

# Research on Effective Interaction Strategy of Online Teaching

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**Abstract:** With the development of the Internet and information technology, it has been widely applied in the field of education, changing the mode and mode of education. At present, online teaching is more common. However, online teaching also faces some problems, when the teacher-student interaction is not strong, which affects the teaching effect. Based on this, this paper studies the strategies of effective interaction between teachers and students in online teaching. Firstly, the paper elaborates the guiding significance of online interactive teaching, then analyzes the difficulties in online teaching, and finally puts forward some measures to improve the interaction between teachers and students in online teaching.

**Keywords:** Online Teaching; Effective Interaction; Strategy; Teaching Effect

## 1. Introduction

In recent years, the application of new media and new technology in various industries has made the development of the technology more perfect, and the application of the technology in the field of education has also enhanced the infectious force and attraction of the times. Especially with the emergence of the COVID-19 pandemic, the degree of integration between information technology and education is getting deeper and deeper, and online teaching has become one of the current forms of education. Students become online learners through the Internet and live platforms, a new form of teaching.

## 2. The Guiding Significance of Online Interactive Teaching

Interactive teaching is not only a one-way influence between teachers and students, but also a two-way influence between teachers and students. Interactive teaching can regulate the teacher-student relationship, which in turn enhances the impact of activities between any

environment, forming a teaching resonance and making the teaching effect effectively improved. Online teaching means that students make use of information technology to learn, plan learning steps according to their own learning characteristics, are not limited by time and space, and emphasize the autonomy of learning. The learning mode is mainly through videos and written materials, which are relatively boring and lack of effective interaction. There is no emotional communication between teachers and students, so it is not easy to stimulate students' learning interest, and it is difficult for students to stick to learning all the time [1]. In a word, the learning effect of online teaching is not good for students, which leads to the low quality of the whole online teaching.

Online interactive teaching is a combination of online and interactive teaching, the interactivity of the offline classroom into the online teaching, the teacher through the planning and design of the online teaching classroom, set up attractive activities to guide students to online learning [2]. In this process, driving should rely on rich experience and theoretical knowledge to establish an online interactive teaching mode that can attract students.

## 3. Difficulties in Online Teaching

### 3.1 Difficulty in Classroom Transformation

The traditional teaching is basically carried out in the classroom, using real-time control of the physical classroom teaching mode, while the online teaching is realized through the camera and the screen to realize the space dialogue and the face-to-face operation is impossible, which is greatly different from the daily instilled teaching method, and the teachers are also very unsuitable. During teaching, most teachers still adopt the traditional teaching method of lectures, and whether the students can concentrate on listening at home is also a challenge for the teachers. Teachers' reliance

on traditional physical classroom teaching methods is not in line with the needs of online teaching, leading to conflicts between the two. In addition, teachers are not familiar with modern information technology and can not operate online teaching skillfully, which has a great impact on online teaching. Some teachers are more resistant to this teaching method.

### 3.2 Difficulties in Teaching Organization

At present, there are various problems in the online teaching of most teachers. Some teachers use MOOC to let students learn on their own, and during normal classes, teachers use online Q&A to answer self-study questions for students. Although this teaching method can improve the students' independent learning ability, if the operation is improper, the students are easy to watch the video in a hurry, and the actual teaching effect cannot be played. When answering questions, individual students are more active, while most students are very silent, or even no one asks questions, teacher-student interaction is not strong, which in turn leads to poor online teaching [3].

### 3.3 Difficulties in Teaching Management

When teaching online, online classroom management is difficult. In the same class, some students' home network is better and can be tracked in the whole process, while some students' home network is poor, and even some students have no network in their homes, which leads to difficulties in the classroom, students may drop out of the classroom due to network reasons, and some students privately deactivate the network to go offline. Although the teacher will call the roll at any time in class, the students' attention is still not focused, and it is also very difficult to ask questions.

### 3.4 Difficulty in Using Tools

Online teaching platforms are generally the platforms uniformly recommended by schools. These platforms may cause congestion and even website collapse during centralized classes. If the online teaching platform is not available, some teachers can only use WeChat voice to teach in the group, which is difficult to implement and the teaching effect is not good. Some teachers use the conference system to teach, such as Ding Talk, Feishu and other software. However, because this software are mainly set up for office, the mobile

terminal interface displays few head images, and teachers cannot pay attention to the overall listening state of students at the same time. If the students did not turn off the microphone will lead to classroom interference [4]. Therefore, in terms of software properties and R&D applications, it cannot be dedicated to online learning.

