

# *Implementation of "Flipped Classroom" in E-commerce Course*

**Junli Yu and Lirong Wang**

*Qianan College, North China University of Science and Technology, Tangshan 064400, Hebei, China*

**Keywords:** Implementation of Flipped Classroom, College Teaching, E-commerce Course

**Abstract:** With the further development of education and the rapid improvement of computer level, schools pay more attention to teaching efficiency. Modern information technology has extremely important practical significance in improving classroom teaching efficiency. As a product of the application of information technology, flipped classroom is also the latest teaching mode at the present stage. It is widely used in E-Commerce teaching. On the one hand, it makes up for the shortcomings of traditional teaching, and on the other hand, it effectively improves the efficiency of E-Commerce teaching. Taking e-commerce course as an example, this paper proves that the application of flipped classroom can not only effectively improve students' academic performance, but also improve students' understanding of the course.

## **1. Introduction**

Flipped classroom is also called flipped classroom teaching mode. It is an organizational form of mixed classroom teaching. Flipped classroom mainly includes online and offline stages. The online learning stage is what people often call extracurricular time. Our students can use high-quality educational resources through Internet and other network technologies, and the time, process and methods of learning are arranged by students themselves, The offline learning stage refers to the class time at school. This is when the students and teachers are together, making the classroom a place for interaction between teachers and students, and between students and students. At this time, teachers can walk around to help students solve problems and guide them to effectively use what they have learned in class. The flipped class is different from the traditional class in many aspects, as shown in Table 1.

*Table 1. Some differences between Traditional class and Flipped class*

Traditional class	Flipped class
Provide and organize large amounts of comprehensible input through both listening and reading.	Read material before class. Tasked with extensive listening outside class time.
Note words on the board as they occur in listening, following teacher's communicative tasks	Some pre-task consciousness Preview some related videos before class Finish the assignments
Work on guessing from context, dictionary use, passage structure analysis and read the dialogue.	Videos on these strategies could be prepared for the learners to view before class and/or as needed. Group study and try to solve the difficulties with the help of the teacher.
The teachers assign tasks to the students after class to strengthen their comprehension.	Students do exercises and discussions after class to reflect and summarize what they have learned.
...	...

## 2. Connotation of Flipped Classroom Teaching Mode

The traditional teaching process generally includes two parts: the teaching of knowledge and the internalization of knowledge. The dissemination of knowledge is mainly conducted by teachers in the classroom, while the internalization of knowledge is mainly completed by students through homework and operation after class. The flipped classroom we mentioned completely subverts the traditional teaching process, and the knowledge is taught by students with the assistance of information before or after class. With the reversal of the teaching process, each sequence of the classroom learning process has gradually changed. The teaching sequence of the traditional classroom is different from that of the flipped classroom. The traditional teaching sequence is divided into three links: before class, in class and after class. The traditional teaching process will have preview and practice before class. The purpose of this is to thoroughly understand the content to be learned, While the students read the textbooks themselves during preview and review, the flipped classroom can help them master the basic knowledge and ability in the learning content and basically complete the learning requirements as much as they can. The students will watch the video when reading the textbooks and can timely understand the results of the students' learning through the test. As an effective teaching mode, it can effectively help teachers understand students' learning condition before class, constantly adjust classroom teaching activities, and achieve the teaching target. Most importantly, there is an instant feedback in the flip class, and the results can be counted

at the same time. Traditional classroom focus on teacher's explanation in class. The purpose of explanation is to help students fully understand the content which has just been taught in class. The way of explanation is basically based on teaching. Flipping class is to solve the puzzles brought by students' during the preview before class and guide students to summarize what they have learned. This teaching method is basically the way of answering questions and solving the students' problems encountered in the preparation process and their profound understanding of the contents. The homework of traditional classroom is mostly the after-school assignments or activities, which aim to further consolidate their understanding. Teachers will arrange exercises for students to complete independently. Flipping class tends to lead students to reflect on what they have learned and discussed after class. Our teachers can also broaden the network materials and provide corresponding online guidance.

