Blended Learning in International Trade Course (Bilingual): Teaching Design and Implementation

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Abstract. In the digital era, the integration of modern information technology and education has brought new opportunities to the development of international trade teaching in vocational colleges. Teachers can make full use of multi-media to create blended learning environment which has the advantages of both online information resources and offline face-to-face learning. Taking the module of International Trade Course (bilingual) in a vocational college in Guangzhou as an example, the teacher is expected to use a blended learning approach that can help students build an active, effective and interactive learning process. The method used in this research is classroom action research. In this research, both qualitative and quantitative data collection techniques are used in two classes, which aim at tracking the improvement of students' skill in both language competence and international trade skills and describing the class climate and interaction between the teacher and students when blended learning is successfully applied. The research findings show that the blended learning has realized the complementary advantages of both online courses and traditional face-to-face ones. It has greatly enhanced students' interest, motivation and participation level in international business learning through the motivation from activities and assessment on online platforms and elaborate offline organization from the teacher. Also, the class climate has positive improvement among the teacher and students.

Keywords: Blended learning approach · International Business Course · Teaching design · Motivation

1 Introduction

International Trade Course (bilingual) is a professional course offered by many undergraduate and higher vocational colleges, which intends to cultivate high-quality technical talents who have broad international vision, good professional ethics, teamwork spirit, innovation and entrepreneurship awareness, and who are familiar with international business practices and business processes as well as strong comprehensive English application ability, cross-cultural business communication ability and international business operation ability. It integrates theory and practice, aiming to help students conduct

business activities and international trade on the basis of mastering expertise, including relevant terms and expertise in international trade.

In teaching practice, the traditional face-to-face teaching of International Business Trade course has led to a series of problems due to limited resources and monotonous teaching methods, such as complicated theoretical knowledge of business trade, disconnection between theory and practice, students' lack of language competence, weak practical ability, lack of practice, etc.

However, the development of internet and mobile phone has brought reformatory methods and opportunities for teaching and presented a new mode, that is online teaching, which has the features of rich resources and not limited by time and space. However, it needs interaction not only between computers or mobile phone and learners, but also between the teacher and students or among students. The decline of MOOC boom in the information age proves that a single online learning model also has defects [16]. Therefore, we cannot ignore the fact that the traditional face-to-face teaching also has its irreplaceable advantages, for example, the teacher can provide emotional support easily to students. So how to integrate them in International Business Course (bilingual) in a scientific way to achieve the complementary effect is what we intend to research and reach.

2   Literature Review

Blended learning is a new mode developed with the progress of information and internet technology and is booming in recent years [15]. The definition of blended learning varies among scholars. One of the influential one is the 5R principle proposed by American scholars Singh, H. and Reed, C [10], who believed that the key to blended learning is to optimize learning goals through such methods like applying 'effective' learning techniques, matching 'suitable' personal learning methods, imparting 'optimization' skills to 'autonomous' learning individuals at the right time so that the learning effects can be optimized and costs in learning can be reduced. Jennifer Hofmann [5] held that the ideological system of blended learning lies in the modularization of learning. Driscoll's [3] stated that in order to realize the most ideal learning effect, blended learning combines any form of teaching technology with specific learning aims, tasks or training techniques. Kaye Thorne [12] emphasized that blended learning originates from online learning and is a combination of diversified online learning and traditional face-to-face learning based on E-learning.

Guided by behaviorism and constructivism learning theory, blended learning optimizes, organizes, presents and uses teaching resources by using modern educational technology, internet and information technology as well as other technical means. It also integrates the traditional face-to-face classroom learning so that it can achieve complementary advantages of both online and offline courses and have more efficiency and effect [2], enables the educators to re-examine and re-construct the teaching practice [4]. This approach reflects the principles of integration, openness, communication and collaboration in the teaching process.

Blending learning is multi-dimensional, rather than the simple combination of online and offline learning. It also includes the blending of various learning theories and methods. This approach breaks through the time and space constraints of traditional face-to-face learning, which can help teachers to play the leading role of in organizing, guiding, enlightening and monitoring the teaching process, and most importantly, it can fully stimulate the students' enthusiasm, initiative and creativity in the autonomous learning process [7]. Therefore, the interactivity between the teacher and students can be improved [8]. Since blended learning approach can effectively realize the rational allocation of learning resources and interaction between teachers and students, it has gained increasing popularity in the current education field, and will be a commonplace in future education [9].

Due to the professionalism of teaching objectives, the applicability of teaching contents and the openness of teaching methods, and compared with universities, blended learning can be more applicable in higher vocational colleges which intend to cultivate qualified practical talents.

3   Methodology

This research is implemented in Guangzhou City Polytechnic, a vocational college in Guangzhou, China. The participants of the research are the 2nd-grade college students majoring in business English, who come from 2 classes and have the same mean score in the pre-test of the research. In this research, Class 1 is the control group while Class 2 is the experiment group.

