ẢNH HƯỞNG CỦA TRÍ TUỆ NHÂN TẠO ĐẾN THÁI ĐỘ CỦA GIÁO VIÊN TIỂU HỌC TRONG VIỆC GIẢNG DẠY BỘ SÁCH FAMILY AND FRIENDS NATIONAL EDITION

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON PRIMARY TEACHERS' ATTITUDE IN TEACHING THE FAMILY AND FRIENDS NATIONAL EDITION TEXTBOOK SERIES

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	Nghiên cứu này nhằm đánh giá ảnh hưởng của việc ứng dụng trí tuệ nhân tạo (AI) đến thái độ của giáo viên tiểu học trong giảng dạy bộ sách Family and Friends National Edition. Dữ liệu được thu thập từ 88 giáo viên tiểu học thông qua bảng hỏi Likert 5 mức độ, với các biến độc lập gồm Perceived Usefulness (PU - mức độ hữu ích cảm nhận), Perceived Ease of Use (PEOU - mức độ dễ sử dụng cảm nhận), Facilitating Conditions (FC - điều kiện hỗ trợ kỹ thuật) và AI Use Index (Ai UseIndex - chỉ số mức độ sử dụng AI); biến phụ thuộc là Attitude Overall (thái độ tổng thể) được cấu trúc theo ba thành tố Affective - Cognitive - Behavioral (cảm xúc - nhận thức - hành vi). Kết quả hồi quy tuyến tính cho thấy mô hình có Adjusted R² = 0.647, phản ánh khả năng chứng minh đáng kể của các biến độc lập đối với thái độ tổng thể. Trong đó, Ai Use Index là yếu tố ảnh hưởng mạnh nhất (β = 0.807, p < .001), tiếp đến là PU và PEOU. Kết quả này cho thấy trải nghiệm sử dụng thực tế và nhận thức về tính hữu ích của AI đóng vai trò trung tâm trong việc hình thành thái độ tích cực của giáo viên. Nghiên cứu góp phần mở rộng cơ sở lý luận cho việc tích hợp Technology Acceptance Model (TAM - Mô hình chấp nhận công nghệ) và ABC Model (Mô hình ba thành tố thái độ) trong bối cảnh giáo dục tiểu học Việt Nam.
	ABSTRACT *This study investigates the impact of applying Artificial Intelligence (AI) on primary school teachers' attitudes during the teaching of the Family and Friends National Edition textbook series. Data were collected from 88 primary school teachers through a five-point Likert-scalequestionnaire, with independent variables including Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Facilitating Conditions (FC), AI Use Index (AI_USE_INDEX) and the dependent variable ATTITUDE_OVERALL was structured according to three*

components: Affective, Behavioral, and Cognitive (ABC). The results of linear regression analysis showed that the model had an Adjusted $R^2 = 0.647$, reflecting the significant explanatory power of the independent variables on overall attitudes. In which, AI_USE_INDEX was the factor with the strongest influence ($\beta = 0.807$, $p < .001$), followed by PU and PEOU. The results show that the actual use experience and perceived usefulness of AI play a central role in shaping teachers' positive attitudes. The study contributes to expanding the theoretical basis for applying the Technology Acceptance Mode (TAM) model combined with the ABC Model in the context of primary education in Vietnam.

1. Introduction

In the process of digital transformation in education, AI is increasingly exploited to innovate methods and improve teaching quality; in primary English teaching, AI tools support personalization, progress tracking and instant feedback, making the classroom flexible and interactive. In Vietnam, Family and Friends National Edition is now widely used in primary schools and facilitates the integration of AI into teaching activities; however, teachers' attitudes a decisive factor in acceptance and maintenance of use are still divided due to differences in awareness, digital skills and technology experience.

