

## Pedagogical Transformation Through Artificial Intelligence: Implementation Barriers and Adoption Strategies in Business Education

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### ABSTRACT

As artificial intelligence reshapes business education, this study explores how the adoption and challenges of artificial intelligence (AI) in business administration education at private Institutes. A survey of 205 teachers and students, as well as UTAUT-based modeling of technology acceptance, demonstrate that performance expectancy ( $\beta=1.21$ ) and job experience ( $\beta=0.748$ ) are significant adoption factors. However, basic knowledge gaps ( $\beta=-0.712$ ) and low student motivation for formal AI training greatly impede acceptance. Critical barriers include "teaching-learning" role conflicts, "old-new" pedagogical contradictions, and the under-utilization of smart infrastructure, despite its positive impact. Results indicate that effective AI integration requires redesigning curricula to align AI literacy with employment demands, enhancing teacher training for technical identity adaptation, strengthening institutional policy infrastructure support, and establishing ethical safeguards against misuse. This study provides an empirically validated framework for AI adoption in applied business education and practical strategies for navigating digital transformation in higher education.

*Keywords:* Artificial intelligence, business education, technology adoption, UTAUT model, institutional change management.

### INTRODUCTION

The rapid advancement of the digital economy has elevated intelligent information management to a critical competency for business administration students. Concurrently, the New Liberal Arts movement necessitates transformative reforms in applied universities' business education programs. As artificial intelligence reshapes educational paradigms, it offers unprecedented opportunities to enhance pedagogical effectiveness and learning efficiency. Therefore, this study focuses on the application of artificial intelligence technology in business administration teaching, and analyzes how to make artificial intelligence education technology better serve the cultivation of students' autonomous learning ability and the ability to discover, analyze and solve complex problems.

Business administration education aims to cultivate students' knowledge and abilities in management, economics, law and enterprise management. It is rooted in the practice of enterprise management and uses theoretical teaching and practical teaching methods to cultivate students' ability to solve practical problems faced by enterprises (Guo & Hu, 2024). The content required to be studied in the undergraduate stage of business administration is broad and comprehensive, basically covering all branches of economics and management. Private universities focus on practical application in business administration education (Chen, 2017), advocating that management theory should be adapted to the current development status of my country's construction of a socialist modern country and integrated with the modern enterprise system. In the process of talent training, they have put forward a series of advanced educational concepts and teaching methods in line with the times.

Business administration lacks effective means and methods in practical teaching. Therefore, after completing their studies, students usually only have the knowledge of the subject at the purely theoretical level, such as an overview or knowledge

framework, and it is difficult to complete the education cycle in improving students' ability to solve practical problems. This has also become an important constraint on teaching quality.

This study will provide data support for the innovation of business administration course design and intelligent construction of private institutions, and provide a theoretical basis for applied universities to carry out new liberal arts construction. It is expected to improve the quality of talent training in business administration and provide ideas for Institutes to optimize and upgrade teaching programs and methods. At the same time, the application of artificial intelligence technology in higher education and the model of willingness to adopt artificial intelligence technology obtained in this study will further enrich the theoretical research on the construction of business administration majors under the background of new liberal arts construction, and provide theoretical support for the construction of high-quality teaching systems in applied universities.

## LITERATURE REVIEW

Domestic and foreign researchers have affirmed the application value of artificial intelligence in the field of education, and believe that the empowerment of artificial intelligence has indeed brought new development and vitality to higher education. On the other hand, issues such as technical cognitive bias, lack of teacher identity, and abuse and misuse of technology have also caused extensive discussion in the academic community. The purpose of business administration teaching is to cultivate students' independent learning ability and the ability to solve complex practical problems. Improving students' quality is the fundamental purpose. The fundamental task of talent training model is to match the application of new technologies with the current relatively traditional teaching concepts, to ensure that teachers can properly integrate artificial intelligence technology with teaching practice, and to enable students to have artificial intelligence technology literacy; to retain traditional teaching methods, and to insist on innovation in the application of artificial intelligence education. This requires handling the relationship between "teaching and learning" and "new and old" in the integration process, and the root of this relationship is that the current teaching concept does not adapt to the teaching conditions provided by the new technology.

