

# An Exploration of Blended-Teaching Management in Application-Oriented Undergraduate Universities

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**Abstract**—Under the background of the rapid development of informatization, application-oriented undergraduate colleges and universities carry out mixed teaching reform, which is the development trend and inevitable choice of modern education. This paper explores the advantages, concepts and practices of blended teaching, puts forward suggestions for blended teaching management, realizes the organic connection of online and offline blended teaching, and improves the connotation and quality of higher education teaching mode.

**Index Terms**—Blended; Management; Universities; Teaching

## I. INTRODUCTION

At present, the training mechanism of higher education is constantly improving and improving, and the state has implemented the training mechanism of application-oriented undergraduates, and the direction of talent training is more clear and specific. It is an inevitable development trend of local undergraduate colleges and universities to cultivate college students with a certain theoretical foundation, strong practical ability, innovation and entrepreneurial spirit. Modern classroom teaching should be learning-oriented, learning first and then teaching, teachers are the specific implementers of teaching, students are not only the goal of teaching, but also the main body of teaching, it is necessary to change the teaching concept to "student-centered". This requires teachers to change from the previous leading role of teaching to the supporting role of student learning guidance, support, service and assistance.

The impact of blended learning on higher education is twofold, with both opportunities and challenges. Universities at home and abroad have successively explored hybrid teaching methods, and the new crown pneumonia epidemic has had a great impact on the normal teaching work of universities around the world, and universities have carried out online teaching work, providing a foundation for hybrid teaching reform.

## II. THE ADVANTAGES OF BLENDED-TEACHING METHOD

(1) Combine online learning with offline practice. Blended teaching is divided into two teaching links: online and offline. The two teaching links complement and support each other. Online teaching mainly meets the basic theoretical knowledge learning of project development. The reasonable distinction and organic combination of online and offline

learning can not only improve students' learning initiative, integrate students' theory with practice, help cultivate students' ability to observe, analyze and solve problems, but also improve students' ability to comprehensively apply knowledge, enhance students' innovation ability and employability.

(2) Change traditional knowledge indoctrination into students' active learning and teachers' assistance in answering questions. The training goal of application-oriented talents is first of all based on the cultivation of application-oriented capabilities. The ability to use theoretical knowledge, find problems in actual production, and solve problems is the key to the cultivation of applied talents. In the traditional teaching method, students have the problems of unclear learning purpose and insufficient learning motivation in the learning process. There is a serious disconnect between theoretical learning and experimental practice, and students are not interested in learning. Through the reform of blended teaching, project-driven teaching is carried out, allowing students to rely on information resources to carry out basic theoretical learning and consolidation with specific problems, and teachers to answer and assist difficult knowledge, which can not only give full play to students' enthusiasm for independent learning, improve students' learning quality, but also organically combine theoretical learning with practical application ability improvement, so as to better meet the training goals of application-oriented talents.

(3) Change fragmented verification experimental teaching into systematic internship practice, so that students have the vocational ability required by the post and better meet the training goals of application-oriented talents. Through offline practice, the theoretical knowledge and applied practice are organically combined, and the single verification teaching mode of traditional experimental teaching is freed. It not only consolidates professional theoretical knowledge, but also organically combines theoretical knowledge and practice, and exercises students' application ability more effectively.

## III. BLENDED TEACHING CONCEPT

Blended teaching is a teaching reform model in which teachers design and guide students to use abundant online high-quality teaching resources, combine the discussion and deepening of offline teaching, and organically integrate online students' independent learning and offline teachers' teaching. In blended teaching, teachers' focus is not on



traditional teaching professional knowledge, but on relying on online platforms and using information technology to pre-teach content, allowing students to exert their autonomy and prepare to complete pre-class learning tasks. In classroom teaching, teachers provide targeted guidance to students on doubts, pay attention to exchanges and discussions between teachers and students, and expand students' research ability. In the blended teaching, the educational concept of "teacher-oriented" has gradually changed to "student's independent learning as the center", which is more in line with the development requirements of the times.