Recent international studies have noted the positive role of AI in teachers' professional awareness and behavior (Tan et al., 2025; Bergdahl & Sjöberg, 2025), while in the Vietnamese context, there have been orientations and policy tools to promote application such as the Circular guiding the tasks of IT application and digital transformation in the 2024 - 2025 school year of the Ministry of Education and Training (MOET), Circular No. 02/2025/TT-BGDDT (MOET, 2025a) on the Digital Competency Framework for Learners and Circular No. 2250/BGDDT-GDPT (MOET, 2025b) implementing the document "Guidelines for using Artificial Intelligence Applications in Teaching and Learning", along with plans to foster digital and AI competencies

for teachers (MOET, 2025c), thereby strengthening the foundation for implementation at the school level.

However, most domestic works currently only stop at describing technology application trends or reflecting general feelings, lacking quantitative evidence associated with primary school classrooms using Family and Friends National Edition, have not systematically measured attitude components according to the structure of Affective, Cognitive, Behavioral and have not pointed out the specific level of influence of AI use on teachers' overall attitudes; therefore, this study focuses on analyzing the relationship between AI use and primary school teachers' professional attitudes in the context of teaching Family and Friends with three key questions: To what extent are primary school teachers applying AI in teaching Family and Friends?; What are teachers' attitudes (Affective - Cognitive - Behavioral) towards AI?; How does an AI application affect teachers' overall attitudes?

2. Literature Review

2.1. Application of AI in education

Artificial intelligence is reshaping global education by personalizing learning, analyzing learner data and supporting pedagogical decision-making. In foreign language teaching, especially at the primary level, AI helps teachers optimize teaching time and support students in

developing language skills at their own pace. According to Tan, Cheng and Ling (2025), AI is not only a technological tool but also a means of innovating learning methods, allowing students to participate in smart learning forms such as adaptive learning and automated feedback systems, thereby enhancing their initiative and interest in learning. Bergdahl and Sjöberg (2025) stated that the implementation of AI in K-12 education has a dual impact: improving the quality of teaching and enhancing teachers' AI self-efficacy, that is, their confidence in the ability to apply technology in professional practice. With confidence in their technological capabilities, teachers are more receptive to AI tools and experiment with new pedagogical approaches, creating a more flexible and interactive learning environment.

In general, recent studies confirm that AI is an inevitable trend in educational innovation, especially at the primary level the stage where language and learning thinking are formed. The integration of AI not only improves efficiency and personalization but also helps teachers develop technological capabilities and positive attitudes towards pedagogical innovation (Tan et al., 2025; Bergdahl & Sjöberg, 2025).

2.2. Teachers' attitudes towards AI applications

Attitude is a central factor influencing teachers' professional behavior and ability to accept innovation. According to Fishbein and Ajzen (1975), attitude is formed from three components: Affective, Cognitive and Behavioral, reflecting an individual's feelings, perceptions and action tendencies towards technology. When these three factors interact, they form Attitude Overall, as shown as the overall attitude of teachers towards integrating AI into teaching.

In the educational environment of AI applications, teachers' attitude is considered a key predictor of technology acceptance and retention. Zhao et al. (2025) demonstrated that the level of technological self-efficacy and

perception of the pedagogical value of AI are positively related to professional attitude. In the same direction, Güneyli et al. (2024) showed that AI literacy and experience using technology directly affect teachers' emotions and behaviors.

In addition, Herzallah and Makaldy (2025) asserted that technological self-efficacy plays a bridging role between cognition and behavior, while Hazzan-Bishara et al. (2025) emphasized the combination of intrinsic factors (self-efficacy, motivation) and extrinsic factors (facilitating conditions, institutional support) in forming positive attitudes. Therefore, the ABC model is a suitable theoretical basis to explain the dependent variable Attitude Overall in this study, reflecting the interaction between cognition, emotion and behavior of teachers in the context of primary education towards AI application.