### Application of Artificial Intelligence Technology

Facing the powerful momentum brought by the new round of technological revolution, artificial intelligence technology (AI) is now shining in many fields, and new technologies are driving the innovation of economic development methods and talent training models. Wang Qiangchun [20] and others made a systematic discussion on the application of generative artificial intelligence technology (GAI) in higher education. Generative artificial intelligence helps to expand and disseminate knowledge, promote the modernization of higher education, enrich students' learning methods, and enhance the teaching experience of teachers and students.

Many Western countries also attach importance to research in this field. Some European scholars have conducted extensive research on higher education institutions to explore the role of artificial intelligence technology in shaping college students. Almaraz-López, *et al.* (2023) conducted qualitative and quantitative research on the impact of the application of artificial intelligence technology in education on students' future careers, showing that artificial intelligence education will enhance students' perception and early warning capabilities that their careers may be replaced by new technologies in their future careers, thereby stimulating students to pay attention to their own learning ability, innovation ability and abstract thinking ability. Bigne (2020) believes that the application of new technologies has promoted innovation in higher education, which is specifically manifested in three aspects: digital learning, learning analytic, and customized learning. He also systematically discussed the interactive relationship between the three subjects in this process, namely students, teachers, and delivered content, indicating that the digitization process has greatly changed the less noticeable link in the previous education process, namely the link in which students complete the delivery of content.

At the same time, there are obvious differences in the application of artificial intelligence technology in the teaching practice of liberal arts majors and science and engineering majors. Due to the different nature of the disciplines, the teaching content and learning process of liberal arts majors are relatively simple and specific, while the requirements for cultivating ability and practical requirements are more difficult and abstract (Duan & Cui, 2020). The cultivation of quality is an abstract and gradual process, and practical teaching and industry-education integration are important methods to manifest this process (Hu, 2012). Therefore, it is necessary to enhance students' practical participation and provide personalized learning content, and to discover and correctly utilize the powerful role of artificial intelligence technology.

### The Effectiveness and Problems of Artificial Intelligence Education Technology

Li (2024) *et al.* gave a detailed description of the application of artificial intelligence technology in ideological and political courses in private universities, and pointed out that artificial intelligence technology can form personalized teaching implementation plans based on students' interests, theoretical abilities and academic levels, and promote students' understanding of professional theoretical knowledge. At the same time, the teaching quality can be evaluated more scientifically based on the feedback data of students and will help improve it in the future. From the perspective of innovation and entrepreneurship, Hou *et al.* (2024) proposed that generative artificial intelligence technology is promoting the transformation of teaching from "teaching-centered" to "learning-centered", changing the past "cramming" teaching method. Students can use generative artificial intelligence tools such as ChatGPT to form a modular search for knowledge, integrate and summarize it to form learning results. At the same time, virtual reality and augmented reality immersive interactive technologies represented by "metaverse" overcome the limitations of teaching venues and time, saving practical training costs.

However, the disorderly use of artificial intelligence technology will also cause many problems. For example, teachers' cognitive bias towards new technologies will lead to the absence of identity in the teaching process, and students' excessive reliance on artificial intelligence technology to complete homework will lead to reduced classroom feedback effects (Cui, J. 2024). Due to the above problems and risks, in the process of knowledge transfer, ability cultivation, and value shaping, higher education faces contradictions in both "teaching and learning" and "new and old". On the one hand, the original "teaching-learning" relationship has been broken, the teaching methods and learning methods have been reconstructed by artificial intelligence technology, and the identity attributes of teachers and students are no longer obvious - teachers and students have to redefine their roles in the teaching process; on the other hand, the application of new methods, new models, and new concepts has challenged the traditional teaching process, forcing the education system to carry out a comprehensive transformation of self-renewal - which will inevitably cause pain in the original system.

