

# Innovations

## The influence of online teaching on the transformation of college classroom teaching

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### Abstract

**Problem:** In the face of the demand for high-quality innovative talents brought by the rapid development of the world economy and information technology, college classroom teaching must be changed in time. The outbreak of the novel coronavirus has forced the traditional face-to-face teaching to be replaced by online teaching, which has brought unprecedented opportunities and challenges to the transformation of college classroom teaching. This paper studies the influence of online teaching on the transformation of classroom teaching in colleges and universities, and discusses the challenges of online teaching in the transformation of classroom teaching.

**Methodology:** This study adopts a mixed research method which combines quantitative research and qualitative research. **Findings:** online teaching has a certain degree of influence on the transformation of classroom teaching. The challenges faced by online teaching in the lack of information literacy of teachers and the lack of scientific and systematic assessment mechanism may affect the individual development of students, the satisfaction of their individual needs and the improvement of their independent learning ability. **Conclusion:** Online teaching is effective in promoting the transformation of college classroom teaching and has a positive impact on the development of students. Some of the challenges students face in online teaching, these challenges affect students' online learning from different aspects, and thus affect the transformation of classroom teaching.

**Keywords:** online teaching, transformation of college classroom teaching, influence, university, Challenge

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### Introduction

The traditional "teacher-led" teaching mode in colleges and universities, namely the so-called mechanical "cramming" teaching, overemphasizes the status of teachers in the classroom, teachers control the whole classroom and the whole teaching process, inhibits the play of students' subjective initiative, the classroom lacks vitality, kills students' enthusiasm for learning, and makes

students lose interest in "class". They have completely lost their ability to judge knowledge, learn and innovate, which restricts their personality and hinders the improvement of students' comprehensive quality and the development of education.

Today, with the rapid development of digital information, knowledge is no longer eternal in the traditional sense, but constantly changing, and every individual needs to constantly reconstruct their own knowledge system. The changes of The Times not only affect individuals, but also promote talents to explore, practice, and innovation. Traditional classroom education model has been unable to adapt to the development of modern economy, while the development of educational information technology has given birth to "online teaching", which can make up for the shortcomings of traditional education, can capture the most cutting-edge information in the fastest time, and can enable teachers and educates to truly realize cross-space dialogue, which is not limited by time and space, and can receive education anytime and anywhere. Sharing educational resources.

The outbreak of the novel coronavirus epidemic has forced traditional offline teaching to be replaced by online teaching, which has brought unprecedented opportunities for the transformation and development of higher education. This is a severe test for the education field, a test for the level of education informatization in various countries, and also an innovation and exploration for further deepening the reform of university classroom teaching. It will play an inestimable role in the future development of national higher education. Only by transforming classroom teaching can colleges and universities meet the needs of students, cultivate high-quality talents needed by society, develop stably and sustainably, and adapt to the development of The Times.

### **Research design and method**

This study adopts a hybrid research method combining quantity and quality. The subjects are teachers and students from Handan University. The questionnaire survey is conducted quantitatively by using questionnaire stars, the results are processed by weighted average method, and Likert scale is used to evaluate the impact of online teaching on classroom teaching transformation. Through an inductive analysis of the interview results, the challenges of online teaching in classroom teaching transformation are determined. Thus the conclusion of this study is drawn.

**Table1**  
**Likert Scale**

Weighted Mean	Interpretation	Description
3.25-4.00	Highly influential	Online teaching highly contributes to the improvement of classroom teaching.
2.50-3.24	Influential	Online teaching somewhat contributes to the improvement of classroom teaching.
1.75-2.49	Slightly Influential	Online teaching partly contributes to the improvement of classroom teaching.
1.00-1.74	Not Influential	Online teaching does not contribute to the improvement of classroom teaching.

### Data processing and analysis

#### 1. the extent of influence of online teaching on the transformation of classroom teaching along

In this part, 312 students in Handan University were investigated by questionnaire, which consisted of 25 questions about the goal, content, strategy, resources and evaluation of online teaching. Through the students' answers, weighted average and Likert scale were used to investigate and analyze the influence degree of online teaching on classroom teaching transformation, so as to understand the influence degree of online teaching on classroom teaching transformation. Identify the problems.

**Table 2**  
**the Influence Degree of Online Teaching on Classroom Teaching Transformation**

Dimensions	Mean	Description
Teaching Objectives	3.05	Influential
Teaching Contents	3.03	Influential
Teaching Strategies	3.00	Influential
Teaching Resources	3.01	Influential
Teaching Assessment	3.00	Influential
Overall Mean	3.01	Influential

It can be seen from Table 2 that among the five dimensions studied, online teaching objectives

have the highest degree of influence, followed by online teaching content, teaching resources and teaching evaluation, and teaching strategies have the lowest degree of influence.