In the reform of blended teaching, the role and positioning of teachers should be transformed, not only pursuing the transfer of knowledge, but also scientifically grasping the essence of teaching, deeply understanding the needs of students, and better guiding students to carry out diversified and personalized learning from the perspective of students; It is not simply aimed at improving students' achievements, but teaching students according to their aptitude and pursuing the improvement of teaching efficiency. Teachers are required to re-examine the relationship between teaching and learning, take "cultivating people with virtue" as the fundamental goal and basic task of education, and return to the original intention of education. Teachers become educational "guides", design online and offline teaching activities in advance, clarify teaching arrangements, guide students to learn actively, and play their main role. In the teaching process, teachers should be able to continuously optimize the teaching content, adjust the teaching method, and improve the overall teaching effect according to the data analysis in the process learning. Such teaching reform inevitably requires teachers to have the professional quality and ability of blended teaching, teachers should actively study, research, reflect and summarize, in-depth study of blended teaching, and continuously improve their own education and teaching capabilities, enhance their data analysis capabilities, resource design capabilities, and informatization capabilities. In offline classroom teaching, it is necessary to enhance teachers' ability to design, organize and implement comprehensive practical learning activities, make offline teaching more systematic, complement and expand online teaching, and form an integration of teaching modes. Using the flexibility, diversity and data of online courses, the teaching position is expanded from university classrooms to the sharing of high-quality resources in the whole society, creating a diversified learning mode, breaking the boundary restrictions of traditional education, making school education and modern information education continuously integrated, and promoting the comprehensive and personalized development of students. [8] examined the development and refinement of possible mathematical models for the intellectual system of career guidance. Mathematical modeling of knowledge expression in the career guidance system, Combined method of eliminating uncertainties, Chris-Naylor method in the expert information system of career guidance, Shortliff and Buchanan model in the expert information system of career guidance and DempsterSchafer in the expert information system of career guidance method

has been studied. The algorithms of the above methods have been developed. The set of hypotheses in the expert system is the basic structure of the system that determines the set of possible decisions of the expert system. This set, which is crucial in decision-making, should be sufficiently complete to describe all the possible consequences of situations that arise in the subject area. Therefore, it is important to improve the mathematical models of the intellectual system of career guidance. [9] discussed about specific Policy document which ensures of which the teaching, learning in addition to assessment methods are upwards to the amount of typically the course and are ideal to the attainment involving objectives and intended understanding outcomes of the program and the course. The particular policy requires that school members use recent in addition to variety of teaching, mastering methods and assessment methods. Higher Quality Accredited Institutions will continue to further more improve the standard involving teaching and learning via recognition, sharing and moving of good practices to be able to inspire the learners to be able to achieve their potentials throughout a multicultural environment in addition to in turn, improve accomplishment, retention and learners pleasure.

#### IV. BLENDED TEACHING PRACTICES

(1) Improve teachers' informatization skills and teaching level

The reform of blended teaching requires teachers to continuously improve their professional quality, teaching ability and information skills, strengthen their software application ability, data analysis ability, information technology ability, etc., learn to record videos, make animations, design test web pages, etc., and upload them to the teaching platform for students to learn and communicate. Schools can regularly carry out information skills training for teachers, organize various competitions to motivate, and improve teachers' enthusiasm and effectiveness in learning. At the same time, teachers should keep pace with the times in teaching, link learning content with real-time hot spots, improve the knowledge system, and design different curriculum resources according to students with different learning foundations, so as to facilitate the expansion of students' knowledge, guide students to carry out deep learning, and then enhance students' comprehensive ability to analyze and solve problems.

(2) Effectively use high-quality teaching resources

Teachers need to choose suitable teaching software and platforms, fully understand and master the functions of the platform, and proficiently use software to complete teaching tasks. In addition, in order to give full play to the role of online teaching and do a good job in the integration of online and offline teaching, it is necessary to continuously enrich online high-quality course resources and achieve diversified course resources in content and form.

(3) Elaborate design of blended teaching content

Online teaching has the characteristics of flexible learning, abundant resources, data analysis, personalized learning, precise teaching, etc., and is not limited in the number of people, space and time, and can be on-demand and play back



teaching videos, which can improve students' independent learning ability and consolidate students' learning effects. Offline teaching organically connects and deeply integrates online teaching, which can maximize teaching benefits and promote students' all-round development. Blended teaching organically combines online courses with offline classroom teaching, and teachers carefully design different online and offline teaching content according to the course content system. Guided self-learning tasks are released before class, requiring students to watch the teaching videos, preview teaching materials and related materials transmitted by the teacher to the platform in advance, complete the self-test, summarize their difficulties and doubts, and communicate with each other and feedback to the teacher. Teachers use the online platform to collect students' feedback, organize statistics, understand students' learning status, preview participation and mastery of knowledge, and design teaching content in the classroom accordingly. In offline teaching, focus on explaining the difficulties and doubts reflected by students, organize classroom discussions, group debates, review and summary, classroom tests, practical contacts and other teaching activities, and highlight the comprehensive mastery and comprehensive application of knowledge points. After class, teachers post thematic discussions or assign homework to trigger students' deep thinking and improve students' understanding and application of knowledge.