This research used Classroom Action Research (CAR) which involves four stages: planning, action, observation and reflection in which both qualitative and quantitative techniques were conducted to collect the data. The qualitative data include that from observation, audio and video recording, transcription, interviews and questionnaires. Another kind of quantitative data: pre-test and post-test scores of the two classes are also used. In the analysis of quantitative data, the scores are compared to show whether there is any improvement of the students' international business skill after blended learning is applied.

4   Teaching Design and Results

There are four basic procedures of blended teaching design proposed by Josh Bersin [6]: analyzing students' internal needs and expectations for learning, formulate teaching design and assessment standards according to the actual situation and internal needs of students, explore and integrate teaching resources, implement teaching plans and track the implementation effect. Our research and teaching design is also based on these four procedures.

4.1   Class Problems and Students' Internal Needs

At the beginning of the research, in order to analyze students' internal needs and expectations in learning, we got the data and results by observing the class, a pre-test, interviewing the students and the teacher. According to the results, there are mainly three

Table 1. Pre-research findings

	Problem indicators
Students' language and international business competence	1. The class had poor classroom teaching-learning effect.
	2. Students did not have enough skill practice.
	3. The teacher had monotonous assessment method.
Class climate	1. Students had low interest in the learning process.
	2. Students were not active and interactive in teaching-learning process.
	3. Students had low motivation in learning international business.
	4. The using of media was monotonous and there were mainly offline class activities.

problems in the international business teaching and learning process in both classes: poor classroom teaching effect, inadequate skill operation, monotonous assessment method. For the class climate, there are also four problems: students' low interest in the leaning process, not being active and interactive, low motivation and teacher's monotonous usage of media. They can be seen in "Table 1".

4.2 Teaching Design and Assessment Standards

Based on the problems and by analyzing students' internal needs and expectations in learning, the research adopted the "Online + Offline" blended teaching approach in Class 2 to design the teaching-learning activities in which there are four major steps including one pre-test and one post-test. We take one chapter "letter of credit" (L/C for short hereafter) in the course of international business as an example of the teaching design and implementation. The teaching stages consist of 10 parts: preview and pre-test, warming-up, brainstorming, practice 1, demonstration, summary of features, practice 2, online meeting, post-test and consolidation after class.

It is suggested by scholars that blended teaching should carefully integrate different teaching methods [1], and adopt active learning strategies and rationally use multiple teaching methods [14]. In the teaching process, different teaching methods were applied for different teaching procedures and purposes like task-driven approach, heuristic teaching method, operation demonstration method, project teaching method. In preparing the teaching methods and steps, we arranged a series of teaching-learning activities to make sure that the teacher and students could overcome the problems and promote students' autonomous learning and learning efficiency. It can be seen in "Table 2".

During the implementation process, there are four features involved. Feature 1: Various information means, resources and offline activities on L/C are effectively explored

Table 2. Teaching design and implementation

Teaching stages	Content	Teaching methods	Students' activities	Tools	Aims
Preview and pre-test	1. Students check and finish the task list issued by the teacher on Superstar Platform by previewing the content of the course. 2. Students finish the pre-test. 3. The teacher checks the results of the test.	Task–driven method	Self-study online	Cyber resources; Superstar Platform	1. Students' learning time and space can be expanded. 2. The teacher can make teaching adjustments in class.
Warming-Up	1. The teacher shows the video about L/C. 2. Students have a discussion about the importance of L/C in international trade business. 3. Each group chooses one member to state their opinions.	Heuristic teaching method	Watch and discuss	PPT; Superstar Platform	Students' interest in L/C can be aroused
Brainstorming	1. The teacher shows more cases of L/C. 2. Students analyze the cases and brainstorm different types of L/C and relevant procedures.	Heuristic teaching method	Watch and brainstorm	PPT; Superstar Platform	Students can be inspired to watch and think.
Practice	Students drill the process of L/C in an international trade simulation system.	Task–driven method	Practice	Pocib Platform	Students can get direct idea from practice.

(*continued*)

Table 2. (*continued*)

Teaching stages	Content	Teaching methods	Students' activities	Tools	Aims
Demonstration	The teacher demonstrates how to review the terms of an L/C according to the contract and relevant information.	Operation demonstration method	Watch and think	Shige Platform	Students can get indirect experience from watching the demonstration.
Summary of features	The teacher guides students to draw a mind-map about the trap terms, especially the expiry date of L/C and soft terms.	Heuristic teaching method	Draw a mind-map	Superstar Platform	Students make an induction from what have been learnt by themselves.
Practice	1. The students are assigned in groups to review and modify a real case of L/C from the college- enterprise cooperation company Hongtai. 2. The groups demonstrate their works. 3. The class summarize the key points.	Project teaching method	Review and modify	Shige Platform	Students get practical experience by doing and discussion.
Online meeting	The teacher invites the manager of Hongtai Foreign Trade Company to give a speech about the students' performance.	Project teaching method	Listen and think	Superstar Platform	Students get experience and assessment from a real company.
Post-test	Students finish the post-test.	Task–driven method	Review and summarize	Superstar Platform	The teacher gives different kinds of practice to different students according to the feedbacks.