In general, the teaching objectives, teaching contents, teaching strategies, teaching resources and teaching evaluation of online teaching in schools all have an influence on the transformation of classroom teaching in colleges and universities (3.01). These five aspects all affect the transformation of classroom teaching in colleges and universities, and promote the transformation of classroom teaching to a certain extent, laying the foundation for the all-round development of students and the cultivation of high-quality talents needed by the society.

Among the items in the questionnaire, the school's online teaching goal has the greatest influence and the highest score (3.05). Online teaching in schools needs to be student-centered and pay attention to the personalized development of students. It is a brand new teaching mode, rather than simply copying the offline teaching mode. Online teaching should consider the needs, interests and strengths of students. Online courses should be set up with students as the center, improve students' enthusiasm for online learning, and give full play to the main role of students, so as to improve students' ability of innovation, exploration and practice. So as to become the society needs high-quality talents.

This confirms the study of Yu (2021), which found that online teaching can promote the all-round development of students, the realization of school goals, and cater to the development trend of the era of big data. Online teaching has become one of the ways to reform college classroom teaching, and can promote the transformation of college classroom teaching. It can be seen that online teaching objectives have a certain impact on the transformation of classroom teaching.

Teaching content has a certain degree of influence on classroom teaching transformation (3.03). Classroom teaching content is the material and information that interact with teachers and students in the teaching process, and its main function is to better serve the teaching, so as to achieve the teaching purpose. In the setting of online teaching content, schools pay attention to the combination of knowledge and interest, pay attention to tapping students' internal potential, pay attention to improving students' independent learning ability and exploration ability, and greatly improve students' learning enthusiasm. Paying attention to the setting of online teaching content will play an immeasurable role in the all-round development of students, so as to better promote the transformation of classroom teaching.

This also confirms the study of Chen (2021), which found that rich online teaching content, based on textbook content, expands extra-curricular knowledge, develops students' intelligence, improves students' ability, enables students to learn, effectively carries out teaching, improves teaching quality and effect, and promotes the high-quality development of higher education.

Teaching resources also have a certain degree of influence on classroom teaching transformation (3.01). Teaching resources are necessary materials for effective teaching. Compared with traditional teaching resources, online teaching resources have natural advantages. Rich online resources broaden students' horizons, improve students' interest in learning, better

meet students' individual needs, and create conditions for improving students' independent learning ability.

This confirms the study of Jia (2022), which found that the rational use of rich online education resources can ensure the teaching quality, promote the all-round development of students, and help improve their comprehensive literacy.

The degree of influence of online teaching evaluation on classroom teaching transformation is relatively low (3.00). The implementation evaluation of online teaching in schools mainly depends on students' evaluation of online teaching. The main body of online teaching evaluation is students, and students' point of view is the key to online teaching evaluation. Therefore, schools need to pay more attention to online teaching and pay attention to the opinions and suggestions of students. According to the actual situation of schools and students, a scientific and reasonable online teaching evaluation system should be established to truly reflect the dominant position of students and enable students to better develop.

This also confirms the study of Sheng (2021), which found that scientific, accurate and efficient evaluation in online teaching can promote the all-round development of students. It can be seen that scientific and reasonable teaching evaluation plays an important role in the cultivation of talents.

Teaching strategies came last (3.00). It indicates that the online teaching strategy of schools has an impact on the transformation of classroom teaching, but it needs to be further improved to better promote the transformation of classroom teaching, so as to cultivate high-quality talents for the country. The teaching strategy of online teaching is the effective magic weapon to improve the level of online teaching. Appropriate and reasonable teaching strategy will make the teaching effective and complete the teaching task efficiently. Teachers should pay attention to the needs of different students, control the rhythm of classroom teaching, pay attention to the teaching process of knowledge formation, pay attention to the feedback of students and correct it in time, so as to achieve good teaching results and promote the better development of students.

This confirms the study of Wu (2021), which found that online teaching strategies are the prerequisite for realizing online classroom teaching and improving the efficiency of online classroom teaching. Good teaching strategies can promote the exchange of roles between teachers and students, stimulate the learning enthusiasm of college students, and improve their personal abilities. Therefore, only by attaching importance to online teaching strategies, can we obtain good learning results, enable students to get better development, and become the pillars needed by the country.