## METHODOLOGY

### Research Ideas

This study is conducted a literature review on the application of artificial intelligence technology in colleges and universities, the degree of fit with teaching requirements, and the challenges faced. In combination with the reform of relevant education policies and actual conditions in recent years, the teaching of business administration majors in applied universities at home and abroad, and the application of artificial intelligence technology, a preliminary understanding of the educational concept of business administration majors in applied universities is formed, and a theoretical foundation and practical basis are laid for this study. Secondly, the impact of the two pairs of relationship issues of "teaching and learning" and "new and old" in teaching practice is understood. The method is to conduct investigations and research from the perspectives of teachers and students respectively, explore the overall behavioral process of "purpose-behavior-result-evaluation" of both teachers and students, and then implement questionnaires on the two types of subjects, analyze their behaviors and needs, and thus obtain the use of new technologies and future expectations in the context of artificial intelligence education application. Finally, through model analysis and quantitative research methods, analyze what kind of motivation will promote students to accept artificial intelligence education application technology, compare this motivation factor with the previous descriptive analysis results, analyze the connection and conflict between the two, and thus obtain the challenges faced by artificial intelligence education application technology.

### Research Methods

This study adopted the form of questionnaire survey, and designed two questionnaires, namely the questionnaire on the use of artificial intelligence technology (questionnaire one) and the questionnaire on the willingness to adopt technology (questionnaire two).

#### *Questionnaire on the application of artificial intelligence education application technology by teachers and students of business administration major of Wuchang Institute of Technology, Wuhan, China.*

Questionnaire 1, a total of 250 questionnaires were distributed to teachers and students of 2021, 2022, and 2023 of the business administration major of Wuchang Institute of Technology, and a total of 233 questionnaires were collected, of which 205 were valid questionnaires, with an efficiency of 87.98%. The survey subjects included 61 teachers and 144 students. Among them, male students accounted for 44.23% and female students accounted for 55.77%. Freshmen accounted for 15.38%, sophomores accounted for 15.38%, juniors accounted for 38.46%, and seniors accounted for 30.77%.

The questionnaire contains a total of 30 questions, divided into three parts: the first part is the selection questionnaire. The second part is the objective part, which is classified by teacher and student identity, with the purpose of understanding the situation and effect of teachers and students using artificial intelligence technology. The third part is the subjective part, which aims to understand the suggestions and thoughts of teachers and students on the future development of artificial intelligence education application technology, and is also a test of the authenticity of the conclusions drawn in the second part of the questionnaire.

Table 1: Variables List (Question design and question number of Question 2)

Variables	Number of Items	Number of Questions
Demographic variables (GV)	3	1、2、3
Performance expectancy (PE)	3	4、5、6
Effort expectancy (EE)	3	7、8、9
Facilitating conditions (FC)	3	10、11、12
Work experience (WE)	3	13、14、15
Basic knowledge (BK)	3	16、17、18
Adoption willingness (IU)	3	19、20、21

#### *Questionnaire on the willingness of business administration students in Wuchang Institute of Technology to adopt artificial intelligence education application technology*

Questionnaire 2 is based on the conclusions of Questionnaire 1 to further study the willingness of business administration teachers and students to adopt artificial intelligence education application technology. It is aimed at students of the School of Business of Wuchang Institute of Technology. A total of 105 questionnaires were collected, of which 70 were valid, with an efficiency of 66.67%. The questionnaire contains 21 questions in total, including two parts: the first part is demographic

variables, and the second part uses the Likert five-point scale to design the questionnaire. The scale is designed based on the survey results of Questionnaire 1, and also draws on relevant mature scales such as (Šumak 2016), which are divided into performance expectations, effort expectations, promotion conditions, work experience, basic knowledge, and adoption willingness, a total of 21 questions (Table 1).