Table 2. (*continued*)

Teaching stages	Content	Teaching methods	Students' activities	Tools	Aims
Consolidation after class	Students do more practice in Pocib and Shige Platform according to their levels.	Task–driven method	Review and consolidate	Pocib and Shige Platform	Students can learn at their own pace, at any time and anywhere.

and integrated, forming a three-dimensional learning chain for the students and giving full play to the main role of students in learning and realizes flipped classroom. Meanwhile, students' autonomy in learning can be greatly enhanced. It has the characteristics of rich teaching content, good experience and controllable learning process.

Feature 2: Simultaneous development of English language and business ability. The learning process offers more effective and entertaining experience for students. It can also improve students' language ability and international business competence in L/C, and further realize the talent training goal of "proficient English, business and entrepreneurship" in a comprehensive way. Feature 3: Both L/C theory and practice are involved actively and interactively. Through theoretical study and classroom practice, as well as visiting and studying in school-enterprise cooperation companies online, students can achieve the learning objectives. Feature 4: It combines teacher guidance with students' autonomous learning. Although blended theory is an information reform of traditional teaching method, we cannot deny the indispensible and irreplaceable role of the teacher that he/she plays in organizing the class activities, asking questions, observing the reaction of students, etc. What's more important, teaching-leaning process is a bilateral process, in which the teacher's language, intonation, body language, expressions exerts invisible influence on students learning effect and feelings. Feature 5: This case of teaching organically combines objective assessment and subjective assessment, and adopts a combination of online learning assessment and offline activity assessment, which examines language ability, business skills, and comprehensive achievement from multiple dimensions, as can be seen in "Fig. 1".

4.3 Exploring and Integrating Learning Resources

Establishing platforms with rich resources is the basis for blending learning. In the research, resources of L/C were scientifically designed in terms of content selection, arrangement, and expression, comprehensively integrating multi-modal features such as charts, sounds, expressions, text, images, and colors, and considering timeliness, readability and interactivity. In the teaching process, there are mainly 3 platforms used by the class: Superstar, Pocib and Shige, among which the Superstar is the most frequently used for self-study and interaction with classmates and the teacher. The construction of Superstar platform can be divided into two parts. One is the teaching-learning area and the other is the interaction area. For the teaching-learning area, rich resources of the relevant content like cases, videos and PPTs of L/C are collected and prepared by the teacher for
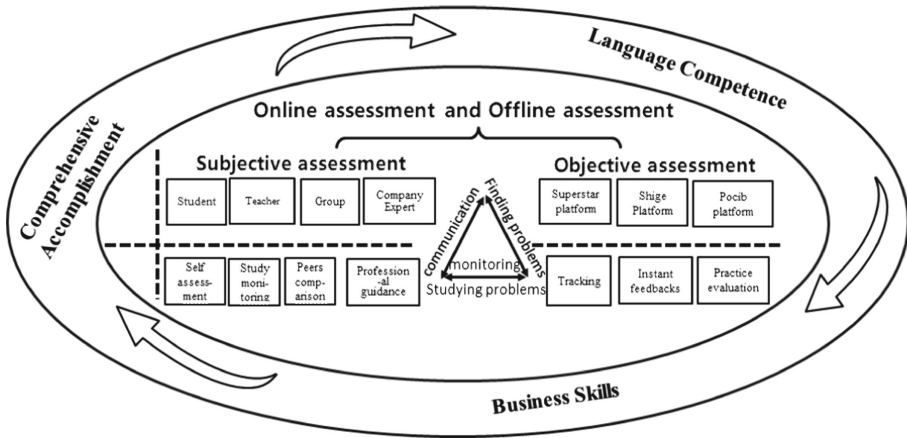
Fig. 1. Online and Offline Assessment.

students to learn independently according to their own needs. For the interaction area, there are a lot of functions involved: discussion, test, mind-map, voting, answer race, assessment and online meeting, etc. They can change the class climate and make it more engaging. So through these functions, students' interest can be stimulated and aroused. Furthermore, the collaboration among groups or the whole class and interaction between the teacher and students can be improved effectively.