### **3. Disadvantages of Traditional E-Commerce Course Practice Teaching**

E-commerce is a cross-knowledge of the complex course, it covers foreign languages, business management, computer information technology and many other aspects, although e-commerce has got more and more attention, however, due to its strong practicality, involving many aspects, and curriculum content updating quickly, many colleges and universities in the opening of e-commerce courses inevitably encounter some bottlenecks or some malpractices, in the development of teaching philosophy. While for the time being, most of our students are lack of entrepreneurial awareness, causing a huge gap between the students and e-commerce professional job market. At present, the teachers and students of e-business course in our country are still in a perceptual stage of understanding, and have not formed a rational understanding. There is a lack of e-commerce curriculum practice teaching characteristics, and has not formed a more completed system. At this stage, the traditional e-commerce curriculum teaching method is relatively backward, even after the curriculum was reformed, the effect is not obvious. Based on ERP training room, virtual online practice platform and other e-commerce practice, the current e-commerce class can not meet the rapid development of our society, many colleges are still at the stage where the theoretical knowledge input is greater than the output of practice. This also caused that a large number of students who have a very solid basic of knowledge lack the ability to solve practical problems.

### **4. Practical Teaching Design of E-Commerce Course Based on Flipped Classroom**

#### **4.1. Orientation of the Course**

E-commerce courses are different from traditional business courses and computer courses. E-commerce is mainly aimed at cultivating compound informatization talents who have e-commerce related knowledge and skills and can skilfully use e-commerce skills to carry out business activities. It mainly involves foreign language knowledge, business knowledge, information technology knowledge, e-commerce knowledge and so on. The training skills mainly involve business skills, innovation skills and vocational skills.

#### **4.2. Course Design**

Before class: Flipped learning usually allows the students to get access to some materials related to the learning goals which can be in the form of a mini-lecture or a short video of a topic. So teachers need to do a lot of preparatory work, record video, audio and other materials in advance according to the teaching plan, publish the course objectives and preview tasks before the class starts, so that the basic knowledge will be transferred to offline and completed by students

independently. According to the pre class tasks, students learn the basic knowledge independently, and leave their doubts to the class to communicate with the teacher, as shown in Figure 1.

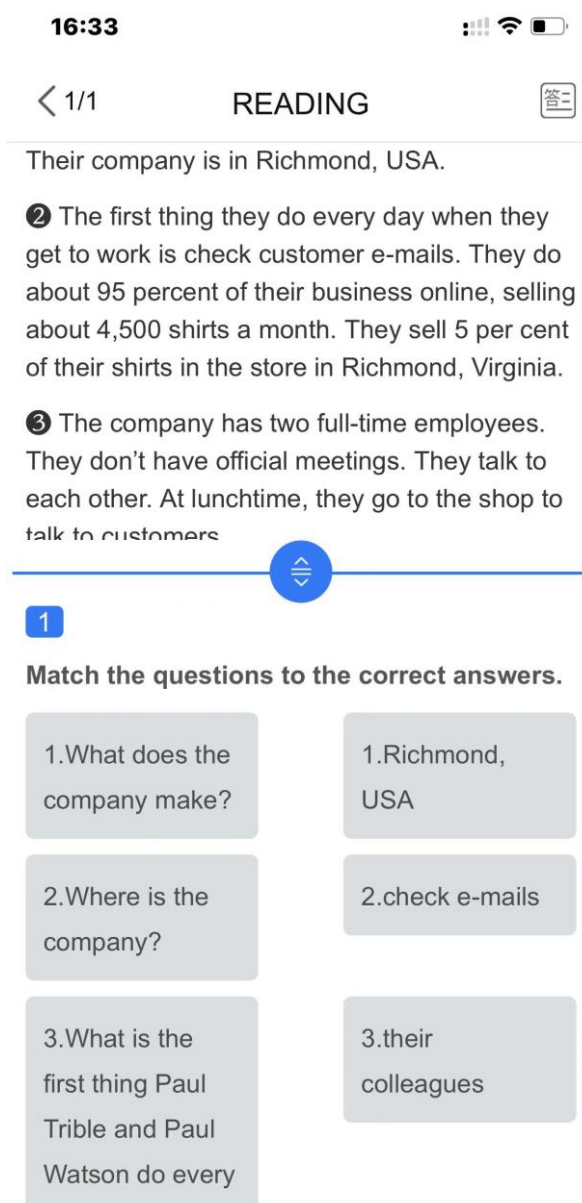


Figure 1. Preview activities before class

In class: the teacher saves a lot of explanation time, can organize students to discuss in groups, and can also focus on answering students' questions. In this communicative process, teachers should give different kinds of guidance or advice according to the characteristics of the students.