### Model Construction

In the 1980s, researchers conducted in-depth explorations on the topic of "technology acceptance" and formed a series of influential technology acceptance theories and models, the most representative of which is the Unified Theory of Acceptance and Use of Technology (Venkatesh *et al.*, 2003), namely the UTAUT model (integrated model of technology acceptance and use). The UTAUT model provides a thinking dimension for factors that affect users' use of technology, which can be used to explain the influencing mechanism and factors of the acceptance and use of new technologies. For this study, it can be used to analyze the motivation and acceptance of teachers and students for artificial intelligence technology during the teaching process.

The UTAUT model summarizes four core variables: performance expectation PE, effort expectation EE, social influence SI, and facilitating conditions FC, as well as four moderating variables: age, gender, experience, and voluntariness. Based on the questionnaire design and the UTAUT model, this study introduced two factors, work experience and basic knowledge, because students' acceptance of artificial intelligence technology is related to their usage experience and they need to have certain computer network knowledge. At the same time, since the application of artificial intelligence education technology in colleges and universities is not high at present and the social influence is relatively weak, this study extracts five factors that affect the willingness of business administration teachers and students to adopt artificial intelligence technology, namely: performance expectation, effort expectation, facilitating conditions, work experience, and basic knowledge.

First, performance expectation (PE) is the subject's perception of the system's improvement of work performance, which is considered to be an important factor affecting the subject's technology usage behavior. Performance expectation explains 80% of behavioral tendencies (Sun, Cheng & Ke (2007). If teachers believe that the use of artificial intelligence technology can improve teaching efficiency and effectiveness, and students believe that the use of artificial intelligence technology can meet their learning needs, it can be said that they have a high willingness to adopt artificial intelligence education applications.

Second, effort expectation (EE) refers to the subject's judgment on the ease of use of the system, which will have a direct impact on the individual's intention to adopt technology. When the system is difficult to obtain or inconvenient to use, the user's acceptance of the system will decrease. For this study, when students or teachers believe that the process of using AI technology encounters fewer difficulties or can be solved through effort, they will be more willing to continue to use the technology for work and study in the future.

Third, facilitating conditions (FC) are important external variables of individual technology adoption behavior, that is, the comprehensive effect of various environmental conditions on the subject's technology use behavior, generally including infrastructure, technical conditions, policies, group conditions, etc. In this study, the facilitating conditions of artificial intelligence education application technology include such as smart classrooms, smart laboratories, online education platforms, intelligent question-and-answer systems, and related generative artificial intelligence service platforms, and policy conditions such as the policy support of various colleges and majors for the use of artificial intelligence education, and the acceptance of artificial intelligence technology by the surrounding groups.

