

Influence Of Blended Learning Model On Students' Motivation, Participation And Learning Results In Adult Continuing Education

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Abstract:

Adult continuing education, as a primary educational approach aimed at individuals in society, is not highly valued by relevant departments, schools, and even students themselves due to various reasons. As a result, the recognition of adult continuing education by society is not high, which is unfair to the educated. Therefore, this article attempted to improve the quality of adult continuing education from the perspective of students. This paper first proposed a collaborative blended learning scheme. The main idea of blended learning is the combination of online and offline learning. Then, bibliometrics and data visualization were used to list the impact of blended learning on English majors in a school. Then, the teaching logic of SPOC (Small Private Online Course), one of the blended learning models, and its differences from the traditional education model were analyzed to reflect its advantages, and finally applied to the experiment. In this teaching mode, the academic performance of adult students in the experimental group has been improved, as well as their learning enthusiasm and motivation.

Keywords: Adult Continuing Education, Blended Learning Model, Bibliometrics, SPOC Teaching Model

1. Introduction

The blended learning model has played a great role in improving various educational fields. Adult continuing education, as one of

them, is also a good target. The ultimate purpose of this paper is to introduce SPOC teaching model, a typical model of blended learning model, into adult continuing education, aiming to ultimately improve the teaching quality of various adult colleges and universities by improving students' learning achievements and learning motivation first.

The blended learning model has a strong innovative significance in modern education. Albiladi W S mentioned in his research that English blended learning is a relatively new field, because it combines traditional teaching and distance online learning methods [1]. Ranjan P also pointed out that blended learning is a new field of research and practice in educational institutions and is known as a successful teaching model [2]. Evans J C and his research team believed that the blended learning model provided teachers with a real student perspective and helped teachers in their teaching [3]. Gambari A I's findings in his research also confirmed this view, because in his findings, the blended learning model has improved the performance of target undergraduates [4]. It is necessary to study the blended learning model in depth. Wang X mentioned a blended learning model called SPOC in his research, which is highly progressive [5]. At the same time, this type of SPOC has also become one of the main research objects of this article.

Adult higher education, as an important component of the education system, is of great significance for the further development of recognition. Wang H Y agreed with this point and also pointed out that it is difficult to recruit adult higher education this year and the quality of students is not high [6]. Among many types of education, the quality of adult continuing education is relatively low. Gao X pointed out in his research that the management personnel of adult continuing education in vocational colleges have outdated concepts and low levels of information technology in management methods. Xu R H believed that the good governance model should be introduced into the field of continuing education governance in universities, clarifying the important issue of public interest, and allowing the government and students to jointly regulate the main parts of continuing education. Bernhard-Skala C proposed that digitization can be used to improve adult and continuing education [9]. There are so many scholars trying to solve

various problems in adult continuing education through various methods, which demonstrates the importance of this matter.

Through the research results of many researchers, it is not difficult to see that the combination of adult continuing education and blended learning is highly feasible, so this idea provided in this paper is of great reference value.

2. Collaborative Blended Learning

Xu Y H proposed in his research that collaborative blended learning is based on three innovative perspectives [10]. These three innovative perspectives are innovation in teaching experimental equipment, innovation in learning scenarios, and innovation in teaching methods. Among them, learning scenario innovation is the top priority, as mentioned in the above research. The so-called learning scenario innovation is the combination of online and offline learning, which not only utilizes the convenience of offline communication and direct teaching, but also utilizes the advantages of online teaching's internet resources, and divides the entire course process into pre class, during class, and after class. The flowchart of the innovative learning mode through scenario innovation is shown below:

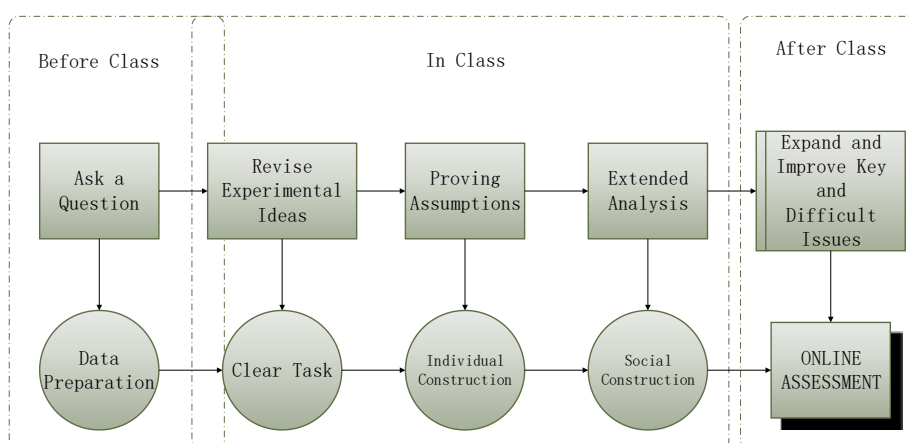


Figure 1. Flow chart of experimental collaborative blended learning mode

As shown in Figure 1, the collaborative blended learning mode

is mainly divided into pre class, in class and after class. Before class, it is necessary to prepare learning materials in advance and ask various questions based on the materials. When the course steps enter the class, it is necessary to revise the experimental ideas separately, prove the hypotheses through experiments, and finally conduct extended analysis. After analyzing all the content of the experiment in the classroom, teachers and students can expand and improve on key and difficult issues.

Chen Y proposed a collaborative U-Learning blended learning model [11]. Ubiquitous teaching is mainly based on online learning based on the network, mainly relying on some learning platforms and students' mobile terminals for learning. However, relying solely on online teaching is difficult to establish a complete teaching model, as online teaching also has many drawbacks, such as being limited by network fluctuations, difficulty in direct communication between teachers and students, and a need for application operations between teachers and students. Then, the advantages of the blended learning model are reflected, and offline teaching can make up for the shortcomings of online teaching. Therefore, the collaborative ubiquitous blended learning mode is a learning mode mainly based on online learning platform and a small amount of offline teaching assistance.

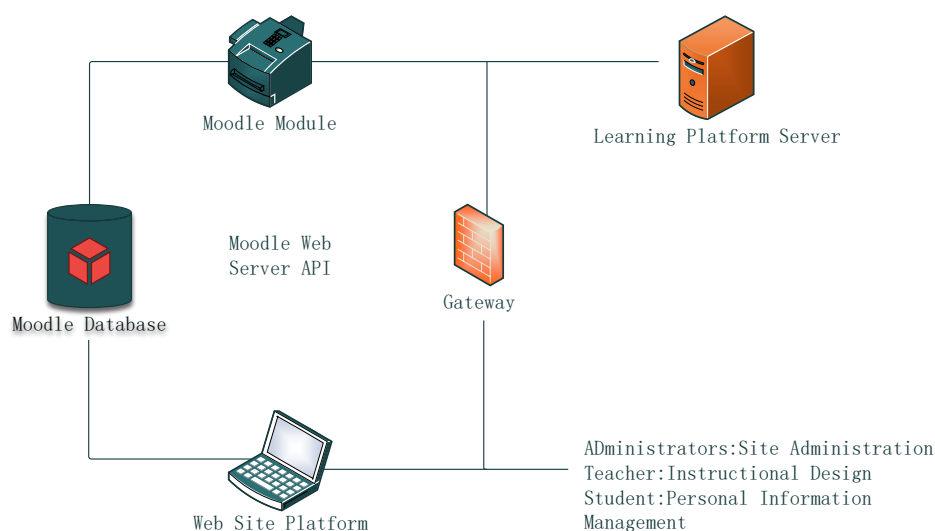


Figure 2. Universal learning environment

As shown in Figure 2, the environment of ubiquitous learning

mode is mainly online. Based on Moodle (Modular Object Oriented Dynamic Learning Environment), online courses are created and a Moodle database is established, which serves as the basic logical layer of the business and output content externally. Furthermore, a web website platform is established to connect with administrators, teachers, and student groups, allowing them to enjoy the resources of the Moodle database. In this mode, a learning platform server is also needed to allow various users to establish their own accounts, prevent personal information loss, and facilitate management.