2.3. Factors affecting teachers' attitudes

Many studies have demonstrated that teachers' attitudes toward the application of AI in teaching are influenced by both cognitive factors and practical conditions. Based on the extended Technology Acceptance Model, the four main independent variables considered in this study are Perceived Usefulness, Perceived Ease of Use, Facilitating Conditions and AI Use Index. Perceived Usefulness reflects the extent to which teachers believe that the use of AI improves teaching effectiveness, saves time, or improves the quality of feedback for students. According to Tan et al. (2025), PU is the factor that has the strongest and most direct influence on technology acceptance attitudes, as teachers often evaluate the value of AI through its practical impact on teaching. Zhao et al. (2025) also pointed out that when teachers clearly perceive the pedagogical benefits of AI, they are more likely to develop positive attitudes and maintain stable usage behavior.

Perceived Ease of Use reflects teachers' feelings about the simplicity, friendliness and ease of operation of AI tools. Davis (1989)

argued that PEOU not only directly affects attitudes but also indirectly affects PU through positive feelings when experiencing technology. Hazzan-Bishara et al. (2025) extended this view, arguing that perceived ease of use helps reduce technology anxiety and promote interest in integrating AI into the classroom.

Facilitating Conditions refers to the availability of infrastructure, equipment and technical support needed for teachers when using AI. Herzallah and Makaldy (2025) assert that favorable organizational conditions are a factor that ensures the sustainability of technology adoption behavior, especially when AI requires the coordination of individual capabilities and school resources. Factors such as supportive policies, professional training, and teacher networks using AI all contribute to the formation of long-term positive attitudes.

Finally, the AI Use Index is considered a behavioral indicator that shows the level and frequency of AI use in actual teaching. Unlike cognitive factors, this index reflects accumulated personal experiences, which in turn influence attitudes. According to Hazzan-Bishara et al. (2025), the interaction between actual behavior and technology awareness helps teachers strengthen their belief in the value of AI applications and at the same time, motivates pedagogical innovation. Thus, these four factors together comprehensively describe the "cognitive - conditional - behavioral" aspects that influence teachers' "Attitude Overall" in the current primary education context.

2.4. Theoretical framework of the study

The study is based on two fundamental theoretical frameworks: the Technology Acceptance Model by Davis (1989) and Attitude Theory by Fishbein and Ajzen (1975). TAM explains technology acceptance behavior through two factors: Perceived Usefulness and Perceived Ease of Use - factors that form attitudes and intentions to use (Tan et al., 2025; Hazzan-Bishara et al., 2025). In addition, the ABC Model describes the three-component structure of attitudes, including Affective, Cognitive and Behavioral. The combination of the two theories helps this study comprehensively analyze the relationship between perception, supporting conditions, use behavior and overall attitude of teachers towards AI. Specifically, the hypotheses are defined as follows: Perceived usefulness has a positive effect on attitude overall; Perceived ease of use has a positive effect on attitude overall; facilitating conditions have a positive effect on attitude overall; AI use index has a positive effect on attitude overall.

Figure 1. The proposed research model on the impact of AI application on teachers' attitudes is based on the integration of Davis's Technology Acceptance Model (1989) and Fishbein and Ajzen's (1975) three-component attitude model.
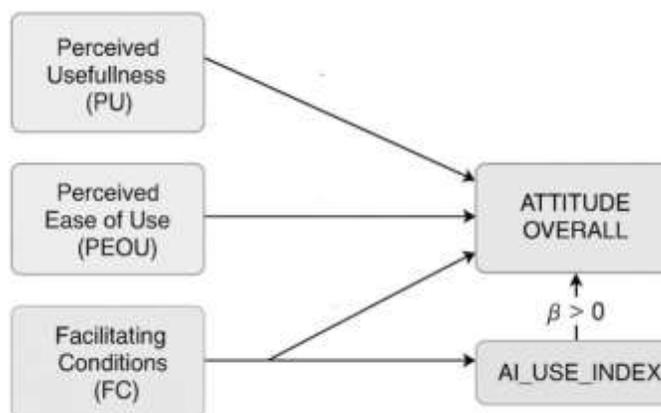
3. Methodology