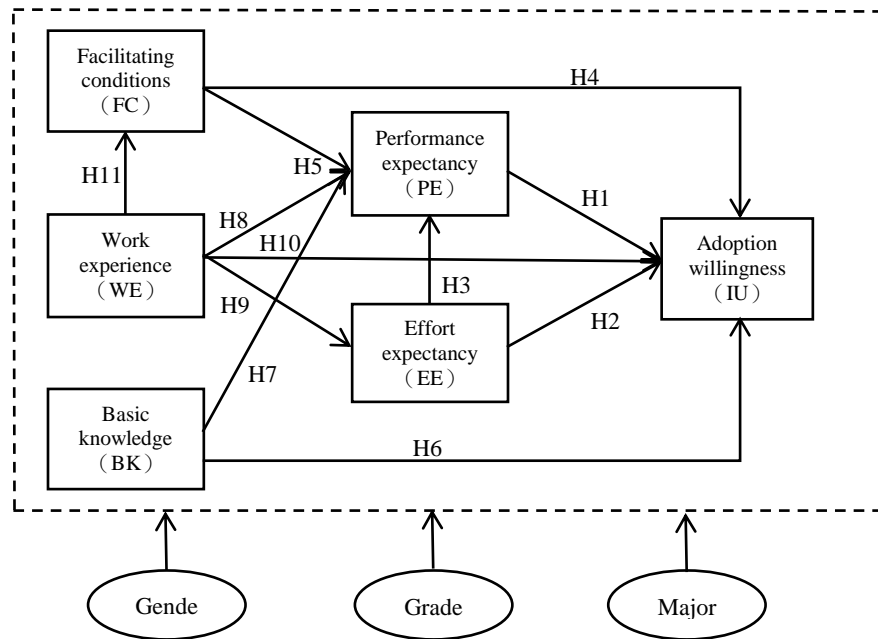


Figure 1: Hypothesis model of willingness to adopt AI education applications

Fourth, working experience (WE) refers to the time an individual has been engaged in a specific job and the work experience accumulated in the work process. Work experience includes the knowledge, skills, methods and problem-solving abilities accumulated by the subject in actual work. Guo (2005) believes that in addition to basic teacher qualities, university teachers must also have two basic qualities: professional skills and work experience. Work experience is a key factor in teachers' exploration of the use of new technologies in the teaching process.

Fifth, basic knowledge (BK) in this study refers to the core knowledge and skills involved in the field of artificial intelligence, such as computer programming, data structure, algorithm design and analysis, machine learning, etc. Chen, He and Zhong (2018) believe that the purpose of cultivating students' programming ability and computational thinking is to focus on cultivating students' ability to apply artificial intelligence technology. In addition to the above variables, this study also incorporates the gender, grade (teaching time), and major factors of teachers and students into the research model, and proposes a hypothesis model of the willingness of business administration teachers and students to adopt artificial intelligence education applications (as shown in Figure 1).

**Model Analysis Results**

**Reliability analysis**

According to SPSS Statistics 27 analysis, the overall Cronbach coefficient of Questionnaire 2 is 0.88, and the  $\alpha$  coefficients of each variable after transformation are 0.955, 0.939, 0.637, 0.919, 0.873, and 0.915, respectively, indicating that the overall reliability of the questionnaire is very good. According to SPSSPRO analysis, the combined reliability CR values are 0.973, 0.944, 0.955, 0.93, 0.944, and 0.933, respectively, and the overall value is greater than 0.7, indicating that the extraction degree of the measurement indicators within the factor is excellent. Overall, the reliability of Questionnaire 2 is very good (Table 2).

Table 2: Reliability and Validity Analysis of each Variable Item

Variables	Item	Factor Loading	Cronbachs $\alpha$	CR	AVE
Performance Expectancy (PE)	P1	0.822	0.955	0.973	0.926
	P2	0.833			
	P3	0.801			
Effort Expectancy (EE)	E1	0.378	0.939	0.944	0.851
	E2	0.41			
	E3	0.355			
Work Experience (WE)	W1	0.347	0.919	0.93	0.821
	W2	0.4			
	W3	0.405			
Facilitating Conditions (FC)	F1	0.351	0.637	0.955	0.879
	F2	0.373			
	F3	0.261			
Basic Knowledge (BK)	B1	0.589	0.873	0.944	0.867
	B2	0.692			
	B3	0.694			
Adoption Willingness (IU)	I1	0.819	0.915	0.933	0.828
	I2	0.847			

Source: Authors' Calculation

**Validity analysis**

The factor analysis validity test showed that the overall KMO of Questionnaire 2 was 0.711 (p=0), which was greater than 0.6, indicating that the data results had a strong correlation with the variables under study. The variance explanation rate was 36.714%, which did not exceed the critical value of 40% given by scholars, and was lower than the critical value of 50% proposed by Podsakoff and Organ, indicating that there was no obvious homologous variance problem in the questionnaire. The average variance extracted (AVE) values were 0.926, 0.851, 0.879, 0.821, 0.867, and 0.828, respectively, and the overall value was greater than 0.5. The comparative analysis of the Pearson correlation coefficient and the AVE root value showed that the correlation coefficient of each variable was less than the square root of AVE as a whole, indicating that Questionnaire 2 had good validity (Table 3).