### 3.5 Difficulties in Teaching Interaction

Difficulty in classroom interaction is also an important issue in online teaching. Online teaching cannot be face-to-face, which leads to teachers need to face the phenomenon of teaching out of control, and can not effectively carry out the interactive teaching in the offline classroom. However, if the online interactive teaching can be carried out by using technical means, not only can online teaching management be realized, but also the attraction of online teaching can be increased, and the participation of students can be actively promoted. In addition, when online interactive teaching is carried out, there is also a problem in retaining teaching data, and only screenshots can be saved for text and voice images.

## 4. Strategies for Effective Interaction between Teachers and Students in Online Teaching

### 4.1 Construction of Online Teaching Mode based on Effective Interaction between Teachers and Students

In online teaching, students need to define two objectives: one is to define learning objectives, to understand the degree of knowledge and energy conservation, as well as the test methods and standards; the second is to clarify the action goals, the students in the understanding of the things to do to achieve the learning objectives and the sequence [5]. In this regard, when learning online, learning should be carried out in the form of activities, and some activities should be designed to achieve the teaching objectives.

Online teaching itself is difficult to develop. Most students have poor self-study ability, low self-learning awareness and poor interactivity. In the absence of face-to-face teaching constraints, it is difficult for students to persist in online learning for a long time. In this regard, in order to improve the interactivity of

online teaching, online learning can be divided into the following stages.

#### 4.1.1 Independent learning

Students first look at the learning task list, which introduces the unit learning objectives, key and difficult points, and assessment methods, and collect information before the class to send the video resources to students using the pinned group. Students will initially complete pre-class assignments and upload them to the platform.

#### 4.1.2 Interactive learning

Students evaluate each other's uploaded assignments according to the evaluation methods set by the teacher, find out the shortcomings, discuss the existing problems online, jointly find solutions, cooperate in learning, help each other, and record relevant questions, which will be uniformly answered by the teacher in the interaction between teachers and students.

#### 4.1.3 Participate in activities

After the first two interactive learning stages, students have a deep understanding of relevant knowledge. At this time, students can be guided to participate in online tests, results demonstrations and other activities to test the learning outcomes and provide reference for offline activities.

#### 4.1.4 Summarize and improve

This stage is for the students to summarize the learning situation by themselves, mainly summarizing the knowledge and skills they have mastered, the problems to be solved, the relevant learning experience, the places where the works need to be improved, etc., so as to jointly discuss and solve the problems with teachers and classmates during offline learning.

## 4.2 Interactive Teaching between Teachers and Students Based on Teaching Platform

### 4.2.1 Teaching design

Different students, learning environment and learning methods carry out different teaching activities. Online teaching is not only simply copying offline teaching into online teaching. In online teaching, students need to understand the design perspective of teaching videos, which is student-led, expanding online learning time, and spending more time in online learning [6]. In addition, teachers need to choose high-quality course resources as the basis for the application of interactive teaching platform, familiar with information technology,

realize teaching management and full-staff interactive teaching with intelligent classroom for live lectures, and realize full-line fusion type double-class operation, which not only enables students to experience the online teaching mode, but also can use professional interactive platform to check the live learning status and effect, and play the function of real-time reminding and error correction through real-time bullet screen comment, so as to enhance the interactivity of teaching.

### 4.2.2 Guiding students to innovate independently

The source of students' knowledge is not only teachers, but also through various channels, teachers need to enrich their knowledge and enhance the innovation of knowledge. There are a lot of piecemeal knowledge in the Internet, which is fragmented. Teachers integrate these knowledge to form unique courses and teach them to students [7]. In this regard, in classroom learning, teachers should guide students to realize independent innovation on the basis of teachers' knowledge, reconstruct the content according to their own ideas, and actively share their knowledge system and content.

### 4.2.3 Application of flipped classroom teaching

Flipped classroom is to make use of students' autonomous learning ability to realize teaching. Teachers will put part of knowledge outside the classroom, and students can learn independently and then make works by themselves, which is a form of classroom teaching, students can freely play, cooperate with each other, and solve the problem together [8]. Teachers leave a certain space for thinking when teaching, so that students can think about problems according to the space. If online courses only serve their own students and are not open to the public, no need to provide large-scale online teaching services, just need to meet the basic requirements.

