

# Teaching Reform in the Internet + Era

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**Abstract:** *This paper puts forward a teaching idea based on the combination of BOPPPS teaching design mode and super star learning, reasonably arranges various teaching links and activities of BOPPPS under the environment of super star learning, and uses rich teaching activities to improve students' interest in teaching contents, so as to effectively promote the progress and advancement of teaching reform.*

**Keywords:** *Internet +, BOPPPS Teaching Mode, Superstar Learning, Teaching Reform*

## 1. Introduction

The concept of Internet + first appeared in 2012. The author believed that all traditions and services in the world should be changed by the Internet. Indeed, in today's society, the Internet affects every aspect of our lives. In 2015, The State Council issued the Guiding Opinions on Actively Promoting the "Internet +" Action, which clearly pointed out that the "Internet +" is to apply the innovative achievements of the Internet to all fields of society, and to build a new society with the Internet as the infrastructure and innovation elements. Of course, the education community is also one of the areas affected. Some scholars believe that the essence of Internet + education is to provide all learners with a high quality, flexible, personalized education new service mode, the mode mainly use experience technology, such as: cloud computing, learning analysis, Internet of things, artificial intelligence, network security, etc., make the space of learners space is no longer limited to the school and class.

With the cross-border integration of Internet + and education, a brand-new education ecosystem comes into being. The construction of a new education environment needs the support of technological innovation. For example, the recently paid attention to "golden courses" generally refer to first-class courses, which refer to about 10000 national first-class courses and about 10000 provincial first-class courses constructed by the Ministry of Education under the "double 10000 plan" of first-class courses. Its essence is to change the education ecology under the support of the technical environment and make the teaching undergo structural changes [1]. The reform of teaching structure can not be separated from the support of various online technology platforms. Therefore, some technical means that improve the classroom teaching organization to a certain extent are gradually recognized by people [2].

With the advent of the Internet + education era, teaching concepts, teaching models and learning methods have also changed. Therefore, the traditional teaching concepts, teaching models and learning methods also need to be innovated and reformed to realize a new teaching model that can truly take students as the main body. At present, the classroom reform in colleges and universities requires to pay attention to the accumulation of materials, enhance the interest of teaching, and innovate teaching methods, as well as enhance the attraction of the classroom. That is to say, under the current social situation, the reform of online and offline mixed teaching has also emerged, that is, on the basis of the traditional teaching mode and according to the current teaching environment and social environment. It presents a new state of teaching and learning with students as the main body [3].

## 2. Application of Superstar Learning in teaching

Superstar Learning is a free application integrating mobile teaching, mobile learning, mobile reading and mobile social networking developed by Beijing Century superstar Information Technology Development Co., Ltd. in 2016. It supports PC and mobile terminals and is one of the first 22 learning platforms recommended by the Ministry of Education. Its appearance has played a great role in promoting the reform of college classroom. Superstar learning plays a link role in the traditional teaching mode and the online teaching mode. It can realize the connection and synchronization of online teaching and classroom teaching. It is currently the research object of teaching reform and innovation of various

disciplines in colleges and universities. The mixed teaching research combining online and offline has entered a new journey, which has become a topic of common concern for higher education researchers [4].

In the traditional teaching environment, the middle-level students are the main body of teachers' teaching research. Teachers use their degree of knowledge acceptance as the standard to carry out the relevant teaching design, the arrangement of teaching related processes, and how to spread knowledge in the classroom environment. In the classroom, teachers mainly transmit knowledge. The process of students' learning is listening and taking notes, but the process of receiving knowledge and transforming it into application is not clearly reflected; Outside the classroom, due to the different levels of students, the problems encountered by students in the process of preparing or doing exercises cannot be solved in time, which will inevitably lead to learning differences and performance differentiation among students.

Under the environmental conditions of Superstar Learning, teachers can carry out different multi-level teaching designs according to the characteristics of each student. Each student can choose to learn according to his or her mastery of knowledge, that is, to achieve personalized learning; In the form of teaching, traditional classroom teaching is no longer the only way for students to learn knowledge. Students can choose online learning, which can reduce repetitive work for teachers and only need to focus on the design of teaching links. For example, teachers can put simple knowledge and basic knowledge related to courses into online environment, and students can learn independently according to the knowledge structure they have mastered. The classroom time is used to solve the problems encountered by students in learning and promote more efficient learning. Although Superstar Learning has played a great role in practice and research, there is no mature teaching model to guide the actual use, which leads to the inaccurate division of online and offline teaching.