After class: During the former two sessions, the students can get a good understanding of the basic content of the class. In this session, the homework is different from that in the traditional class. Teachers can assign related tasks according to the content. They can be a topic to write about, a film for the students to watch and then share their insights, or a drama to play, and so on, as shown in Figure 2,3.

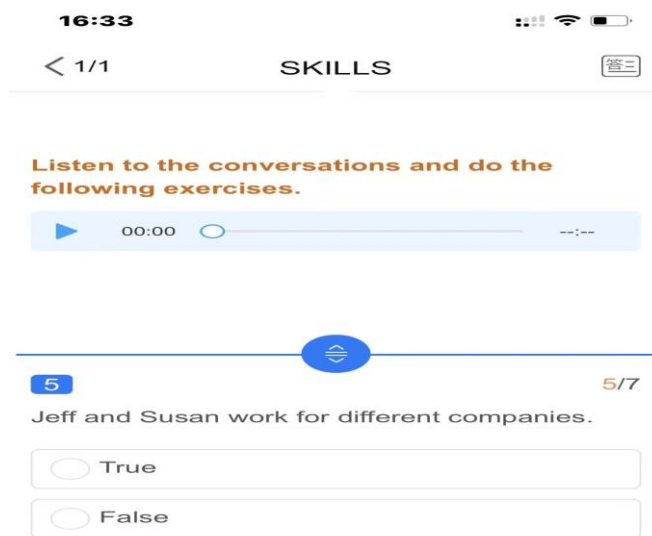


Figure 2. After class assignments of e-commerce skills



Figure 3. After class assignments of e-commerce language review

### 4.3. Application of Flipped Classroom in E-commerce Teaching

Flipped classroom has become more and more popular in recent years. The practice results show that the application of flipped classroom in E-Commerce teaching can greatly improve the teaching efficiency. Taking the teaching content of introduction to e-commerce as an example, this paper briefly expounds the application of flipped classroom in its teaching. If teachers want to use the flipped classroom teaching mode, they first need to publish the learning tasks and requirements related to the course content on the school's public websites (learning link, Ismart, etc.) before class teaching, and then release the relevant case analysis, teaching videos, micro lessons, teaching ppt and other materials to students in advance, so that students can preview the basic knowledge and master the whole structure framework before class. At the same time, teachers need to set corresponding questions in combination with classroom teaching objectives to lay a solid foundation for subsequent classroom learning activities. When setting questions, teachers should combine the key and difficult points of the course content, so that students can focus on the video, so that students can quickly grasp the overall context of the course content and develop the habit of independent learning, independent thinking and problem solving.

In addition, students will inevitably encounter some problems in the pre class preparation stage. They can communicate with students through video learning to solve some problems that can be solved as much as possible. At the same time, they need to focus on the common problems so that teachers can make targeted explanations in class. This can not only improve learning efficiency, but also get rid of cramming teaching and improve students' learning enthusiasm, It plays a very important role in the follow-up "teaching" and "learning". In the process of classroom teaching, teachers need to use the flipped classroom teaching mode to highlight the main position of students and give full play to their guiding role to form a virtuous circle. It is worth noting that the E-commerce Teaching under the flipped course teaching mode is not the traditional cramming class teaching, but it needs to let students learn the basic knowledge of e-commerce introduction independently under the correct guidance of teachers, gradually grasp the structure of e-commerce introduction, and finally form a systematic knowledge vein. Only in this way can the superiority of flipped class in improving students' performance be reflected in the final evaluation.

