

Research Article

Influences of Online Practice Community on Instructors' Blended Teaching Behaviors: Analysis Based on an Extended UTAUT Model

Xiaolu Han 

Department of Finance and Business, Anhui Vocational and Technical College, Hefei 230051, China

Correspondence should be addressed to Xiaolu Han; hanxl@uta.edu.cn

Received 2 July 2022; Revised 12 August 2022; Accepted 17 August 2022; Published 31 August 2022

Academic Editor: Yuxing Li

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During the implementation of China's Vocational Skill Level Certificate, the Vocational Skill Curriculum Development Organization built an online teaching community of practice (COP) by inviting instructors from several schools to participate. Through this community, instructors constructed a blended teaching system together through multiparty collaboration modes like cooperation, communication, sharing, and mutual assistance. As demonstrated by the research team, when teachers participate in a community of practice, the curriculum development model implemented within that community can strengthen the blended teaching intentions and ability of instructors, thus exerting positive effects on their blended teaching behaviors. Based on an extended Unified Theory of Acceptance and Use of Technology (UTAUT), a theoretical model concerning the influencing factors of online teaching communities of practice on the blended teaching behaviors of instructors was constructed. Through a questionnaire survey and field interviews of 204 instructors, data were analyzed by SPSS and AMOS software and an empirical test of the constructed conceptual model was carried out. The research results demonstrate that performance expectancy influences the blended teaching intentions of instructors only slightly, while effort expectancy and facilitating conditions have significantly positive influences on the blended teaching intentions of instructors. Interactions between the instructors themselves and interactions between instructors and the organization in the online community of practice have significantly positive influences on the blended teaching ability of instructors. The blended teaching intentions and blended teaching ability of instructors both have significantly positive influences on their blended teaching behaviors. In this research conclusion, various methods for online COPs to improve the blended teaching behaviors of instructors were summarized.

1. Introduction to China's Vocational Skill Certificate Curriculum

In April 2019, the Ministry of Education of China implemented the “academic certificate + several vocational skill level certificates” (hereinafter referred to as “1 + X” certificate) plan in vocational colleges. This initiative encourages colleges to have curriculums for vocational skill certificates and organizes students to participate in vocational skill certificate exams. Once they finish their academic studies, students receive a graduation certificate and several vocational skill level certificates.

The “1 + X” certificate plan involves multiple action subjects, including education administrative departments at all levels, vocational skill curriculum development organization, various vocational colleges, instructors, and students. The education administrative departments are responsible

for implementing the “1 + X” certificate plan. The vocational skill curriculum development organization is responsible for developing curriculum resources, making assessment standards, and organizing assessment. Vocational colleges are responsible for facilitating training for instructors, setting up curriculums, and building training rooms. Instructors are responsible for specific teaching work and enabling students to participate in vocational assessment. The working contents and working process of all action subjects in the “1 + X” certificate plan are shown in Figure 1.

A vocational skill curriculum includes theories and practices. The vocational skill curriculum development organization develops the online course platform and offline training platform. The online course platform is equipped with a learning resource library, tests, student management, and data statistical analysis functions. The offline training platform enables students to understand the practice

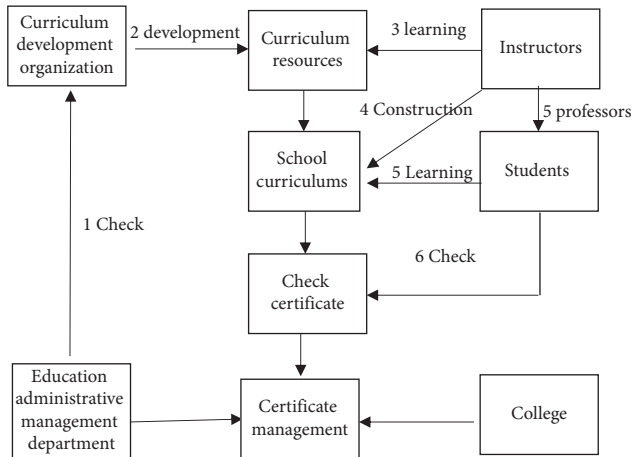


FIGURE 1: The flowchart of the “1 + X” certificate plan.

procedure and master practice skills by using the provided simulation production data and operation training equipment. The learning resources of vocational skill curriculums cover the teaching resources on the online learning platform, textbooks, and offline training equipment. The learning modes include face-to-face learning in the classroom, practice learning in the training rooms, and online learning using the network curriculum resources.