### 3. BOPPPS teaching mode

BOPPPS teaching mode was originally created by Douglas Kerr team of Vancouver University in 1976. It is an effective curriculum design model proposed by the North American Teaching Skills Seminar (ISW) [5]. It is a face-to-face teaching mode based on the traditional classroom. This mode divides the teaching process into six modules, namely, the introduction module, the target module, the prediction module, the participatory learning module, the post test module and the summary module. These modules ensure the effective connection between the teaching processes. With the development and maturity of BOPPPS teaching mode, this teaching mode has become the standard mode of teacher training and classroom teaching in Canadian higher education. In terms of teaching concept, the student-centered education concept has been advocated in recent years. The main feature of the BOPPPS teaching model is that it emphasizes students' participation in learning, the teaching objectives and teaching objects are clearly directed to students, the interaction between teachers and students in teaching, the reflection of teachers in teaching, the participatory learning in the module more intuitively and clearly reflects the teaching idea of taking students as the main body. From the perspective of teaching mode, BOPPPS teaching mode can provide a complete teaching framework for face-to-face teaching in the classroom and provide a reference basis for each teaching process [6]. In recent years, such a learner-centered concept is the ultimate teaching concept of higher education, and it is also a new teaching concept that has always been advocated. Face-to-face teaching mode based on the traditional classroom is the teaching mode adopted by BOPPPS, its main characteristic is to emphasize the students' participatory learning, which reflects the teaching thought with students as the main body, and is also an important means to train students' active learning; teachers should have clear teaching objectives and teaching objects, and grasp the learning direction. Teaching interaction and reflection are also focused on by BOPPPS. In short, the organization and rationalization of classroom teaching arrangement make BOPPPS systematically scientific and operable in the teaching mode, which can provide an effective guarantee for the realization of classroom teaching objectives. At the same time, the BOPPPS teaching model also provides teachers with a complete teaching framework and strong theoretical support, which covers all aspects of classroom teaching. This teaching model also increases the interaction between students and students to stimulate learners' interest in the process of discussion; and provides practical methods for the reform of teaching design. However, in practice, few scholars have clearly put forward the BOPPPS teaching design mode to effectively guide the classroom teaching reform, and put forward the feasible reform plans for the classroom teaching reform. In short, the BOPPPS teaching mode plays a good role in supervising and guiding the classroom teaching arrangement, ensuring the realization of classroom teaching objectives, and also promoting the reform of teaching design and methods.

#### 4. Superstar Learning + BOPPPS teaching mode

BOPPPS teaching mode and super star learning are combined to carry out teaching activities, that is, the combination of traditional teaching classes and online teaching activities. In different teaching environments, the learning links are divided into online and offline. The online learning is realized through Superstar Learning, and the offline learning is realized through BOPPPS teaching mode. The online and offline teaching activities are designed and divided, so that each student can selectively learn according to needs, evaluate key knowledge, and urge each student to complete online learning and offline learning.

Theoretically, the BOPPPS teaching design mode is reasonably combined with the superstar learning communication teaching activities to form a relatively complete design framework of online and offline classroom integration teaching activities, ensure the effective connection between teaching activities from the theoretical framework, and ensure that learners can continuously deepen their understanding of knowledge through each activity process. Enrich the theoretical system of the design of superstar learning and communication teaching activities under BOPPPS teaching mode. The construction of the teaching mode suitable for communication engineering professional courses has a certain reference value for the theoretical research of students' active active training and teaching mode construction. In practice, it can provide a feasible plan for the teaching reform in colleges and universities, provide some reference basis for teachers, and provide a reference basis for improving the quality of teaching and learning. In classroom teaching, for teachers, assisting students to complete problem solving in specific situations is the main task of teachers in the process of problem solving. Around the teaching objectives, learners can constantly find new problem solutions in the process of solving problems. Teachers guide students to compare the advantages and disadvantages of various solutions, and students can finally choose the best solutions through individual efforts or collaborative results. Inspired by the teachers, students' algorithm thinking, problem solving ability, collaboration ability and critical thinking will be improved, and students will gradually form a series of comprehensive practical ability to solve problems.

Online teaching is supplemented by classroom teaching. The key and difficulty of the combination of the two lies in how to design teaching activities and teaching links, so that online and offline teaching can complement and supervise each other and achieve teaching objectives.

##### 4.1. Questionnaire survey

According to the requirements of the curriculum syllabus, a set of relatively general reform schemes are designed for the classroom teaching reform, mainly for the design of superstar teaching activities under the guidance of BOPPPS teaching mode. According to the content of the outline, the learning link and the actual teaching process framework of each link. Considering the characteristics and advantages of the combination, the design is more meet the outline of the teaching content, in order to form a relatively complete and reasonable teaching reform plan, can be for this subject teachers in the process of teaching reform to provide practical and effective teaching activity design reference, makes the teachers in the process of reform has a relatively complete reference framework architecture. In the process of teaching, we can understand the effect of reform by issuing questionnaires to students. The questionnaire of a course is distributed before teaching practice, and the questionnaire of a course effect is distributed after teaching practice. The purpose is to conduct data statistics, data analysis and summary on the learning level of students' professional courses, so that the changes of teaching effect can be reflected in intuitive results. Summarize the advantages and characteristics of the existing forms and links, and closely combine with the current teaching environment of higher education to meet the requirements of the teaching reform under the current situation.

##### 4.2. Interview method

According to the specific course situation, design the interview content, interview the teachers and representative students, sort out and summarize the interview results, further understand the training of students, in order to find out the shortcomings and propose improvement measures. Under the guidance of BOPPPS teaching mode, the teaching design meets the needs of teachers' reform. Teachers of different subjects can refer to this scheme in the reform process for practice attempt, in order to find the teaching activity design scheme suitable for their own subjects.

### 4.3. Action research method

The members of the teaching team participate in the teaching design and teaching practice of the course in the whole process according to the constructed teaching mode, observe, reflect and summarize the classroom, and make appropriate adjustments and modifications to the teaching design, so as to put it into the next round of teaching.

## 5. Conclusion

In classroom teaching, for students, if they can participate in the whole problem-solving process, and can better complete learning tasks, achieve learning objectives, obtain learning results, and actively explore different solutions to problems, it means that students have the ability to solve problems in this specific situation; For teachers, helping students solve problems in specific situations is the main task of teachers in the process of problem solving. Around the teaching objectives, learners can find new solutions to problems in the process of solving problems. The construction of Superstar Learning + BOPPPS teaching mode applicable to a certain course has certain reference value for the theoretical research on the cultivation of students' learning initiative and the construction of teaching mode; In practice, it can provide a feasible scheme for the teaching reform of colleges and universities, provide some reference basis for teachers, and provide reference basis for improving the quality of teaching and learning.

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