Besides the online platforms and activities, the offline face-to-face classroom activities and the specializations of the teacher also play a very important role in blended teaching. Scholar has pointed out that the proportion of online teaching in blended teaching should be between 30% and 79% [2]. Through comparative experiments, other study found that online teaching which accounts for 50% can achieve the best results [11]. In our teaching process, the proportion of offline learning for students is just about 50%, in which ppts and visual aids like the real copy of L/C from companies were carefully presented as scaffolds for students and activities like discussion and question-answering were well-designed and organized by the teacher. These resources and teaching stages were integrated with the online ones as a whole process to achieve the best implementation effect. Furthermore, the teacher paid special attention to the reaction and even emotions of the students in the interaction process so as to make right judgment and prompt adjustment in class.

4.4 The Implementation Effect

After adopting the blended learning approach to organize classroom activities, the teacher found prominent improvement in Class 2's academic performance and class climate. The result from the platforms indicates the simultaneous feedback of each individual student to themselves and the teacher. Providing timely feedback to students can lead to better learning outcomes for students [13]. This feedback consists of six parts, in which the pretest, brainstorming, mind-map and post-test are finished in mobile phones, while the operation of L/C is in Pocib and Shige Platform on the computer. It can be seen clearly

Table 3. Score on the Platforms of Class 2

Students' No.	Pre-test	Brainstorming	Pocib	Mind-map	Shige	Post-test	Total score
901200101	12	9.17	8	5	28	29	91.17
901200102	9	8.89	7	4	29	29	86.89
901200103	9	8.21	7	5	27	28	84.21
901200104	12	8.08	8	4	26	26	84.08
901200105	8	8.44	5	3	25	24	73.44
901200106	7	6.79	7	4	26	25	75.79
901200107	11	8	8	5	27	27	86
901200108	10	6.09	6	4	24	23	73.09
901200109	11	8.94	7	3	28	20	77.94
901200110	10	8.09	8	5	29	25	85.09
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Table 4. The Comparison between Two Classes

Items	Observation	Class 1	Class 2
Kind of Test	Pre-test	Post-test	Post-test
Students' mean score 10.58		19.65	25.76

that students in class 2 have got positive improvement in the post-test after all kinds of leaning activities. The average score in the post test is 15 points more compared with the pre-test. The results of each part can be shown in "Table 3".

For both classes, they have nearly the same results in the pre-test, but the post-test results from both classes prove great differences after blended learning is adopted in class 2. There are 6 points more in Class 2 than in Class 1 in the mean score, as can be seen in "Table 4".

Based on the findings from the empirical study, there are big improvement of the language competence, international business skills and class climate in Class 2 through blended learning approach: (1) The enhancement of students' business English competence indicates that students could comprehend the L/C documents and terms rapidly through the videos, cyber resources and practice with group members. Simulated language situations from the company could also attract them to simulate speaking and reading in a natural way. (2) The improvement of students' business knowledge and skill indicates that students could understand the new concept, procedures, different types of L/C and they could also review and modify the L/C efficiently. For Chinese college students, especially the Grade One and Grade Two, they have few opportunities to get close to real foreign business companies, so lots of real cases of L/C from the companies and

学生评语汇总：

1:刘芬老师上课效果很好，课堂氛围也很棒，教学通俗易懂，易于接受。
2:觉得课程很清晰
3:很好
4:非常好！！！！

Fig. 2. Survey Results from the Students about the Course and Teacher.

guide from the manager could help them to master the business skills in a relatively short time. (3) Class climate has been largely enlivened than before. Through various kinds of platforms and class activities elaborately designed by the teacher, students' interest was aroused and they were fully motivated by the simultaneous assessment from the platforms so they became much more active and interactive in the learning process. Meanwhile, their autonomy in learning was also greatly improved. In the preview and review as well as the consolidation stage, due to the high portability, convenience of platforms in mobile phones, students learnt at their own pace anytime and anywhere.

According to the survey and interview after leaning, an overwhelming majority of students in Class 2 believe that blended learning stimulates their interest, enthusiasm and enhances their independent learning. They also showed much satisfaction with the class climate and the teacher. They said "the class effect and climate is great", "the teaching content becomes easy to comprehensible and acceptable", "the process of the course is very clear", etc., as can be seen in "Fig. 2".

5   Conclusion

The research showed that the blended learning could improve students' language competence and business skill in international business course (bilingual) if it is elaborately designed and fully implemented. It has changed the traditional face-to-face teaching mode. With the help of modern information-based teaching tools, rich and diverse online teaching resources, flexible and effective offline classroom activities, this approach has fully enhanced students' interest, motivation, engagement and collaboration in international business learning. For the preview and review stage of the learning process, students can construct knowledge by exploring business information and moving at their own pace, on their own needs, which brings the development of independent and critical thinking. Furthermore, it helps the obtaining of theoretical knowledge more easily since it breaks through the constraints of insufficient resources, and improves students' practical ability through simulation and practice.

The blended learning is still developing with the information technology. How to make the most use of both advantages of online teaching and traditional face-to-face teaching and how to integrate them in other courses is what we will continue to research.

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