The study used a quantitative method with a 5-point Likert questionnaire to survey 88 primary school teachers who are teaching Family and Friends to assess their level of AI application and their professional attitudes. The scales were built based on the TAM model of Davis (1989) and adjusted to the Vietnamese context, including four independent variables (PU, PEOU, FC, AI USE INDEX) and one dependent variable (Attitude Overall), in which attitudes were divided into three components: Affective, Cognitive and Behavioral according to the ABC model. The questionnaire was divided into three parts: personal characteristics, level of AI application and attitude towards AI,

with items inherited and refined from recent studies by Tan et al. (2025), Herzallah and Makaldy (2025), and Zhao et al. (2025). Data were processed using JASP 0.18, including descriptive statistics, reliability testing using Cronbach's Alpha, Pearson correlation analysis and linear regression to determine the influence of cognitive factors and AI usage behavior on teachers' overall attitudes.

4. Findings

4.1. The level of AI application in teaching

The results in table 1 below show that the level of application of AI by primary school teachers when teaching Family and Friends is relatively high, with the average value ranging from 3.71 to 4.05.

Table 1. Descriptive statistics of the level of application of AI in teaching Family and Friends

Observed Variables	Code	Mean	Std. Deviation
Perceived Usefulness	PU	3.965	0.330
Perceived Ease of Use	PEOU	3.904	0.369
Facilitating Conditions	FC	3.824	0.496
Breadth of AI Use	BREADTH	4.054	0.517
Purpose of AI Use	PURPOSE_MEAN	3.716	0.496
Overall of AI Use Index	**Ai Use Index**	**3.714**	**0.212**

In particular, the Breadth indicator has the highest average value, reflecting a fairly diverse range of AI applications, mainly in creating interactive exercises, practicing pronunciation, and automatic scoring. The PU and PEOU variables are both high, showing that teachers rate AI as useful and convenient in pedagogical operations. The FC variable has a relatively lower value, showing that the conditions of facilities and technical support between schools are still different. The Ai Use Index index is stable, reflecting the frequency of AI applications in teaching. In general, the average values exceed the threshold of 3.7 and the low

standard deviation (SD ≤ 0.52) shows that teachers have formed a relatively high level of technology readiness and consensus in using AI.

Scale diagnosis (diagnosis only)

Prior to regression, we examined internal consistency to verify unidimensionality. The aggregated composite combined cognitive/reflective constructs (PU, PEOU, FC), use descriptors (Ai Use Index, with Purpose Mean indicating purpose; Breadth indicating task scope) and an outcome (Attitude Overall). To test for heterogeneity, a single Cronbach's α across all items was 0.386 (95% CI 0.152, 0.565), as shown in table 2 below:

Table 2. Cronbach's Alpha (Frequentist) and "If item dropped" results
for variables PU, PEOU, FC, Breadth, Purpose Mean, Ai Use Index, Attitude Overall

Frequentist Scale Reliability Statistics	
Estimate	**Cronbach's α**
Point estimate	0.386
95% CI lower bound	0.152
95% CI upper bound	0.565
Note. The following item correlated negatively with the scale: Breadth.	

Frequentist Individual Item Reliability Statistics	
Item	**If item fropped Cronbach's α**
PU	0.322
PEOU	0.433
FC	0.444
BREADTH	0.548
PURPOSE_MEAN	0.320
AI_USE_INDEX	0.149
ATTITUDE OVERALL	0.140

Breadth had a negative item-total correlation and removing it increased α to 0.548. Therefore, we report Breadth descriptively to contextualize AI use and exclude it from the reflective reliability assessment; Subsequent analyses proceed with constructs aligned to their intended measurement structure, maintaining measurement validity and inferential coherence.