The vocational skill curriculum proposes higher requirements for the teaching ability of instructors. Simple classroom teaching is transformed into blended teaching, combining online-offline and theory-practice modes. Due to limited time and ability, it is difficult for instructors to complete the various tasks required to implement blended teaching to a high standard. Faced with the new blended teaching environment, instructors who are unfamiliar with curriculum contents and have limited teaching resources develop negative emotions when teaching vocational courses. Many feel lonely and helpless. Some interviewees complained that “I have to spend a long time to prepare teaching content before each class” or “I completely have no idea on how to teach using the online curriculum platform.”

To increase the teaching quality in vocational courses, the vocational skill curriculum development organization set up a professional curriculum development team and built an online teaching community of practice (COP) with multi-party cooperation by uniting instructors from many schools. The curriculum development team and instructors collaborated to make online teaching resources, design online-offline combined teaching modes for each knowledge point, record teaching reference videos, and help instructors to improve their blended teaching ability via communication, sharing, and mutual assistance with other instructors. After one year, the blended teaching intentions and ability of instructors had been strengthened, thus influencing their blended teaching behaviors. This phenomenon begs the following questions: How do online teaching COPs influence the blended teaching intentions of instructors? How do online teaching COPs improve the blended teaching ability of instructors? How do online teaching COPs influence the blended teaching behaviors of instructors?

Based on the COP theory and blended teaching behavioral theory, this study investigated the influences of a COP on the blended teaching behavior of instructors. The major research outcomes of this study include the following: (1) Based on the expanded Unified Theory of Acceptance and Use of Technology (UTAUT), a model of influences of COPs on the blended teaching behaviors of instructors was constructed. (2) The influences of various factors like performance expectancy, effort expectancy, organization supports, interaction, blended teaching intentions, and blended teaching ability on the blended teaching behaviors of instructors were discussed quantitatively. (3) Various methods for online COPs to improve the blended teaching behaviors of instructors were summarized.

2. Literature Review

2.1. Effects of COPs on Instructors’ Professional Development.

The concept of a “community of practice (COP)” aims to realize the professional development of instructors as individuals and groups based on the community framework [1]. A COP comprises two roles: old hands and newcomers. In the COP, newcomers develop their professional ability through social practices and context learning with old hands who have mature practice abilities. The learning framework of a COP is comprised of four dimensions, namely, participation and materialization, emergence and design, local and global, and recognition and negotiation [2]. Online communities can help instructors to change their attitudes, behaviors, skills, and knowledge [3]. In COPs, instructors develop their professional abilities through various behaviors, such as application, appreciation, official comments, announcements, apologies, clarification, compliments, sympathy, and knowledge sharing [4]. They communicate professional knowledge, textbooks, and teaching strategies, and they share their feelings regarding their careers [5]. Instructors participate in COPs to seek cooperation opportunities, exchange ideas, and experience friendship [5]. In a word, studies have demonstrated that COPs can alleviate the heavy workloads of instructors, change their attitudes toward other instructors, and strengthen their teaching ability through cooperation, sharing, and exchange.

2.2. Blended Teaching.

Blended teaching is usually defined as one teaching mode that combines online teaching and traditional face-to-face teaching. Brown [6] divided factors that influence the blended teaching of instructors according to whether they are external or internal. The external influencing factors include technology, academic workload, institutional environment, and students. The internal influencing factors include instructor attitudes and beliefs, and instructor learning. Ocak [7] summarized the problems that eight instructors encountered during blended teaching, which were the complexity of the instruction, lack of planning and organization, lack of effective communication, need for more time, lack of institutional support, changing roles, difficulty of adoption to new technologies, and lack of electronic means. How can the blended teaching ability of

instructors be improved? Some studies indicated that education institutions must strengthen blended teaching support to instructors from the perspectives of policies, resources, and curriculum planning [8]. Poon [9] pointed out that institutions should give support to instructors with consideration given to the key aspects of blended teaching, including information technology, qualifications of teachers, continuous input, high-level managers, and faculty training. Grion and Varisco [10] summarized another method that sought to build an online professional development community of teachers, thus helping teachers to improve their blended teaching ability through peer communication, sharing, and mutual assistance.

2.3. Research Design. Blended teaching outcomes are, to a large extent, determined by instructors' attitudes and their ability to undertake preparation. The end result depends on how instructors change from their role in traditional face-to-face classrooms to the more complicated role required for blended teaching. Blended university course designs might adopt several forms, as determined by the intentions and technical ability of instructors [7]. The intention of accepting technologies has significantly positive relations with computer capacity and attitude toward computer-assisted education (CAE) [11]. This study argued that online COPs influence the blended teaching behaviors of teachers by influencing their intentions and ability.