#### (4) Form a diversified evaluation system

The effect of blended teaching needs to be reflected in a scientific evaluation system. According to the data in process teaching, increase the proportion of process assessment and evaluation. It no longer adopts the practice of only using final assessment, enriches various assessment methods, assesses students' comprehensive ability from multiple angles, and improves students' learning effect in an all-round way. Through the teaching data of different stages of online and offline, the learning effect of students is evaluated according to the viewing video, the degree of preparation of teaching materials, pre-class tests, homework completion quality, group discussions and speeches, etc., plus attendance data, classroom performance, etc. constitute the process assessment results, combined with the final test to constitute the final assessment results of students.

#### (5) Do a good job in controlling the teaching process

The teaching process is composed of two parts: the teacher's teaching activity and the student learning process, in order to achieve the ideal teaching effect, it is necessary to do a good job in teaching control at each stage. For example, the established assessment system can not only complete the purpose of attendance, but also improve students' enthusiasm for learning, make learning sustainable, and fully reflect the integration of teaching and learning. It can also increase the link of teacher-student mutual evaluation, which can not only allow teachers to evaluate students, but also allow students to give feedback on a certain course and a teaching activity, which will help teachers adjust and improve the teaching process and achieve better teaching results.

## V. MANAGEMENT OF BLENDED TEACHING

### (1) Complete the teacher performance evaluation management system

Since the blended teaching model requires teachers to prepare high-quality teaching resources, produce animations, record videos, etc., this will inevitably increase the workload of teachers. It is suggested that the workload of online teaching be included in the performance appraisal system of teachers, scientifically statistically calculated as an indicator, and formulate a sound performance reward system for quantitative assessment. Establishing and improving the evaluation system under the new management system can mobilize teachers' enthusiasm for work and achieve better teaching efficiency.

### (2) Reconstruct the information teaching management environment

Based on the rapid development of the Internet and information technology, the teaching management environment should also keep pace with the development of the times, and the most effective way is to build a smart campus in the information environment. Give full play to the role of Internet technology and cloud technology in university education and teaching management, transform smart classrooms, and then build a digital campus to meet the needs of school informatization and intelligent teaching management. Schools can retrofit existing classrooms, use smart blackboards, and upgrade multimedia equipment; Connect to wireless networks to ensure that students can log in to the online platform at any time and build cloud network classrooms; The relevant information technology department establishes and opens up a big data system to collect and process students' learning data and assist in the implementation of teaching management. Doing a good job in the construction of supporting information facilities in schools can provide auxiliary roles for the development of teaching work, and then improve the smooth implementation of the integrated teaching reform of colleges and universities.

### (3) Realize individualized management of students

Due to the different individual ability level, learning interest and personality of each student, different teaching effects will appear in the same teaching process. In blended teaching, with the help of online big data analysis, teachers can understand the level of knowledge mastery of students. For students with poor cognitive ability, teachers can explain more basic knowledge in offline classrooms; for students with a higher level of knowledge understanding, more in-depth knowledge discussions can be conducted. Through the school's big data management, improve openness and sharing. Schools can also realize the interaction between students of different majors through the big data platform to expand students' knowledge.

### (4) Transform the teaching management concept of colleges and universities

The innovation of teaching management concept is the forerunner of higher education management reform, and the important prerequisite for promoting hybrid teaching reform is to change the education and teaching management concept, establish the awareness of information teaching management,

and vigorously promote the construction of school information platform. Establish a student-centered teaching model, ensure the main position of students, and reflect the goal of education from multiple aspects. The role of teachers has changed from the main position to the guiding position, strengthen teachers' professional quality and information skills, use Internet technology to implement a diversified and personalized teaching system, carry out in-depth interaction with students, and stimulate students' enthusiasm for learning and internal motivation.

#### VI. CONCLUSION

The blended teaching mode conforms to the trend of development in the information age, which is conducive to deepening the integration of applied undergraduate knowledge and skills, so that professional teaching can closely follow the needs of the industry. Improving the teaching level of colleges and universities and exercising students' independent learning ability not only activates students' motivation for independent and active learning, but also cultivates students' ability to analyze and solve practical problems, enhances students' innovation ability and employability, and highlights the core competitiveness of the school.

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