4.2. Teachers' attitudes towards AI in teaching Family and Friends

The results in table 3 show that primary school teachers' attitudes towards AI adoption are generally positive, with the mean values of the three components Affective Attitude, Cognitive Attitude and Behavioral Attitude ranging from 3.82 to 3.97, with a low standard deviation (SD < 0.33) reflecting high consensus.

Table 3. Descriptive statistics of primary school teachers' attitude components towards the application of AI in teaching Family and Friends

	Affective_Attitude	**Cognitive_Attitude**	**Behavioral_Attitude**	**Attitude_Overall**
Valid	88	88	88	88
Missing	0	0	0	0
Mean	3.864	3.965	3.828	3.886
Std. Deviation	0.292	0.330	0.240	0.164

Of these, Cognitive Attitude (Mean = 3.965) is the highest, indicating that teachers are well aware of the pedagogical benefits of AI in improving teaching quality and expanding learning resources, which is consistent with the findings of Güneyli et al. (2024) on the central role of cognition in forming positive attitudes. Affective Attitude (Mean = 3.864, SD = 0.292) represents teachers' positive emotions, indicating that they are increasingly confident and interested in adopting technology. In contrast, Behavioral Attitude (Mean = 3.828, SD = 0.240) was slightly lower, reflecting that actual AI usage behavior has not yet caught up with positive cognitions and emotions a phenomenon similar to the results of Bergdahl and Sjöberg (2025), who pointed out barriers of time and policy support. The aggregate value of Attitude

Overall (Mean = 3.886, SD = 0.164) shows a stable and positive overall attitude. The small difference between the three components suggests that teachers are in the process of transforming cognitions and emotions into specific behaviors a trend similar to international studies on AI acceptance, in which cognition is often the precursor to behavior (Tan et al., 2025; Zhao et al., 2025).

4.3. The impact of AI applications on teachers' attitudes

The descriptive analysis results in the previous section reflected the positive attitude of primary school teachers towards the application of AI in teaching Family and Friends. However,

the extent to which each specific factor influences this attitude still needs to be examined in more depth through correlation and regression analyses. The next section presents the relationship between the independent variables in the model and the dependent variable Attitude Overall, thereby testing the suitability of the research model.

4.3.1. Correlation Analysis

The results presented in Table 3 reflect the linear relationships between the independent variables in the research model and the dependent variable Attitude Overall.

Table 4. Results of correlation analysis between variables in the research model

Variable		PU	PEOU	FC	Ai use Index	Attitude Overall
1. PU	Pearson's r	—				
	p-value	—				
2. PEOU	Pearson's r	-0.053	—			
	p-value	0.627	—			
3. FC	Pearson's r	-0.025	-0.108	—		
	p-value	0.814	0.316	—		
4. Ai use Index	Pearson's r	0.440	0.290	0.571	—	
	p-value	< .001	0.006	< .001	—	
5. Attitude Overall	Pearson's r	0.457	0.364	0.421	0.807	—
	p-value	< .001	< .001	< .001	< .001	—

All Pearson's r correlation coefficients are positive and statistically significant at p < .001, indicating a positive association between the level of AI application and elementary school teachers' attitudes towards using technology in teaching. The Ai Use Index variable has the highest correlation coefficient with Attitude Overall (r = .807, p < .001), proving the strongest relationship between the frequency of using AI tools and teachers' overall attitudes. The Perceived Usefulness variable also shows a significant correlation with Attitude Overall (r = .457, p < .001), reflecting the association between perceived usefulness of technology and teachers' positive attitudes. Meanwhile, Facilitating Conditions had a moderate correlation coefficient with Attitude Overall

(r = .421, p < .001), indicating a stable relationship between technical support conditions and teachers' readiness to adopt AI. In addition, Perceived Ease of Use had a lower correlation coefficient than the remaining variables (r = .364, p < .001), but still reached statistical significance, demonstrating a positive correlation between perceived ease of use and teachers' general attitudes. These results showed that the four independent variables in the model all had a positive relationship with Attitude Overall, thereby confirming the suitability of the extended TAM model used in the study.