To date, scholars have devoted significant resources to studying instructors' teaching intentions and behaviors [12]. Based on the summary of TAM-related studies, Venkatesh, Morris et al. [13] discussed factors that influence people to use information technology and information systems from the perspective of technology acceptance and proposed the Unified Theory of Acceptance and Use of Technology (UTAUT). In UTAUT, four core dimensions that influence an individual's intention to use information technology are performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC). The blended teaching behaviors of instructors are an individual teaching behavior influenced slightly by social factors. In this study, the UTAUT model was used as a theoretical basis to influence the blended teaching intentions and behaviors of instructors. PE, EE, and FC were chosen, and their specific meanings were further adjusted to explain the blended teaching intentions and behaviors of instructors.

People generally demonstrate higher self-efficacy and clear initiative behaviors in their professional fields if they have the requisite knowledge, skills, and cognitive abilities related to their line of work [14]. Based on the professional curriculum development team, the vocational skill curriculum development organization built an online COP with instructors from many schools. This COP has four functions: (1) providing curriculum teaching videos, helping instructors to master curriculum content better, organizing instructors to finish the design of blended teaching together, and compiling teaching design documents (teaching program/teaching plan/lesson plan); (2) organizing instructors to develop and share blended teaching resources

(courseware, videos, question banks, and cases); (3) inviting excellent instructors to provide online sharing of class videos, and allowing teachers in the COP to observe, discuss, and exchange ideas; and (4) answering questions that instructors encounter during teaching. We believe that instructors in COPs can improve their blended teaching ability by communicating, cooperating, and sharing with other teachers and with the curriculum development organizations, thus influencing their blended teaching behaviors.

Based on the above analysis, the research model in Figure 2 was developed.

2.4. Concepts and Hypotheses

2.4.1. Effects of PE on Blended Teaching Intentions of Instructors. On the teaching communication platform, the curriculum development organization guides instructors to cooperate and share teaching designs and resources; invites excellent instructors to record and share class videos; and encourages instructors to learn, discuss, and exchange. Instructors can enrich their teaching content, stimulate students learning autonomy, and strengthen students learning interests by using the blended teaching method. Therefore, instructors are willing to apply blended teaching during vocational skill courses. A hypothesis is therefore proposed:

H1a: COPs help instructors to understand blended teaching outcomes, which has positive influences on the blended teaching intentions of instructors

2.4.2. Effects of EE on Blended Teaching Intentions of Instructors. The complexity of blended teaching behaviors is the main deterrent for teachers considering a blended mode of delivery [7]. Instructors have to devote more time to design in order to provide effective blended courses. However, support from the curriculum development organization and other instructors decreases the workloads of instructors in preparing teaching resources and planning teaching activities. The provided teaching reference videos render blended teaching less complicated. Hence, another hypothesis is proposed:

H1b: support from COPs makes instructors believe that blended teaching is not so complicated and difficult, which has positive influences on the blended teaching intentions of teachers

2.4.3. Effects of FC on Blended Teaching Intentions of Instructors. FC refers to the degree of support that users receive from their organization regarding the use of technology. If schools give instructors support for blended teaching behaviors in institutions, income distribution policy, and guarantee of teaching equipment, this will stimulate instructors to adopt blended teaching behaviors. Hence, a further hypothesis is proposed:

H1c: FC provided by schools has a positive influence on the blended teaching intentions of instructors

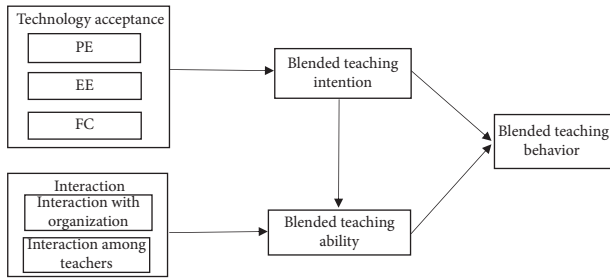


FIGURE 2: Influencing model of COP on blended teaching behaviors of instructors.

2.4.4. Effects of Interaction on Blended Teaching Ability of Instructors. A COP is a group of people who have common concerns, common problems, or common passions. They deepen their knowledge and professional skills in their field through continuous interaction [2]. We believe that in a COP, the blended teaching ability of instructors can be improved by interacting with other teachers and through communication, cooperation, and sharing between instructors and the curriculum development organization. Some hypotheses are proposed accordingly:

H2a: interaction between the instructors and curriculum development organization in a COP has positive influences on the blended teaching ability of instructors

H2b: interaction between instructors in a COP has positive influences on the blended teaching ability of instructors

2.4.5. Effects of Blended Teaching Intentions of Instructors on Their Blended Teaching Ability. It is widely accepted in the academic world that the relatively strong intentions of individuals are conducive to behavior improvement. When an instructor has relatively strong blended teaching intentions, he/she will make teaching objective, design an appropriate teaching process, prepare multimedia courseware, and overcome difficulties in the teaching process in advance to control the outcome. These teaching activities of instructors can strengthen their blended teaching ability. According to the principle of “learning by doing,” the blended teaching intentions of instructors may facilitate blended teaching behaviors, thus improving their blended teaching ability during practice. The following hypothesis is therefore proposed:

H3: the blended teaching intentions of instructors have a positive influence on the blended teaching ability of instructors

2.4.6. Effects of Blended Teaching Ability on Blended Teaching Behaviors. Knowledge and ability influence initiative behaviors. High-level knowledge, skills, and ability are often connected with the high-level initiative behaviors of individuals [15]. To show initiative behaviors, workers have to understand their work well and equip themselves with the relevant knowledge, skills, and cognitive abilities [15]. Knowledge, skill, and ability can provide individuals with

competent experiences, thus helping them to develop higher-level self-efficacy and greater control and appreciation of their work. As a result, individuals find it easier to process potential changes, mistakes, and pressure [16]. Thus, the following hypothesis is proposed:

H4: blended teaching ability has a positive influence on the blended teaching behavior of instructors

2.4.7. Relationship between Blended Teaching Intentions and Blended Teaching Behaviors. The discipline of psychology was the earliest to define intention as the subjective intention of individuals to demonstrate a specific behavior. Individual behavioral intentions determine an individual’s behaviors [17]. Throughout the process of teaching a vocational skill level certificate course, instructors are willing to adopt blended teaching so that they can encounter the problem when using course resources and answer students’ learning questions patiently; a blended model offers the opportunity to make learning and teaching experiences interactive. A COP allows teachers to answer questions from other instructors on the communication platform, as well as offer positive feedback and suggestions for improvement to the curriculum development organizations. Hence, a final hypothesis is proposed:

H5: blended teaching intentions have a positive influence on the blended teaching behavior of instructors

3. Methodology

3.1. Sample Selection and Data Source. In this study, instructors of vocational skill courses in the online COP were chosen as respondents. Data were acquired through the survey questionnaire from May to July 2021. The questionnaire content included general information (e.g., gender and age) pertaining to respondents and a research scale containing 24 items of eight variables. The variables were measured by a five-point Likert scale according to relevant representative studies. Some corrections were made according to the characteristics of the study, and the measurement of all variables was kept consistent. The measuring scale design is shown in Table 1.

3.2. Questionnaire Design and Data Collection. In this study, data were collected through Wenjuanxing, WeChat, and field questionnaires, and a total of 204 effective questionnaires were collected from the respondents. Among the respondents, males accounted for 39% and females accounted for 61%. The respondents under the age of 30 accounted for 23%, while 42% of respondents were aged 30–40, 28% of respondents were aged 40–50, and 7% of respondents were aged 50–60.

4. Result Analysis

4.1. Validity and Reliability Test. The validity and reliability of the scale were tested by SPSS22.0 using indexes such as Cronbach’s α coefficient, KMO value, and Bartlett spherical

TABLE 1: Measuring scale.

Variables	Measuring indexes	No. of questions
PE	I think blended teaching can integrate mobile terminals, Internet, and other information technologies into the teaching process and build a scenario of students' autonomous learning	PE1
	Blended teaching enriches teaching contents and strengthens the learning interests of students	PE2
	During blended teaching, instructors are not only initiators of knowledge, but also organizers and designers of learning activities for students	PE3
EE	Cooperation with colleagues in a COP can decrease my workload for me to prepare blended teaching resources	EE1
	Cooperation with colleagues in a COP can decrease my workload for me to design teaching process	EE2
	My teaching content is now richer and more colorful than before, and the teaching effect is better	EE3
FC	School supports encourage the instructor to use blended teaching	CN1
	Schools provide an online teaching platform, multimedia classroom, computer room, and other hardware equipment needed for blended teaching	CN2
	During teaching, I can use the online teaching platform, multimedia classroom, and computer room conveniently	CN3
Blended teaching intention	I'd like to use blended teaching to teach a vocational skill course	CO1
	I like this blended teaching	CO2
	In future teaching, I will apply blended teaching if the course is appropriate	CO3
Interaction among instructors	I will seek advice from workers and other instructors in the teaching group when encountering problems in the teaching process	CP1
	I can get timely and friendly answers in the teaching group to problems that I encounter in the teaching process	CP2
	I am willing to exchange teaching experiences with other instructors to solve problems encountered in teaching together	CP3
Interaction with curriculum development enterprises	I can find the desired teaching plans, PPT courseware, and other teaching resources on the online curriculum platform	CC1
	I can refer to teaching videos and other teaching data provided on the online curriculum platform during lesson preparation	CC2
	The online curriculum platform provides the tests and test question bank	CC3
Blended teaching ability	Assisted by teaching resources provided on the online teaching platform, I can master the teaching contents of my curriculum easier	BA1
	Teaching reference videos provided by colleagues in online COPs make my blended teaching work not so complicated	BA2
	Cooperation with colleagues in an online COP makes my blended teaching work easier	BA3
Blended teaching behavior	I will actively think about how to carry out blended teaching better	BH1
	I will assign preview teaching resources, online homework, and review resources on the online platform	BH2
	I will answer learning questions proposed by students online timely	BH3

significance test (Tables 2 and 3). Cronbach's α coefficient is higher than 0.7, and the total KMO is higher than 0.6. The sphericity test significance is 0.00. The variables in the questionnaire therefore have good validity and reliability.