For some complex knowledge points in the introduction to e-commerce, students can discuss in groups after watching the video explanation or mini class video before class. In the class, teachers can appropriately increase the interaction between teachers and students, guide students to think actively, and summarize the video clips, so as to avoid students from feeling that the introduction to e-commerce is boring, and stimulate their internal learning motivation and potential. After that, with the help of the network and learning platform, the complex e-commerce knowledge can be simplified. In particular, the theoretical knowledge of e-commerce introduction can be displayed in the form of vivid animation or pictures, which will help students intuitively grasp the difficult e-commerce knowledge points. In this way, the memory effect of students will be better, and finally the quality of E-Commerce teaching will be effectively improved, as shown in Table 2.

Table 2. The effect of flipped classroom in Unit 6 Cross-border logistics and overseas warehouse operation

Learning unit	Learning goal	Ability requirements	Flipped classroom effect	Reference time
U6 Cross-border logistics and overseas warehouse operation	<p>Task 1: Investigate the cross-border logistics freight and logistics selection of Ali Express platform</p> <p>Task 2: Calculate the cross-border small parcel logistics freight rate</p> <p>Task 3: Calculate the freight rates of the four major international commercial express logistics</p> <p>Task 4: Calculate the logistics freight of cross-border special line</p> <p>Task 5: Calculate the logistics costs of the international sea and air transportation head section</p>	<p>Can choose China Post parcel (China Post Air Mail) as a cross-border logistics mode</p> <p>Can choose e packet as a cross-border logistics mode</p> <p>Can choose four major international commercial express delivery (FEDEX, DHL, TNT, UPS) as the cross-border logistics mode</p> <p>Can choose e packet as a cross-border logistics mode</p> <p>Can choose four major international commercial express delivery (FEDEX, DHL, TNT, UPS) as the cross-border logistics mode</p> <p>Can choose cross-border special line logistics as a cross-border logistics mode</p>	<p>Master the meaning, characteristics, packaging size, price, advantages and disadvantages, and operation process of China Post parcel</p> <p>Understand the meaning, characteristics, packaging size, price, advantages and disadvantages of China Post big bags</p> <p>Be familiar with the meaning, characteristics, packaging size, price, advantages and disadvantages, operation process of EUB, etc</p> <p>Familiar with the characteristics, packaging, price, advantages and disadvantages of the four major international commercial express services (FEDEX, DHL, TNT, UPS)</p> <p>Familiar with the characteristics, packaging, price, advantages and disadvantages of the four major international commercial express services (FEDEX, DHL, TNT, UPS)</p>	8

After the completion of the e-commerce class, the course practice session comes. The teacher can divide the students into several groups and let them use the group discussion method to report and summarize the e-commerce knowledge learned in the class. The evaluation involves the

following parts. The series of learning tasks take an 80% part, which is based on the self-learning testing, out-classroom discussion, information collection and in-team discussion for theme researching, theme presentation and reaction, in-classroom discussion and contribution to the team comprehensive practice. The final exam takes a 20% part. In this process, teachers can fully grasp the actual learning situation of students, and at the same time, they can find many shortcomings in their own e-commerce teaching. The practice of e-commerce course is mainly to investigate the actual operation ability of students on e-commerce technology, the ability to use the professional knowledge, the ability to deal with the business issues and so on. For the teachers the evaluation process can also make them continuously accumulate teaching experience in the future, so as to improve the E-Commerce teaching quality and teaching efficiency. This is also the specific requirement of the new curriculum reform.

In other words, the application of flipped classroom teaching mode in E-Commerce teaching, can highlight the main position of students, and at the same time help to make full use of the class when the teachers and students are together, meet the specific requirements of the current new curriculum reform, and have very important practical significance for promoting the quality of E-commerce teaching. Therefore, it is necessary for e-commerce teachers to recognize the specific concept of flipped classroom clearly and take effective measures to strengthen the application of flipped classroom in E-Commerce teaching, so as to promote the further development of E-Commerce teaching.