If it is for large-scale students, it is necessary to carry out secondary development on the MOOC platform to form a service platform integrating individual learning, knowledge transmission and reflection exchange. In addition, in order to facilitate the development of various teaching activities, it is necessary to consider various types of activities, including test, program teaching, feedback, interactive evaluation, chat, database, discussion area,

voting, external tools, questionnaire survey, homework, courseware and other functions. For example, for teachers who are not familiar with live teaching, they can use the love course platform to teach, and students can learn the MOOC Class. The teachers directly answer the questions of the students on the network and upload new materials. The online Q&A is more diversified [9].

### 4.3 Teaching Activities Based on Combination of Online and Offline

In the regular teaching process of the classroom, we need to explain the knowledge points clearly, so that students can master the key knowledge. However, the knowledge of some subjects is abstract and difficult to understand. We can transmit the relevant videos to the offline learning platform through offline teaching method. Students can open and watch at any time. If they encounter problems during watching, they can ask the teacher at any time [10]. For some problems in the classroom, the students can nail the learning crowd for online answers, so that students will list the problems posted in the group, the teacher directly live to solve the problem, and students who have questions can always connect the mic to ask questions and solve the problem in time.

In addition, in order to enhance the interactivity of online teaching, it is necessary to create a good online learning atmosphere, focusing on post-course communication, the establishment of WeChat groups, timely discussion of the content of the classroom lectures, or arrange the homework after class at the end, discuss in the group, or carry out online discussion meeting to discuss the class problems in the form of group, realize the simultaneous online discussion through QQ group, invite professional excellent teachers, actively participate in the discussion, develop cooperation relationship with teachers and students of other schools, improve their own teaching literacy, and also enhance the learning ability. Through the use of voice interaction, students as speakers, group discussion, guided by the teacher, in-depth exploration of relevant knowledge.

### 5. Conclusions

To sum up, the online classroom conducts teaching guidance through video, constructs

knowledge volume, realizes knowledge analysis and application, which not only changes the learning style and rhythm of students and realizes independent learning, but also enables teachers to enrich their own teaching experience, adapt to modern teaching methods, constantly improve themselves, enhance the interaction with students, and then effectively improve their own teaching effect, which plays an active role in promoting the improvement of teaching ability. The implementation of catechism also makes online teaching interactivity greatly enhanced, but there are some shortcomings in its implementation, which need to be further improved.

### References

- [1] Ma Shunxue. Problems and strategies of on-line and off-line teacher-student interaction of "Internet+education" in rural boarding schools. *Course Education Research*, 2019-11-22.24-25
- [2] Yao Lihuan. Exploration of strategies for effective teacher-student interaction in primary school language. *New Curriculum (I)*, 2015-01-08. 33
- [3] Zhou Qun, Xie Fachao. Strategies for Improving the Effectiveness of Online Classroom Teaching. *Examination Weekly*, 2020-06-18.13-14
- [4] Ren Yuanyuan. Effective Research on the Combination of Online Classroom Learning and Offline Classroom Teaching: Taking the Effective Implementation of "Flipped Classroom Teaching" as an Example. *Renwen Zhiyou*, 2018-01-12.55-56
- [5] Lin Dongsheng. Research on Online Teaching Mode of Flipped Classroom Based on Moodle. *Computer Knowledge and Technology*, 2017 -11-25.156-158
- [6] Zhang Wei. Research on the Countermeasures of Strengthening the Interaction between Teachers and Students in College Chinese Teaching under the Network Platform. *Policy Research & Exploration*, 2018-11-28.66-67
- [7] Shen Zhen. Teaching Strategies of Ideological and Political Theory in Colleges and Universities under Epidemic Prevention and Control. *Leading Journal of Ideological & Theoretical Education*, 2020-03-20.15-19

- [8] Gu Xia. Teaching strategy of art class in high school under flip class. Science Fiction Pictorial, 2022-03-15.235-236
- [9] Wang Xianzhi, Zhang Ruijie. Discussion and practice of online and offline mixed teaching mode under the background of Internet+education. China New Telecommunications, 2022 -09-05.149-151
- [10] Wan Lijuan, Wang Haibo, Zhong Duxian. Research on the Construction of Hybrid Teaching Model in Applied Undergraduate Universities, Journal of Anhui Institute of Education. Vol.6, no.39, 2021-11-20. 85-86+114