4.2. *Structural Equation Model.* Path analysis of every research construct is shown in Figure 3.

4.3. *Model Test and Analysis.* The structural equation model was tested and analyzed by Amos 22.0. The degree of fitting is the prerequisite of the model test. If the degree of fitting is not qualified, the significance of the path coefficient becomes meaningless. According to estimation, all fitting indexes are

higher than, or basically reach, the recommended values (Table 4), indicating the good fitting effect of the model.

The path analysis results are shown in Table 5. The significance analysis of the structural equation model is an important index of whether the hypotheses are true.

5. Discovery and Discussion

5.1. *Effects of PE on Blended Teaching Intentions of Instructors in COPs.* Obviously, the effects of PE on the blended teaching intentions of instructors in a COP are not significant ($P = 0.157$) and H1a is false. This might be attributed to the following reasons: instructors have different understandings of blended teaching behaviors. Some believe that

TABLE 2: Numerical values of validity and reliability.

Dimension	Question number	Cronbach's α coefficient	Overall Cronbach's α coefficient
PE	3	0.941	
EE	3	0.85817	
FC	3	0.82818	
Blended teaching intentions	3	0.95219	0.974
Interaction among instructors	3	0.94520	
Interaction with curriculum development enterprises	3	0.91921	
Blended teaching ability	3	0.88922	
Blended teaching behaviors	3	0.90423	

TABLE 3: KMO and Bartlett tests.

KMO		0.940
Bartlett sphericity test	The approximate chi-square	1608.518
	Df	276
	P-value	0.000

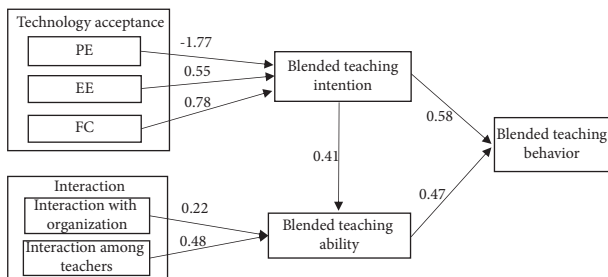


FIGURE 3: Path analysis of every research construct.

blended teaching behaviors should foster a high level of participation in the individual learning context through online teaching, mobile teaching, and face-to-face teaching. Instructors are not the sole knowledge transmitter in class; this also takes place through the actions of the designers and organizers of learning activities for students. They guide and support students to solve problems or explore tasks. However, some believe that blended teaching is only a teaching method that serves to deliver learning materials to students in a more convenient and more practical way. Instructors have different understandings regarding the PE of blended teaching. Instructors with different concepts will adopt different methods during the teaching and design of a blended course [18].

5.2. Effects of EE of Instructors on Blended Teaching Intentions in COPs. The EE of instructors in a COP has significant influences on blended teaching intentions; therefore, H1b is true. Many instructors are confused about how to mix several teaching modes and complain about a lack of experience in using information technology during teaching. Instructors have to devote more time and effort to designing and providing effective blended courses. A combination of teaching techniques makes the curriculum design of blended teaching a more challenging process, especially when undertaken by an independent instructor [19]. Garrison and Kanuka [20] pointed out that once there are strong explicit policies, the blended courses develop very quickly. The

facilitation and sharing of knowledge experiences and intelligence resources is the value pursuit of COPs in teaching. COPs solve the teaching difficulties of instructors and help them to improve their teaching by organizing teaching research; facilitating the communal preparation of lessons; and enabling teachers to attend a lecture and offer comments, questions, answers, etc. As indicated by one faculty member, “in COP, instructors make and share teaching resources, which save a lot of time.” One of the responses indicated that “in COP, I can make teaching designs with experts together, and watch and comment their teaching videos. I’m more confident in blended teaching.”

5.3. Effects of Organizational Supports on Blended Teaching Intentions of Instructors. Organizational supports have significant influences on the blended teaching intentions of instructors—thus, H1c is true. Policy support, salary rewards, and software and hardware support from schools can increase instructors’ willingness to convert to a blended model. Complementary policies, open approval, the stimulation of blended teaching behaviors, assessment assistance, and promotion will increase the blended teaching intentions of instructors. Since instructors devote comparatively more time and effort to the design and development of blended teaching than they do conventional teaching modes, it is essential to provide extra economic compensation to instructors [21]. Teachers offering a blended model need support from technological infrastructure, the digital campus environment, and software and hardware in the college.