## 5. Conclusion

The flipped classroom teaching mode allows students to use their spare time to learn independently and express their opinions in class, where they can also discuss problems with classmates and teachers. The roles between teachers and students have been changed and provide students with opportunities and space for free play and display, and enable students to obtain a sense of pleasure and achievement in learning. Compare to the traditional class, the teacher become the guide and problem solver. As a result, they must continuously improve their own qualities in order to answer any questions the students encounter. The new role turns the students into self-instructor. Every student can arrange study according to his or her learning level. It not only stimulates students' interest in learning, but also enhances students' enthusiasm for learning. When using the flipped classroom teaching mode to carry out E-commerce Teaching, teachers can organize students to use the knowledge and skills they have learned to make creative products after class according to the teaching content, and display and share them in class or in the study platform, so as to exercise students' knowledge application ability and improve the teaching effect.

## Funding

This article is not supported by any foundation.

## Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

## Conflict of Interest

The author states that this article has no conflict of interest.



## References

- [1] Ash, K. (2012). Educators evaluate “flipped classrooms”. *Education Week*, 32(2) 6.8.
- [2] Du, H. (2012). *College English teaching in China: Responses to the new teaching goal*. TESOL in Context Special Edition.
- [3] Enfield, J. (2013) Looking at the impact of the flipped classroom model of instruction on undergraduate multimedia students at CSUN. *Tech Trends*, 57(6), 14-27.
- [4] Davies R. S., Dean D. L. and Ball N., "Flipping the classroom and instructional technology integration in a college-level information systems spreadsheet course". *Educational Technology Research and Development*, 61(4), 563-580, 2013.
- [5] Graham, R. (2012). Commentary The Khan academy and the day-night flipped classroom. *Biochemistry and Molecular Biology Education*, 5, 337-338.
- [6] Shea, P., Hayes, S., Smith, S. U., Vickers, J., Bidjerano, T., Pickett, A. et al., (2012) “Learning presence: Additional research on a new conceptual element within the Community of Inquiry (CoI) framework.” *The Internet and Higher Education*, 15(2), 89-95.
- [7] Hasanah, Iswatin, and Yudhi Arifani. (2020) "The effect of flipped classroom toward ESP students reading comprehension." *Proceedings of the Borneo International Conference on Education and Social Sciences (BICESS 2018)*, Gresik, Indonesia.
- [8] Liu, Ying, Xiaheng Zhang, and Qiongjie Zhou. (2020) "VR technology online classroom mode in cross border E-commerce teaching in colleges and universities." *IEEE Access*.
- [9] Zhu, Yanchun, et al. (2018) "Design and implementation of curriculum knowledge ontology-driven SPOC flipped classroom teaching model." *Educational Sciences: Theory & Practice* 18.5.
- [10] Li, Zhonghua. (2022) "Construction and Exploration of Leisure Physical Education Teaching Model Based on Flipped Classroom from the Perspective of Educational Psychology." *Psychiatria Danubina* 34.suppl 1: 770-771.
- [11] Zhao, Huizhou. (2015) "The Practice and Thinking of the Flipped Classroom Model in the E-Commerce Course." *International Conference on Education, Management and Computing Technology (ICEMCT-15)*. Atlantis Press.
- [12] Ma, Xiaoye, and Shiyong Zheng. (2021) "Analysis on the Application of Flip Classroom in E-commerce Major." *Frontiers in Economics and Management* 2.3: 137-147.
- [13] Zhao, Huizhou. (2015) "A Four-stage Flipped Classroom Model for Seminar-based E-Commerce Learning." *2015 International Conference on Management, Education, Information and Control*. Atlantis Press.
- [14] Kevser, H. A. V. A., and Mehmet Fikret Gelibolu. (2018) "The impact of digital citizenship instruction through flipped classroom model on various variables." *Contemporary Educational Technology* 9.4: 390-404.
- [15] Zhang, Bo, Li Cheng, and Yuting Liu. (2022) "Design and Practice of Teaching Mode Based on Flipped Classroom-Taking International Business Negotiation (Bilingual) Course as an Example." *Proceedings of the 4th International Conference on Modern Educational Technology*.