Table 3 Correlation coefficient matrix

	Performance expectancy	Effort expectancy	Facilitating conditions	Work experience	Basic knowledge	Adoption willingness
Performance expectancy	0.962					
Effort expectancy	0.182(0.131)	0.922				
Facilitating conditions	0.07(0.562)	0.538(0.000***)	0.938			
Work experience	0.026(0.834)	-0.14(0.249)	0.234(0.051*)	0.906		
Basic knowledge	0.685(0.000***)	-0.155(0.201)	-0.169(0.161)	0.488(0.000***)	0.931	
Adoption willingness	0.702(0.000***)	0.456(0.000***)	0.274(0.022**)	0.256(0.033**)	0.458(0.000***)	0.91

Note: \*\*\*, \*\*, and \* represent 1%, 5%, and 10% significance levels, respectively.

Source: Authors' Calculation

**Model Fit Test**

The model fit analysis conducted by SPSSPRO showed that the chi-square degree of freedom ratio (CMIN/DF) was 2.806, the goodness of fit index (GFI) was 0.817, the root mean square residual sum of squares (RMSEA) was 0.162, the root mean square residual (RMR) was 0.053, the comparative fit index (CFI) was 0.871, the standard fit index (NFI) was 0.817, and the non-standard fit coefficient (NNFI) was 0.836. The overall data showed that the fitted model performed well and was suitable for model analysis.

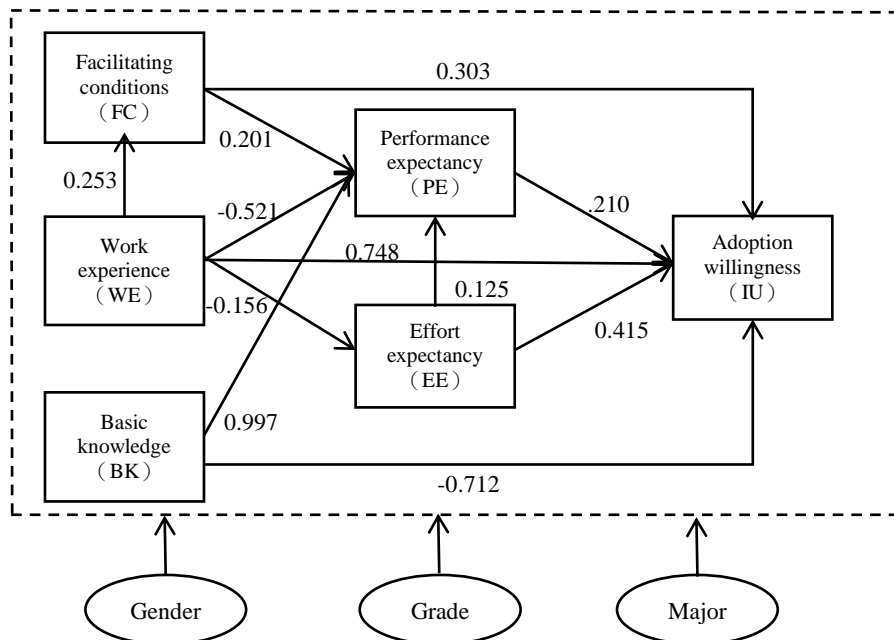


Figure 2: Model of willingness to adopt AI education applications among teachers and students of business administration