4.3.2. Linear Regression Results

The results of the linear regression analysis presented in table 5 show that the research model has a good fit with the survey data.

Table 5. Results of linear regression analysis between independent variables and dependent variable Attitude Overall

Model	R	R²	Adjusted R²	RMSE
H₀	0.000	0.000	0.000	0.223
H₁	0.807	0.651	0.647	0.132

ANOVA						
Model		Sum of Squares	df	Mean Square	F	p
H₁	Regression	2.821	1	2.821	160.721	< .001
	Residual	1.509	86	0.018		
	Total	4.330	87			

Coefficients						
Model		Unstandardized	Standard Error	Standardized	t	p
H₀	(Intercept)	4.178	0.024		175.673	< .001
H₁	(Intercept)	1.221	0.234		5.226	< .001
	Ai use Index	0.801	0.063	0.807	12.678	< .001

The values of $R^2 = 0.651$ and Adjusted $R^2 = 0.647$ reflect that the four independent variables in the model can explain about 64.7% of the variation in the dependent variable Attitude Overall, while the rest is influenced by other factors that have not been considered in the scope of the study. The root mean square error (RMSE) = 0.132 shows that the model has good accuracy in predicting actual values. The Anova test shows that the F value = 160.721 with a significance level of $p < .001$, confirming that the overall linear regression model is statistically significant. This demonstrates that at least one of the independent variables in the model has a significant effect on the dependent variable Attitude Overall and also shows the appropriateness of the regression model in analyzing the relationship between variables in the study.

In the Coefficients table, the Unstandardized Beta (B) = 0.801 and Standardized Beta (β) = 0.807, with t = 12.678 and $p < .001$, showing that Ai Use Index has a positive and statistically significant effect on Attitude Overall. This demonstrates that as the level of AI use by teachers increases, the mean value of overall attitude also increases accordingly. The intercept (Intercept = 1.221) and small standard error (0.234) show that the model operates stably and has good predictive ability.

This result is consistent with previous quantitative studies on the relationship between technology use behavior and teachers' attitudes toward AI technology. Specifically, Tan et al. (2025) noted that AI use experience has a direct impact on teachers' technology acceptance attitudes, while Zhao et al. (2025) and Hazzan-Bishara et al. (2025) also confirmed that actual usage is a strong predictor of professional attitudes in the context of educational digital transformation. These results simultaneously strengthen the reliability and explanatory value of the proposed research model.

4.3.3. Discussion & findings

Regression analysis confirmed the model had high explanatory power with Adjusted $R^2 = 0.647$. All PU, PEOU, FC and Ai Use Index significantly predicted Attitude Overall, with Ai Use Index being the strongest β = 0.807, p < .001, emphasizing the role of actual use experience,

consistent with the thesis of self-efficacy and sense of control in technology acceptance (Herzallah & Makaldy, 2025). PU continued to have a positive effect β = 0.457, p < .001, consistent with TAM and recent evidence (Davis, 1989; Zhao et al., 2025) and also suggesting a mediating role between techno-organizational conditions and occupational attitudes. PEOU, although lower than β = 0.364, still forms initial impressions and integration intentions in the classroom (Ayanwale et al., 2022). FC maintains a stable influence on Attitude Overall, reflecting the role of infrastructure, technical support and school mechanisms, consistent with the results on AI literacy and professional attitudes (Hazzan-Bishara et al., 2025; Çayak, 2024). Overall, the interaction between cognitive factors, organizational conditions and actual usage behavior shows that the extended TAM model is stable and suitable for the Vietnamese primary school context.