In general, the teaching goal, teaching content, teaching strategy, teaching resources and teaching evaluation of school network teaching all affect the transformation of college classroom teaching. These five aspects all affect the transformation of classroom teaching in colleges and universities, and promote the transformation of classroom teaching to a certain extent, laying a foundation for the all-round development of students and cultivating high-quality talents needed by society.

**2 .The challenges encountered of online teaching on the transformation of classroom teaching**

The interview adopts the method of thematic analysis to analyze the challenges encountered by online teaching in the transformation of classroom teaching. The responses of 15 respondents were sorted and classified according to different topics, and frequency and sample responses were provided. Then, each topic is analyzed. The hidden meaning and the reason behind it are discussed. In addition, some evidence is provided to support this finding. Finally, the analysis and summary of this interview

**Table 3**

**The Challenges of online Teaching in classroom Teaching transformation**

Theme	Frequency	Sample Responses
The defects of the equipment itself	5	S2: the sound is delayed and the timbre is distorted.. T2: Dry eyes, headache...
Lack of correct attitude towards online teaching	4	S1: the school arranges for us to take classes online, we take them.. S6: " we can graduate smoothly in the future..." S4: Some teachers are older, slow to accept digital information technology...
The lack of teachers' information literacy	3	T1: lack experience in online teaching...
Lack of individual specialized equipment and venues	3	S3: network congestion T4: impossible to achieve real teaching activities at home.. S5: "Some teachers have a very interesting way ...
Lack of serious teaching attitude	2	S8: it often becomes a place for us to chat...
Lack of scientific evaluation mechanism and management	2	S9:no teachers or administrators who can deal with it.. T3: "At present, online teaching is just emerging..."

It shows that some students in the school have an inactive and improper attitude towards online teaching, some special courses lack online teaching equipment and venues, some teachers are not highly informationized, and the online examination mechanism is not mature enough, which restricts the transformation of classroom teaching to a certain extent.

This is also similar to the research results of Liu (2021), who believes that some current college students have a tendency to utilitarianism learning, ignore learning and have an inadequate learning attitude, and such utilitarianism learning thoughts are not conducive to the cultivation of college students' ideological quality and professional knowledge.

In a sense, online teaching under the epidemic situation is an effective alternative to the traditional teaching mode of offline schools. However, schools are places of concentrated learning, which is reflected in face-to-face language communication, physical communication and real-time expressions in the same environment. From the perspective of constructivism, knowledge, behavior imitation and psychological communication need to be generated through the social construction of groups. These are not given by the space online teaching, plus students have long been affected by traditional teaching ideas, that the teaching in the collective environment of the school is the classroom. In addition, some students have a strong lazy thinking, lack of independent thinking awareness, blindly obedient, no planning, requirements for themselves, as long as it is simple and easy to graduate. Therefore, their attitude towards online teaching is not positive and friendly enough.

This confirms the study of Hongxiang (2021), which showed that during the epidemic, online teaching of individual majors was faced with insufficient places, equipment and equipment, which seriously affected the normal course of classroom teaching. In order to solve this problem, it was suggested that students should practice independently under the guidance of teachers. Develop simple activity venues and simple home sports equipment to maintain the smooth progress of online teaching.

Some teachers lag behind the teaching innovation ability, choose to copy the offline traditional classroom teaching mode, still according to the old-fashioned teaching schedule, but changed a "shell" of "borrowing information technology tools to class", and some teachers are lazy, thinking not to progress, do not keep pace with The Times, just change a teaching environment, continue to use the previous teaching mode, escape from change, This kind of "copy" behavior, which does not pay attention to, innovate and change, is seriously out of line with the proper concept of online classroom teaching, resulting in no vitality and vitality of online classroom teaching and boring teaching, thus restricting the implementation and development of online teaching in Handan University.

This is also similar to the research question of Ma (2020) that teachers' informatization teaching level is not high, their ability to use modern teaching methods is insufficient, and the original traditional offline teaching experience is solidified, which makes it difficult to achieve online teaching objectives and is not conducive to students' active learning.

Compared with traditional classroom teaching, network is the most difficult problem in online teaching. In online teaching, the network is unstable and there is a delay, sometimes connected and sometimes interrupted, which interferes with the normal teaching of teachers and students' normal listening. In addition, the network platform cannot be logged in, teaching materials cannot be uploaded, students cannot enter the class on time due to network congestion, etc., which also

