of educators. From clever grading structures to AI chatbots for pupil queries, each innovation needs to serve a pedagogical cause. They have a look at additionally reminding builders and administrators that instructors are rational adopters, no longer passive users. Their adoption decisions are based on perceived results and no longer just on the novelty of a tool. This research underscores an important truth in educational innovations: equipment is most effective when perceived as useful. The journey from innovation to adoption is not decided by means of ease of entry alone, but via the significant enhancement those tools deliver to the classroom experience. Demonstrating that Perceived Usefulness fully mediates the connection between ease and use, this look affirms the primary function of perceived value in shaping user behaviour. It strengthens the theoretical foundations of TAM, validates the applicability of Preacher & Hayes' mediation framework, and provides practical guidance for AI implementation in education. As we move closer to increasingly digitized and AI-driven educational environments, the insights from this take a look at function as a guidepost, reminding us that at the back of every device and system is a teacher, and their perception remains the key to transformation.

A number of limitations should be taken into account, even if this study offers insightful information about the variables affecting the adoption of AI tools in educational settings. Because respondents may exaggerate their true usage or give false impressions, using self-reported survey data could add bias. Furthermore, the study's cross-sectional design makes it difficult to track changes in instructors' attitudes and actions toward AI technologies over time. Other significant aspects, including training accessibility, institutional support, and general attitudes toward AI adoption, were not investigated



because the three main variables, Perceived Ease of Use (PEAI), Perceived Usefulness (PUAI), and the Use of AI tools (UAI) were the focus of this study. These restrictions advise using caution when extrapolating the results to larger populations.

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