When compared internationally, the results of this study reinforce the trend of teachers' positive attitudes towards AI: Tan et al. (2025) note favorable attitudes when experiencing the benefits of expanding the learning space, while Zhao et al. (2025) confirm the central role of PU and AI self-efficacy. Component analysis shows that the impact of AI on Cognitive Attitude is stronger than Behavioral Attitude, consistent with the argument of Güneyli et al. (2024) and Bergdahl & Sjöberg (2025) that positive cognitions often precede behavior. This interpretation is supported by Hazzan-Bishara et al. (2025) on the decisive influence of organizational and implementation conditions, consistent with Herzallah & Makaldy (2025) on the moderating role of self-efficacy and sense of coherence and with Çayak's (2024) observation that AI literacy is a prerequisite for transforming cognition into action.

From there, the pedagogical implication emerges clearly: when teachers have formed positive attitudes at the cognitive level but their applied behavior is not commensurate, the central task of schools is to design highly usable AI-integrated practice training programs. According to Ayanwale et al. (2022), teachers' readiness and confidence increase significantly when they experience experimentation, reflection and professional collaboration. At the same time, Aslan et al. (2024) emphasize the role of supportive contexts and opportunities for collaboration between teachers in maintaining positive attitudes in the long term. Building a stable technical support environment, expanding digital learning resources and designing spaces for experimenting with pedagogical practices with AI are key to linking Cognitive Attitude with Behavioral Attitude, helping teachers move from awareness to action in a sustainable way.

5. Conclusion and Implications

The results of the study confirm that the application of AI has a positive and significant impact on the Attitude Overall of primary school teachers in teaching Family and Friends National Edition, in which Cognitive Attitude is more evident than Behavioral Attitude. AI is seen as a pedagogical innovation tool that supports the improvement of classroom organization and the development of teachers' professional competence in the context of digital transformation; this result is consistent with the assessment of Tan et al. (2025) and Aslan et al. (2024) on the role of AI in expanding flexible learning environments. When the TAM model is extended with the Ai Use Index variable, its ability to explain the process of positive attitude formation becomes more complete, consistent with the ABC structure of attitudes and with evidence emphasizing the role of use experience in technology acceptance (Herzallah & Makaldy, 2025; Bergdahl & Sjöberg, 2025).

In terms of practical implications, the results emphasize that the transition from positive cognition to adoption behavior depends

significantly on the level of self-efficacy and professional support mechanisms at school, in line with the conclusions of Hazzan-Bishara et al. (2025) and Güneyli et al. (2024).

For teachers, they need to developing practice-oriented AI literacy, implementing micro-credentials in short modules linked to lesson studies and AI toolkits for English, requiring classroom testing, reflective journaling, and sharing evidence, thereby creating mastery experience to transition from Cognitive Attitude to Behavioral Attitude.

For school administrators, it is necessary to issue a professional development plan on AI with measurable goals and clear KPIs, allocate time and resources for professional activities, establish a professional learning community and standardize the process of selecting tools, securing data and evaluating teachers' training results.

At the Department and Ministry levels, prioritize mandatory training policies on AI literacy according to digital competency standards for teachers, allocate budgets at the commune level, integrate into teacher professional standards and promotion mechanisms, issue a list of recommended AI tools and data safety guidelines along with a pilot sandbox and recognize continuous training credits to maintain application behavior in schools.

The study still has some limitations, especially in the sample size and the use of self-reported data, which limits the ability to generalize. Also, because the research area is limited in Ho Chi Minh City, schools use many different sets of textbooks, so searching for teachers who are teaching the Family and Friends National Edition set of books resulted in a small research sample size (88 teachers), which is not considered representative of the majority, affects the objectivity of the study. In future studies, the survey should be expanded to different localities and types of schools and qualitative methods, such as in-depth interviews or classroom observations, should be combined to better understand the transformation process between cognition and behavior in AI applications. This approach will help clarify the emotional and intrinsic motivational factors, thereby creating a basis for designing strategies to support the development of AI application capacity for teachers more appropriately and effectively.

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