5.4. Effects of Interaction on Blended Teaching Ability of Instructors. Interaction has positive influences on the blended teaching ability of instructors. In a COP, the interaction between instructors and the curriculum development organization can improve the blended teaching ability of instructors significantly ($P=0.001$); therefore, H2a and H2b are true. Mishra and Koehler [22] proposed the framework of “technological pedagogical content knowledge” (TPACK framework). In this framework, instructors must use pedagogical knowledge (PK), content knowledge (CK), and technology knowledge (TK) to combine technical means and the specific subject contents effectively during teaching activities. Moreover, instructors have to possess four types of composite knowledge elements formed by these three types of core knowledge: (1) pedagogical content knowledge (PCK); (2) technological pedagogical knowledge

TABLE 4: Fitting test of the model.

Fitting indexes	NFI	TFI	RMSEA	CFI	IFI	x2/df
Actual value	0.886	0.908	0.096	0.922	0.923	2.857
Recommended value	>0.90	>0.90	<0.08	>0.90	>0.90	<3
Results	Acceptable	Qualified	Acceptable	Qualified	Qualified	Qualified

TABLE 5: Numerical values of paths.

Hypotheses	Paths	Standardization coefficient	S.E	C.R	P	True or false
H1a	PE → Blended teaching intentions	-0.177	0.125	-1.416	0.157	False
H1b	EE → Blended teaching intentions	0.554	0.084	6.589	* * *	True
H1c	FC → Blended teaching intentions	0.780	0.202	3.863	* * *	True
H2a	Interaction of instructors → Blended teaching ability	0.218	0.068	3.188	0.001	True
H2b	Interaction with the organization → Blended teaching ability	0.478	0.080	5.996	* * *	True
H3	Teaching intention → Blended teaching ability	0.411	0.132	3.112	0.002	True
H4	Teaching intention → Blended teaching behaviors	0.581	0.092	6.311	* * *	True
H5	Teaching ability → Blended teaching behaviors	0.468	0.144	3.241	0.001	True

(TPK); (3) technological content knowledge (TCK); and (4) technological pedagogical content knowledge (TPACK).

The vocational skill certificate curriculum development and evaluation organization cooperates with instructors from many colleges to build the curriculum online teaching platform based on advice from the professional development team. This platform has four functions: (1) providing curriculum teaching videos, helping instructors to master curriculum content better, organizing instructors to finish the design of blended teaching together, and compiling teaching design documents (teaching program/teaching plan/lesson plan); (2) encouraging instructors to cooperate, develop, and share blended teaching resources (courseware, videos, question banks, and cases); (3) inviting excellent instructors to share open class videos online and allowing instructors in the COP to observe, discuss, and communicate; and (4) addressing various problems that instructors encounter in the teaching process. The ways and methods for a COP to improve the blended teaching ability of instructors through cooperation, sharing, and communication are listed in Table 6.

5.5. Effect of Blended Teaching Intentions on Blended Teaching Ability. Blended teaching intentions have significant influences on blended teaching ability ($P = 0.002$)—thus, H3 is true. The bipolarity of individual changes in professional attitudes is manifested as positive progress and negative coping. The individual who is more positive may devote more effort to work, and he or she will develop a professional ability that is more full and complete, thus garnering greater returns from the job. Such a return naturally includes further

development and improvement of professional ability. On the contrary, an individual who is more negative will surely decrease their efforts with regard to their job. He or she will muddle through the work, finding themselves unable to develop their professional ability completely. As time goes on, this not only results in a waste of professional ability but even the degradation of ability.

5.6. Effects of Blended Teaching Ability on Blended Teaching Behaviors of Instructors. Blended teaching ability has a significant influence on the blended teaching behaviors of instructors ($P = 0.001$); therefore, H4 is true. If individuals are good at their job and can learn very quickly, they may develop stronger self-efficacy in the professional field and thereby develop their initiative behaviors better [15]. In addition, Frese and Fay [14] also pointed out that qualification (overall measurement of working knowledge and skills) has a positive relationship with the initiation of individuals. Knowledge, skill, and ability can give individuals competent experiences, thus helping them to develop higher-level self-efficacy and greater control and appreciation of their work. With the assistance of a COP, instructors can master curriculum content better, acquire the necessary teaching resources for blended teaching, and learn how to implement blended teaching. This helps instructors to deal with the changes, mistakes, and pressures brought by blended teaching and strengthens their self-efficacy [16].