**RESULTS AND DISCUSSION**

**Analysis of Influence Effects**

The path coefficients between variables were obtained based on SPSSPRO analysis (Table 4). The willingness of teachers and students majoring in business administration of Wuchang Institute of Technology to adopt artificial intelligence education

application technology is affected by performance expectations (.21), effort expectations (0.415), promotion conditions (0.303), work experience (0.748) and basic knowledge (-0.712). Combined with the survey results of Questionnaire 1, it was verified that basic knowledge (0.997) and promotion conditions (0.201) have a significant positive impact on performance expectations, and work experience has a significant positive impact on promotion conditions (0.253), while work experience is negatively correlated with effort expectations (-0.156) and performance expectations (-0.521). Comprehensively obtained, the model of the willingness of teachers and students majoring in business administration of Wuchang Institute of Technology to adopt artificial intelligence education application technology is shown in Figure 2.

According to the results of the questionnaire survey and the model analysis, the UTAUT model is well adapted to the research, but at the same time, due to the small research scope, small sample size and the fact that the research subjects are limited to students majoring in business administration at Wuchang Institute of Technology, the degree of homogeneity of the survey subjects is relatively high. Overall, the model of the willingness to adopt artificial intelligence education applications for teachers and students majoring in business administration reflects the adoption behavior mechanism of artificial intelligence technology to a certain extent, and is valuable for analyzing the application prospects and challenges of artificial intelligence technology in business administration education.

#### ***Factors affecting the willingness to adopt***

According to the results of the model analysis, the willingness of teachers and students majoring in business administration to adopt artificial intelligence education applications is mainly positively affected by performance expectations, work experience, effort expectations and promotion conditions, indicating that factors such as students' demand for improving learning efficiency, experience in using artificial intelligence technology, the convenience of new technologies to obtain learning resources, and the acceptance of artificial intelligence by teachers and classmates will affect the process of students exploring and using artificial intelligence education technology.

#### ***The influence of working experience on promoting conditions***

The effect of working experience on promoting conditions is relatively high, at 0.051\*, indicating that as students spend more time using AI education application technology and their grades increase, more and more classmates will accept and use AI technology. This also indicates that the acceptance of this technology by lower-grade students is not high. Related studies have also shown that the influence of AI technology application proficiency on supportive attitudes is significant (Li, X., & Fang, X. (2019)), which indirectly confirms the conclusion of this study.

Table 4: Significant coefficients of model factors

Variables	Factor	Non-standard load factors	Standardized load factors	z	S.E.	P
Performance expectancy (PE)	PE1	1	0.991	-	-	-
	PE2	0.659	0.989	39.441	0.017	0.000***
	PE3	0.714	0.906	17.108	0.042	0.000***
Effort expectancy (EE)	EE1	1	0.933	-	-	-
	EE2	1.079	0.927	13.681	0.079	0.000***
	EE3	0.826	0.902	12.718	0.065	0.000***
Work experience (WE)	FC1	1	0.885	-	-	-
	FC2	1.453	0.987	14.07	0.103	0.000***
	FC3	1.219	0.912	11.946	0.102	0.000***
Facilitating conditions (FC)	WE1	1	0.896	-	-	-
	WE2	0.711	0.827	9.647	0.074	0.000***
	WE3	1.071	0.96	13.377	0.08	0.000***
Basic knowledge (BK)	BK1	1	0.755	-	-	-
	BK2	1.679	0.949	8.793	0.191	0.000***
	BK3	2.665	0.96	8.905	0.299	0.000***
Adoption	IU1	1	0.843	-	-	-

willingness (IU)	IU2	1.576	0.932	10.72	0.147	0.000***
	IU3	1.17	0.939	10.867	0.108	0.000***

Note: \* indicates  $p < 0.10$ , \*\* indicates  $p < 0.05$ , \*\*\* indicates  $p < 0.01$

Source: Authors' Calculation

### ***The influence of basic knowledge on performance expectations***

Whether students have sufficient AI technology literacy or practical experience will affect their understanding of the usefulness of AI education technology. According to the results of Questionnaire 2, the path coefficient of basic knowledge on performance expectations is 0.997, showing a significant correlation. At the same time, according to the results of Questionnaire 1, only 22.22% of students have used data analysis and mining (such as Python and C language), and more students (68.75%) only know about AI education application technology through generative AI software such as speech recognition and translation, intelligent question-answering system, etc., which are less difficult to use and require less professional knowledge than data analysis software. Wang [18] pointed out in his research the necessity of carrying out basic education in artificial intelligence technology and that efforts should be made to include artificial intelligence in the teaching content of technical education, indicating that popularizing basic knowledge of artificial intelligence should be the focus of university education in the future.