brings endless troubles to students and teachers at any time. Although these problems have changed at present, Some optimization measures have been carried out, but they have not been fundamentally solved, and solving these problems requires the support of funds, policies, and time tests. Secondly, there are great differences among different disciplines and majors such as literature, science and art, and not all disciplines and majors are suitable for online teaching, such as: The Conservatory of Music has a large number of vocal music, instrumental music and dance skills classes, which require professional venues such as piano room and dance room, and teaching AIDS such as piano to complete the teaching. However, the actual situation is that during the epidemic period, students are locked in school dormitories or at home, and they do not have these basic conditions for online classes. While music is an art of hearing, vocal music and piano lessons are largely judged by the human voice or the timbre of the piano to judge the degree of practice and professional level, and the sound delivered by online teaching is so distorted, it will make the course teaching seem meaningless. Finally, in traditional teaching, teachers can manage students face to face and see students' learning status more directly, while online teaching cannot do this. It can show students' listening time, answering questions, and interaction in class with data in the background, but it cannot really understand the real status of students in listening. Whether the online exercises are done by the students themselves provides an opportunity for some students to avoid studying. At the same time, online teaching lacks scientific online teaching evaluation standards. The evaluation standard of traditional teaching is the test score, the unified test paper, the unified test time, the test result - the score determines the quality of students' learning, and the result cultivates the same students. Online teaching has learned such a lesson and combined process evaluation with result evaluation. However, this new thing lacks a systematic assessment system, which is still insufficient for comprehensive and objective evaluation of students' online learning effect. Moreover, there are many problems in its evaluation mechanism, which cannot show the most real level of students. It hinders the all-round development of students and the implementation of the real "student-centered" classroom teaching transformation.

### **The significance of implementing online teaching**

With the increasing demand for innovative talents in today's world, the traditional teaching mode of colleges and universities is increasingly insufficient to provide such large-scale talents, and its disadvantages are becoming more and more prominent. How to make up for the shortcomings of the traditional teaching mode, how to use the increasingly mature science and information technology and integrate it into the teaching, so as to form a classroom teaching mode that ADAPTS to the current situation has become imminent. Online teaching has the advantage of making up for the deficiency of traditional teaching, and its effective use can cultivate the all-round development of learners and meet the requirements of comprehensive talents needed by society. In addition, the reform and innovation of higher education has always been the focus of educational research in various countries. The core reform of higher education is classroom teaching, and online teaching is just an important breakthrough. Online teaching is an important product of the

development of education informatization. It has a certain impact on the traditional teaching concept, teaching method, teaching content, teaching evaluation, etc. Therefore, it is very important to study the influence of online teaching on the transformation of classroom teaching.

To sum up, looking at the world, whether developed or developing countries, classroom teaching transformation is inseparable from the development of social economy, science and technology level, development is the absolute truth, all countries should pay attention to economic development, science and technology to promote the development of education. Only by transforming classroom teaching and keeping pace with the development of The Times can colleges and universities meet the individual needs of students and the needs of society, formulate personalized teaching design and effective teaching organization, improve students' participation, enhance students' independent learning ability and planning ability, deepen the interaction between teachers, students and students, and develop an effective evaluation mechanism. In order to cultivate the high-quality talents needed by the society. With the continuous development of Internet digital information technology, online teaching has become the "new normal" of college classroom teaching. In the face of the development of The Times, training innovative talents with comprehensive development of moral education, intellectual education, physical education, aesthetic education and labor education has become the goal of college talent training. Therefore, in actual teaching, only the advantages of online teaching can be brought into full play. In order to make the teaching work of colleges and universities can be sustained, healthy and stable operation; Only by reshaping the roles of teachers and students in classroom teaching can students' innovative ability and exploration ability be improved; Only by truly reflecting the "student-centered", can we realize the all-round development of students and promote the transformation of classroom teaching.

### **Findings**

online teaching has a certain degree of influence on the transformation of classroom teaching. The challenges faced by online teaching in the lack of information literacy of teachers and the lack of scientific and systematic assessment mechanism may affect the individual development of students, the satisfaction of their individual needs and the improvement of their independent learning ability.

### **Conclusion**

Based on the findings, the researchers came to the following conclusions:

1. In general, the influence of online teaching on the transformation of classroom teaching is effective, which can promote the transformation of college classroom teaching and has a positive impact on the development of students.
2. During the epidemic period, online teaching faces some problems, challenges and countermeasures in its impact on classroom teaching transformation. These problems, challenges and countermeasures affect students' online learning from different aspects and hinder the

transformation of classroom teaching.

### **Suggestion**

Regarding the findings and conclusions of this study, the recommendations are as follows:

1. Encourage students to attach importance to the learning of online courses and actively integrate into online classroom teaching, so as to improve their independent learning ability and innovation ability.
2. Through the combination of information technology and the traditional advantages of the school, the online teaching mode that conforms to the actual situation of the school is formed, and the construction of high-quality online courses is strengthened.

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