3. Bibliometrics and Data Visualization

Gao F put forward a point of view in his research: the literature metrology method and data visualization method can be used to statistics the development of blended learning application research [12]. She focused her attention on English teaching in her research, so the goal of statistics is also the publication volume of literature in the English major. The following is a schematic diagram of the number of published literature on blended learning for English majors from 2005 to 2022:

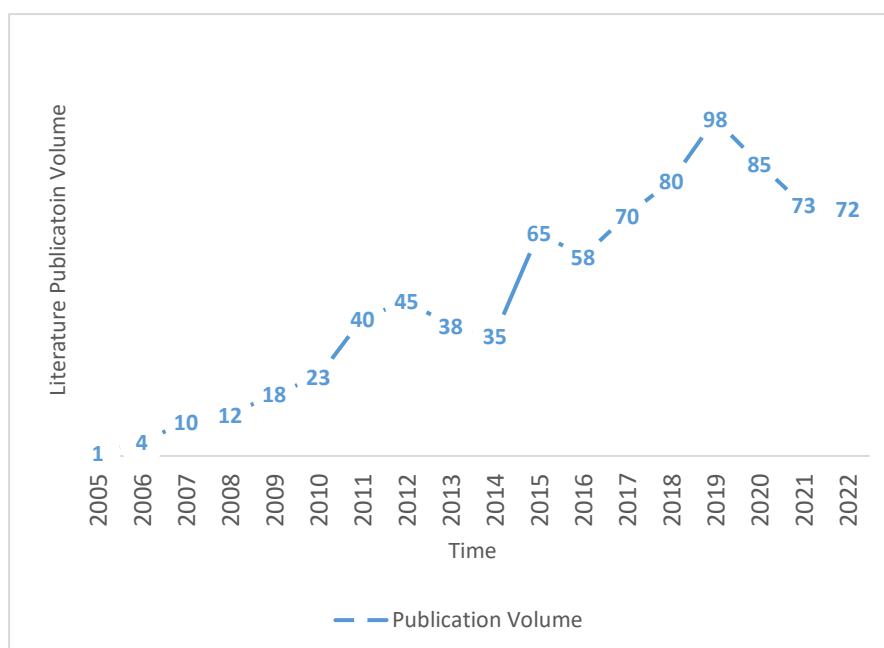


Figure 3. Number of published literature related to blended learning (2005-2022)

As shown in Figure 3, the number of published literature related to blended learning has basically increased year by year, reaching its peak in 2019, after which it has slightly declined, but the decline has also been controlled. From 2005 to 2009, people's

research on blended learning has just started, so there is not much literature published. Zhao Z R mentioned in his research that the release of the National Medium and Long term Development Plan Outline (2010-2020) has a huge impact on general education and industrial education [13], and blended learning also began to develop gradually in the period from 2010 to 2014. Until 2015, the publication of literature on blended learning showed a blowout, which was also inseparable from the background of the times at that time. Zhao X M pointed out that with the arrival of the era of information explosion, under the background of "Internet plus", the blended teaching model urgently needed to be integrated into adult education [14]. This upsurge began to decline until 2019, but the research on blended learning is still a hot topic. Judging from the short trend in the years from 2020 to 2022, this research still has a place in the foreseeable future.

At the same time, in the above research, there is also a high-frequency word search survey involving the application of blended learning. The scope of the survey is still among English majors. This paper intercepts the most popular keywords from it.