5.7. Effects of Blended Teaching Intentions on Blended Teaching Behaviors of Instructors. Blended teaching intentions exert

TABLE 6: Ways and methods to improve the blended teaching ability of instructors in the COP.

Abilities	Ways of improving abilities	Channels of improving abilities	Suppliers
Subject content	Providing online learning videos of curriculums	Teaching communication platform for instructors	Curriculum development enterprises
	Assistance and answering of teaching problems	Teaching communication platform for instructors	Curriculum development enterprises and instructors
Technology	Students operate videos and assistance documents on the online learning platform	Teaching communication platform for instructors	Curriculum development enterprises
	Assistance and answering of teaching problems	Teaching communication platform for instructors	Curriculum development enterprises
Teaching method	Cooperative compiling and sharing of teaching program, teaching plan, and lesson plan	Teaching communication platform for instructors	Curriculum development enterprises and instructors
Technology + subject	Cooperative development and sharing of blended teaching resources (courseware, videos, question banks, and cases)	Teaching communication platform for instructors	Curriculum development enterprises and instructors
Technology + teaching method	Publish learning information for students (courseware, videos, question banks, and cases)	Online learning platform for students	Instructors
	Assign preview content and review content to students	Online learning platform for students	Instructors
	Assign and check homework	Online learning platform for students	Instructors
	Online Q&A	Online learning platform for students	Instructors
	Online examination	Online learning platform for students	Instructors
Subject + technology + teaching method	Share open videos and allow instructors in COP to observe, discuss, and communicate	Teaching communication platform for instructors	Curriculum development enterprises and instructors

significant influence on the blended teaching behaviors of instructors, rendering H5 true. The theory of planned behavior believes that the production of behaviors is determined by behavioral intention directly. The theory of behavioral intention demonstrates that motivation for a person to execute a specific behavior reflects how much effort and time a person is willing to devote to that behavior. Instructors in COPs see convenience and efficiency in blended teaching and decrease their workloads and the complexity of blended teaching with the assistance of a COP. School supports in the form of institutions, facilities, and teaching platforms can influence initiative in the blended teaching behaviors of instructors.

6. Conclusion

Blended teaching is a complicated practice requiring careful curriculum resource development, teaching mode design, and implementation of the teaching process. Management institutions usually encourage instructors to adopt blended teaching behaviors by formulating incentive policies and institutions, perfecting the desired teaching facilities, and developing online teaching platforms. All of these incentive measures might be insufficient without the existence of a COP that instructors in or out of the college can access to solve problems through cooperation and sharing.

Organizers of COPs have to be equipped with rich blended teaching experiences and organizational skills. They should be able to guide instructors to finish their job and organize communication or demonstrations through open classes. A moderator is a steward in an online community of practice; this role establishes a human presence to coordinate the COP fellowship, lead meaningful and goal-orientated dialogues, and help members develop [23].

Schools should develop not only an online learning platform for students to learn course resources and communicate with instructors easily but also a teaching communication platform for instructors to communicate, cooperate, and share resources. The teaching communication platform for instructors has four functions: (1) providing curriculum teaching videos, helping instructors to master curriculum content better, organizing instructors to finish the design of blended teaching together, and compiling teaching design documents (teaching program/teaching plan/lesson plan); (2) organizing instructors to develop and share blended teaching resources (courseware, videos, question banks, and cases); (3) inviting excellent instructors to provide online sharing of class videos and allowing teachers in the COP to observe, discuss, and exchange ideas; and (4) answering questions that instructors encounter during teaching.

Instructors in a COP relieve teaching pressure through cooperation, sharing, and communication, which improve the effects of blended teaching. However, this study also found that the influence of PE on the blended teaching intentions of instructors is not significant and the hypothesis is false, the reasons for which are as follows: most instructors believe blended teaching only improves the efficiency and convenience of teaching and have not yet realized the importance of blended teaching to give students better learning experiences. A COP has to tell instructors about changes in learning methods and the learning environment of students during blended teaching. Instructors must come to understand that blended teaching is not a simple mixture of technologies but a method which creates a greater level of participation and enhances individual learning experiences for students. Blended means not only a combination of face-to-face teaching and online teaching but also a combination of teaching and coaching in the student-centered learning environment.

Since many instructors have little knowledge of blended teaching and are without the time or ability to prepare the necessary teaching resources, they are unwilling to adopt blended teaching. A COP can therefore help instructors to initiate and sustain blended teaching by influencing their intentions and ability.

Data Availability

The data used to support the findings of this study are included within the article.

Conflicts of Interest

The author declares that there are no conflicts of interest.

Acknowledgments

This study was supported by the Educational Scientific Research Project of Anhui Province (jk21008) and the Quality Engineering Project of Anhui Colleges and Universities (2021kcszsfkc227).