### ***The influence of effort expectation on performance expectation***

Effort expectation and performance expectation show a significant positive correlation (the influence effect is 0.131), indicating that students are willing to use new technologies to help themselves solve the difficulties encountered in learning. At the same time, combined with the promoting effect of facilitating conditions on performance expectations, it can be concluded that the external environment and students' personal efforts have a promoting effect on students' understanding of the usefulness of artificial intelligence education technology.

### ***The influence of professional experience on adoption willingness***

The difficulties encountered by students in using artificial intelligence technology are more caused by perceptuality. According to the survey results of Questionnaire 1, when asked about the difficulties encountered by students in the process of using artificial intelligence technology, 64.58% of the subjects chose "lack of appropriate guidance" (Figure 3). In contrast, the selection rate of "difficult technical operation" was only 31.25%, indicating that students' understanding of the ease of use of artificial intelligence education technology is still in its infancy. The solution of technical difficulty requires the solution of cognitive difficulty. However, due to the relatively low popularity of new educational applications, students lack sufficient practical experience to overcome the cognitive difficulties of intelligent technology, not to mention the technical difficulties in the actual operation process. At the same time, according to the adoption intention model, it can be seen that work experience is negatively correlated with effort expectations, which also means that as usage experience accumulates, the difficulties encountered in using new technologies will gradually be resolved.

### ***The impact of basic knowledge on usage experience***

Students do not pay enough attention to the theoretical knowledge learning of artificial intelligence technology. According to the results of Questionnaire 1, 31.05% of students said they understood artificial intelligence technology, while only 27.08% of students were willing to learn artificial intelligence technology courses (Figure 4), while more students (56.94%) hoped to further enhance their ability to use artificial intelligence technology in terms of employment guidance or industry-university integration. Chen (2003) pointed out that spontaneous experiential learning has led people to ignore its importance because of its insignificant results. For the use of technology, the impact of theoretical learning experience is less significant than that of practical learning experience. Therefore, students are more willing to accumulate experience in the use of artificial intelligence education application technology from practical learning, but ignore the influence of basic theoretical learning.

## **CONCLUSION**

The research results show that it takes a long time for students to accumulate knowledge and use artificial intelligence technology. In addition, due to the low application of artificial intelligence education application technology in primary and secondary education, college students lack experience in artificial intelligence learning compared with traditional learning methods, which leads to the relationship between "new and old". The rapid development of teaching infrastructure has also put forward new requirements for college teachers, which leads to the relationship between "teaching and learning".

The support of the external environment will greatly promote students to accept and use artificial intelligence technology. The external environment mainly includes the policy environment, classroom environment and student communication environment. In addition, technical support is an important environmental factor. It is necessary to pay special attention to the powerful role of the application of artificial intelligence education technology in improving the external environment. For students who study across majors, the lack of basic theoretical knowledge will affect their exploration and use of artificial intelligence technology. In order to have artificial intelligence technology literacy, they must learn basic knowledge. Compared with the classroom, students are more willing to learn artificial intelligence technology in the process of actual work. In

addition, applied universities (taking Wuchang Institute of Technology as an example) focus on cultivating students' ability to solve complex practical problems. Therefore, it is necessary to explore a course that combines artificial intelligence theory courses with actual work scenarios. In addition, in order to promote the benign interaction among many initiatives, it is necessary to start from the process and systematically apply it to the entire teaching process.

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