Table 1. Ranking of keyword search frequency for a certain English major student group in learning

Serial Number	Key Word	Frequency
1	Blended Learning	230
2	College English Teaching	122
3	Mixed Teaching Mode	46
4	Flipped Classroom	46
5	SPOC	28

As shown in Table 1, blended learning is the most frequent keyword searched by the surveyed group when learning, up to 230 times, even higher than the specialized course "College English", which has only 122 times of frequency. In addition, among the top five keywords intercepted, the last three are mixed teaching mode, flipped classroom and SPOC, which are also several directions of blended learning. Qu Y H expressed recognition for these ideas in his research [15]. The influence of component blended learning mode in today's education industry.

4. SPOC Teaching Mode

SPOC (Small Private Online Course) is a small-scale restricted online course, which is a blended learning mode. The term “small-scale” generally refers to limiting the number of students to between tens and hundreds, where the number of students is relatively easy to manage and teach, while the term “restrictive” refers to setting certain thresholds for students to join the course. This model has been recognized by many scholars before. Among them, Li H Y suggested using the SPOC model in his research on the English major graduation thesis writing course [16]. Their SPOC teaching process was constructed in their teaching examples.

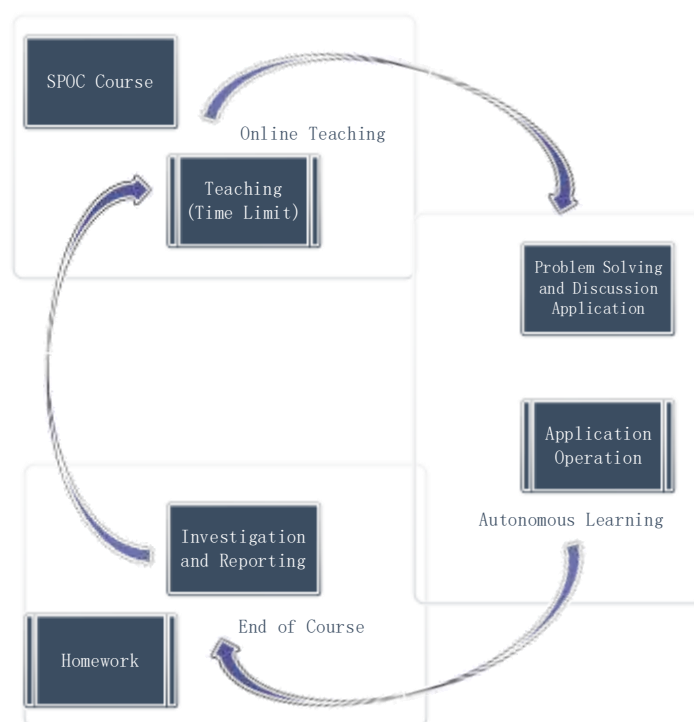


Figure 4. SPOC teaching cycle process

It is not difficult to see from Figure 4 that the teaching process of SPOC is not complex, and its essence is still based on the traditional teaching logic, which is to teach first, then discuss and finally assign homework. However, the advantage of SPOC is that it can combine online and offline teaching. The differences between

this blended teaching mode and traditional teaching mode are mainly reflected in:

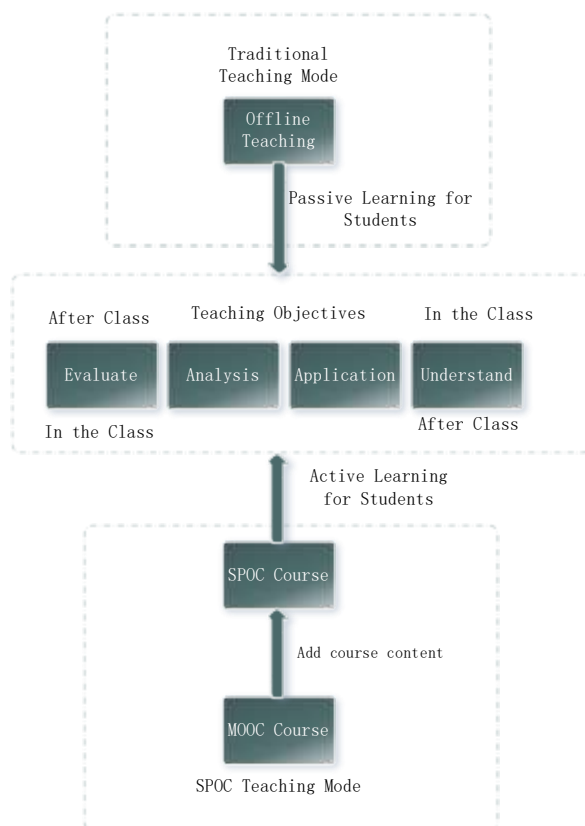


Figure 5. Differences between traditional teaching mode and SPOC teaching mode

As shown in Figure 5, the traditional teaching mode mainly relies on offline teaching by teachers, which cannot develop students' autonomy. They can only passively accept the knowledge taught by teachers, which not only makes the classroom lose interest, but also affects students' learning desire. The SPOC mode combines various elements of SPOC, MOOC, and flipped classroom. MOOC (Massive Open Online Courses, also known as MOOC) provides additional courses for SPOC courses and enriches classroom content. Yousef A M F once stated that MOOC represents an important teaching change, as it allows for unlimited participation and open access to high-quality educational experiences and resources [17]. The flipped classroom mode reverses the "application" and "understanding" stages that originally belonged to the traditional teaching mode in class, as well as the "evaluation" and "analysis" stages that belonged to the off class. This model of reversing the teaching process allows students

to briefly analyze, evaluate, and analyze the knowledge they have learned in class, cultivate their interest, and then enable them to understand after class. From the perspective of the popularity of flipped classrooms, it is not just happening among student groups. Turan Z found in his research that flipped classrooms are becoming increasingly popular among researchers, and research in this field is rapidly increasing [18]. As the core of the SPOC model, SPOC courses adopt a combination of online and offline methods, outputting course knowledge through various dimensions such as video teaching, online testing, and allowing students to learn independently. Compared to traditional teaching methods, SPOC often achieves twice the result with half the effort. In addition, Zhang E also concluded in his research that flipped classrooms based on SPOC can serve as an effective learning mode in teaching practice, providing rich resources, environment, and flexible time space [19].

5. Experiment and Investigation of Blended Learning Model

Through a series of studies on the blended learning model in this paper, the next experiment related to SPOC teaching model is carried out in this paper. Hu Y conducted an SPOC teaching experiment in medical education in his research, with two groups of students receiving SPOC and those not receiving SPOC as the experimental group and the control group, respectively. He ultimately recognized the improvement of SPOC teaching mode on one student [20]. Next, the SPOC teaching model was used as an experimental tool, and the experimental subjects were selected from two classes in a certain adult university. The students in these two classes were mostly adults who chose to pursue further education for various reasons. The number of students in both classes is the same, both with 50 students. In previous exams, the scores of the two classes were not significantly different, indicating that the conditions of the two participating classes in the experiment are very similar. This article names these two classes as Class 1 and Class 2, respectively. These two classes can receive SPOC mode and traditional mode teaching for a period of one month. Finally, after the experiment, a test can be conducted to compare the test scores of the two classes. The selected major can be tested on a percentage scale. The experimental plan is as above, and after a short-term teaching and testing period of one month, this article calculates the scores of two classes:

Table 2. The test scores after short-term teaching

Score Interval	Class 1	Class 2
0-40	0	3
40-60	5	6
60-80	12	26
80-95	28	14
95-100	5	1

As shown in Table 2, it is not difficult to see that the overall performance of Class 1 who received SPOC teaching is higher than that of Class 2 who only received traditional teaching. The majority of students in both classes are concentrated in the large range of 60-95, but the difference is that Class 1 has more students in the range of 80-95, while Class 2 has more students in the range of 60-80. This is proof that the SPOC teaching mode has brought about a grade improvement for students. Moreover, in the extreme score ranges of 95-100 and 0-40, Class 1 performed better than Class 2. It can be said that the SPOC teaching model not only enhances students' learning efficiency as a whole, but also makes top students more outstanding and reduces the number of students with extremely poor learning status.