References

- [1] J. Lave and E. Wenger, *Situated learning: legitimate peripheral participation*, Cambridge university press, Cambridge UK, 1991.
- [2] E. Wenger, *Communities of practice: learning, meaning, and identity*, Cambridge university press, Cambridge UK, 1999.
- [3] E.-O. Baek, *A Study of Dynamic Design Dualities in a Web-Supported Community of Practice for Teachers*, Indiana University, Bloomington Indiana, 2002.
- [4] K. F. Hew and N. Hara, "Empirical study of motivators and barriers of teacher online knowledge sharing," *Educational Technology Research & Development*, vol. 55, pp. 573–595, 2007.
- [5] J. W. Hur and T. A. Brush, "Teacher participation in online communities: why do teachers want to participate in self-generated online communities of K–12 teachers?" *Journal of Research on Technology in Education*, vol. 41, pp. 279–303, 2009.
- [6] M. G. Brown, "Blended instructional practice: a review of the empirical literature on instructors' adoption and use of online tools in face-to-face teaching," *The Internet and Higher Education*, vol. 31, pp. 1–10, 2016.
- [7] M. A. Ocaik, "Why are faculty members not teaching blended courses? Insights from faculty members," *Computers & Education*, vol. 56, pp. 689–699, 2011.
- [8] C. R. Graham, W. Woodfield, and J. B. Harrison, "A framework for institutional adoption and implementation of blended learning in higher education," *The Internet and Higher Education*, vol. 18, pp. 4–14, Jul 2013.
- [9] J. Poon, "Blended learning: an institutional approach for enhancing students' learning experiences," *Journal of online learning and teaching*, vol. 9, no. 2, pp. 271–288, 2013.
- [10] V. Grion and B. M. Varisco, "On line collaboration for building a teacher professional identity," *PsychNology Journal*, vol. 5, no. 3, 2007.
- [11] M. H. Baturay, Ş. Gökçearslan, and F. Ke, "The relationship among pre-service teachers' computer competence, attitude towards computer-assisted education, and intention of technology acceptance," *International Journal of Technology Enhanced Learning*, vol. 9, pp. 1–13, 2017.
- [12] L. M. Jeffrey, J. Milne, G. Suddaby, and A. Higgins, "Blended learning: how teachers balance the blend of online and classroom components," *Journal of Information Technology Education: Research*, vol. 13, pp. 121–140, 2014.
- [13] V. Morris and C. James, "Unified theory of acceptance and use of technology (UTAUT)," *Group Education Journal*, vol. 10, no. 3, pp. 20–24, 2003.
- [14] M. Frese, D. Fay, T. Hilburger, K. Leng, and A. Tag, "The concept of personal initiative: o," *Journal of Occupational and Organizational Psychology*, vol. 70, pp. 139–161, 1997.
- [15] M. Frese and D. Fay, "Personal initiative: an active performance concept for work in the 21st century," in *research in organizational behavior*, B. M. Staw and R. I. Sutton, Eds., vol. 23pp. 133–187, 2001.
- [16] J. B. Rotter, J. E. Chance, and E. J. Phares, *Applications of a social learning theory of personality*, New York, NY, USA, 1972.
- [17] I. Ajzen and M. Fishbein, "The prediction of behavior from attitudinal and normative variables," *Journal of Experimental Social Psychology*, vol. 6, pp. 466–487, 1970.
- [18] A.-M. Bliuc, G. Casey, A. Bachfischer, P. Goodyear, and R. A. Ellis, "Blended learning in vocational education: teachers' conceptions of blended learning and their approaches to teaching and design," *Australian Educational Researcher*, vol. 39, pp. 237–257, 2012.
- [19] N. D. Vaughan, "A blended community of inquiry approach: l," *The Internet and Higher Education*, vol. 13, no. 1-2, pp. 60–65, Jan 2010.
- [20] D. R. Garrison and H. Kanuka, "Blended learning: u," *The Internet and Higher Education*, vol. 7, pp. 95–105, 2004.
- [21] E. Oh and S. Park, "How are universities involved in blended instruction?" *Educational Technology & Society*, vol. 12, no. 3, pp. 327–342, 2009.
- [22] P. Mishra and M. J. Koehler, "Technological pedagogical content knowledge: a framework for teacher knowledge," *Teachers College Record: The Voice of Scholarship in Education*, vol. 108, pp. 1017–1054, Jun 2006.
- [23] M. S. Khalid and M. H. Strange, "School Teacher Professional Development in Online Communities of Practice: A Systematic Literature Review," in *Proceedings of the 15th European Conference on E-Learning*, pp. 605–614, Academic Conferences and Publishing International, Changsha, China, October 2016.