In addition, students in Class 1 were asked to conduct a questionnaire survey, mainly based on their short-term teaching experience, changes in learning motivation, and level of learning enthusiasm during this month, to summarize their views on the SPOC teaching model:

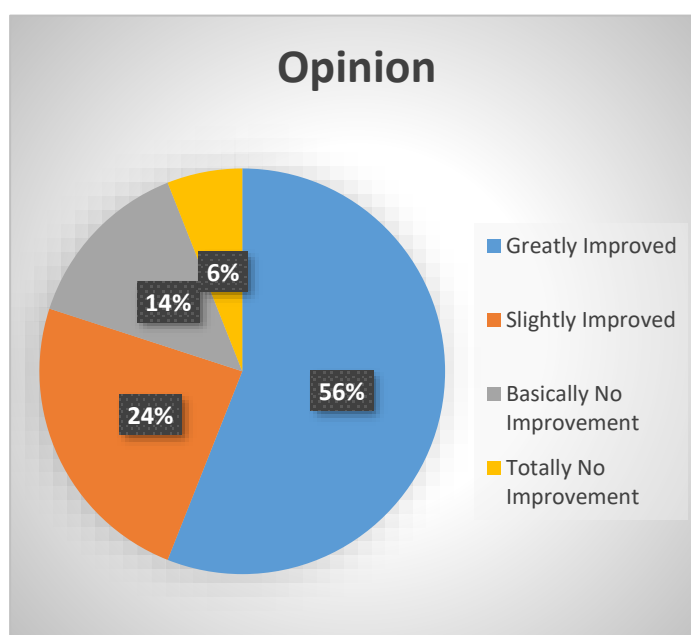


Figure 6. Statistical analysis of students' opinions on whether SPOC enhances their learning enthusiasm

According to Figure 6, 56% of students believe that their learning enthusiasm has greatly improved, 24% of students believe that there has been only a slight improvement, only 14% and 6% of students believe that there has been little or no improvement. From this statistical result, it can be seen that the SPOC teaching model can not only objectively improve students' academic performance, but also enhance their learning interest. The improvement of learning interest inevitably stimulates students' participation and changes their learning motivation, enabling them to participate more actively in daily learning, rather than blindly passively accepting.

6. Conclusions

Through a series of studies and discussions in this paper, a way can be opened up to improve adult continuing education with the blended learning model. As the main research object of this paper, the SPOC teaching model also successfully improved the learning performance of the experimental class in the experiment, changed their learning motivation, and led to their learning interest. However, there are still some shortcomings in this article. Due to limited abilities, the experimental subjects can only be limited to the size of two classes, with only 100 students in each class. It is difficult for such a large number of students to have representativeness, and there are differences between students that cannot be reflected in simple exam scores. Therefore, the experimental variables are also difficult to control, which become the reasons that affect the final experimental results. However, the choice of the blended learning model in this paper is of great practical significance. It is believed that in the foreseeable future, adult continuing education can be fully improved and the quality of education can be greatly improved. In this way, many adults who have entered the society but still have a desire to learn can get excellent education, and these educational achievements would eventually be fed back to all walks of life, bringing more industry talents.

References

[1]Albiladi W S, Alshareef K K. Blended Learning in English Teaching and Learning: A Review of the Current Literature[J]. Journal of Language

Teaching and Research, 2019, 10(2): 232-238

[2]Ranjan P. Is Blended Learning Better than Online Learning for B. Ed Students[J]. Journal of Learning for Development, 2020, 7(3): 349-366

[3]Evans J C, Yip H, Chan K, et al. Blended Learning in Higher Education: Professional Development in a Hong Kong University[J]. Higher Education Research & Development, 2020, 39(4): 643-656

[4]Gambari A I, Shittu A T, Ogunlade O O, et al. Effectiveness of Blended Learning and Elearning Modes of Instruction on the Performance of Undergraduates in Kwara State, Nigeria[J]. MOJES: Malaysian Online Journal of Educational Sciences, 2018, 5(1): 25-36

[5]Wang X, Zhang W. Improvement of Students' Autonomous Learning Behavior by Optimizing Foreign Language Blended Learning Mode[J]. Sage Open, 2022, 12(1): 1-10

[6]Wang H Y,Gou P F.The Development Direction of Adult Higher Education[J].Educational Research,2022, 5(1):74-76

[7]Gao X.Study on the Present Situation and Construction of Adult Continuing

Education Management Information in Higher Vocational Colleges[J].HEILONGJIANG SCIENCE,2022,13(7):97-99

[8]Xu R H. Turning to Good Governance : Age Topics of Continuing Education

at the University Moving Towards Governance Modernization[J].Vocational & Technical Education Forum, 2022, 38(1):112-120

[9]Bernhard-Skala C. Organisational Perspectives on the Digital Transformation of Adult and Continuing Education: A literature Review from a German-Speaking Perspective[J]. Journal of Adult and Continuing Education, 2019, 25(2): 178-197

[10]Xu Y H. The Construction and Application Strategy of Cooperative blended learning Mode[J].Middle School Biology Teaching, 2022, 11(4):46-49

[11]Chen Y,Long Y J.Design and Implementation of a Hybrid Learning Model in a Collaborative Ubiquitous Learning Environment[J].Journal of Liaoning Provincial College of Communications,2022,24(3):76-79

[12]Gao F,Hu J L.Review of Blended — Learning Application in English Teaching in China [J].Journal of Shaanxi University of Technology,2022,40(3):78-85

[13]Zhao Z R,Li Y L.A Textual Quantitative Study on the Construction of China's Lifelong Education System Policy from the Perspective of Policy Tools: Based on the Policy Text of the Ten Years since the Promulgation of

- the "National Medium and Long Term Education Reform and Development Plan Outline "[J].Journal of Higher Continuing Education,2021,34(4):20-28
- [14]Zhao X M,Zhang L X.Research on Teaching Mode of Adult Education under the Background of "Internet +"[J].Journal of Hebei Open University,2022,27(4):21-24
- [15]Qu Y H,Dong B R.The Exploration on Idea of Elements of Ideological and Politics Melting into"Mooc+Spoc+Flip Classroom"Hybrid Teaching Mode[J].Journal of Mudanjiang University,2022,31(8):91-97
- [16]Li H Y,Li S Y.Under the Path of Blended Learning Technology SPOC Construction of Writing Course Model——Taking the English Major Graduation Thesis Writing Course as an Example[J].English Teacher,2022,22(11):8-14
- [17]Yousef A M F, Sumner T. Reflections on the Last Decade of MOOC Research[J]. Computer Applications in Engineering Education, 2021, 29(4): 648-665
- [18]Turan Z, Akdag-Cimen B. Flipped classroom in English Language Teaching: A Systematic Review[J]. Computer Assisted Language Learning, 2020, 33(5-6): 590-606
- [19]Zhang E, Zhang W, Jin C. SPOC-Based Flipped Classroom of College English: Construction of an Effective Learning Model[J]. International Journal of Emerging Technologies in Learning (IJET), 2018, 13(1): 37-45
- [20]Hu Y,Jin W Y,Pei L.Meta Analysis of the Application of SPOC Hybrid Teaching Mode in Medical Teaching[J].Xinjiang Journal of Traditional Chinese Medicine,2022,40(3):63-67