

# Research on the path of improving college teachers' teaching ability in the information 2.0 era

Tianpei Xu, Xiaoli Wang

Hulunbuir University, Hulunbuir, Inner Mongolia 021008

**Abstract:** education is the cornerstone of social progress, and the reform of education also needs to be in line with the times. With the advent of the information 2.0 era, college teachers are facing new challenges. Teachers need to make full use of information technology to improve teaching quality in practice. However, looking back at the education and teaching work in Colleges and Universities under the background of informatization, it is not difficult to find that there are many problems that affect the development process of the modernization of higher education. Based on this, this paper explores the path to improve the teaching ability of College Teachers in the information 2.0 era, hoping to provide a valuable reference for promoting the construction of college teachers.

**Key words:** information 2.0 era; College teachers; Teaching ability; Promotion strategy

In the process of the continuous integration of information technology and college teaching, the teaching philosophy has also changed, subverting the traditional teaching mode, and putting forward higher requirements for teachers' teaching ability. Nowadays, the teaching work in colleges and universities has developed in the direction of informatization, but in the process of keeping pace with the times, many problems of the teaching staff have been exposed. In order to continue to play the leading role of higher education and continue to provide high-quality talents for all walks of life, university teachers need to do a good job in teaching research and explore effective ways to achieve self-improvement from the actual situation. Therefore, the path of improving college teachers' teaching ability in the 2.0 era explored in this paper has very important practical significance, which is conducive to promoting the development and progress of college teachers.

## 1. The necessity of improving college teachers' teaching ability in the information 2.0 era

### 1.1 Colleges and universities put forward new requirements for teachers' teaching ability in the information 2.0 era

The advent of the information 2.0 era has changed people's life and work mode, and provided the Internet as an open platform. In the teaching cause, information technology provides teachers with a large number of knowledge information and teaching resources, and speeds up the dissemination of information, realizes the sharing of teaching resources, and improves the teaching efficiency to a certain extent. At the same time, information technology also provides students with convenient learning channels and enriches their access to knowledge, which will inevitably reduce the enthusiasm of students to participate in classroom teaching, and will also affect the formation of students' deep thinking under the influence of intuitive teaching content. These require teachers to actively change their teaching concepts and create a teaching mode that is in line with the growth of contemporary college students. Therefore, in the era of information 2.0, higher education puts forward higher and newer requirements for teachers' teaching ability.

### 1.2 Knowledge fragmentation poses new challenges to the formation of students' knowledge system

In the information 2.0 era, knowledge is fragmented, especially with the rise of short video platforms, the phenomenon of knowledge fragmentation is becoming more and more common. In contrast, the traditional mode of teaching takes teaching materials as the carrier, and knowledge goes from shallow to deep, which is conducive to students' building a knowledge system from scratch. In the information age, knowledge is fragmented, scattered and disorderly, which challenges teachers' ability to integrate teaching resources, and requires them to guide students to learn to think deeply about fragmented knowledge, so as to form a complete knowledge cognition. In addition, in the era of information 2.0, the virtual environment built by network technology provides channels for the dissemination of all kinds of information. There is no lack of low-quality and scientific information in the mass of information, resulting in information overload. In this environment, teachers and students need to have the ability to distinguish, which puts forward requirements for teachers' teaching ability, which not only needs their own strong professional knowledge, but also needs to cultivate students' information discrimination ability. Therefore, teachers need to think about how to reform teaching methods, how to change teaching ideas, guide students to integrate knowledge fragments in network resources in the information 2.0 era, and realize the reprocessing of knowledge, which undoubtedly requires teachers to improve their teaching ability.

### 1.3 Information based teaching has changed the classroom roles of teachers and students

For a long time, teachers have been the main body in the classroom, instilling new knowledge into students, without considering students' learning needs, resulting in students' strong passivity in learning. In the information 2.0 era, the development of teaching has been accelerated and this relationship in teaching has been changed. Teachers need to provide students with autonomous learning space and play a role of help and guidance. This change makes the teaching content change from one-way indoctrination to two-way interactive communication. This inevitably requires teachers to break away from the traditional teaching thinking and actively carry out teaching reform, which poses new challenges to teachers' professional sensitivity, teaching ability and innovative consciousness.

## 2. Analysis of the current situation of College Teachers' teaching ability in the information 2.0 era

### 2.1 The deviation of College Teachers' information teaching concept

According to the actual observation, the classroom teaching in most colleges and universities at this stage is still dominated by low-end information-based teaching equipment. Similarly, some teachers only use PPT to replace the traditional blackboard teaching, and then use multimedia equipment to show students pictures, videos, etc. In addition, when teachers develop teaching resources with the help of

information technology, teachers often collect relevant information through the Internet. However, the quality of information obtained in such a simple way is difficult to guarantee, and the impact on teaching quality cannot be controlled. Due to the influence of teachers' teaching energy and professional ability, some college teachers cannot use information technology to produce information-based teaching courseware that meets the actual needs of teaching, which affects the exchange and sharing of teaching resources.

#### 2.2 Insufficient investment in software and hardware in Colleges and Universities

In teaching, colleges and universities showed high enthusiasm in the application of information technology, and soon installed information-based teaching equipment. However, in practical applications, the use efficiency of these devices is not high, and the application of the Internet and campus network is not sufficient, resulting in the construction of these networks is not mature enough. In this way, there will be many problems in actual use, such as network speed, maintenance speed, etc. These problems will affect the teaching progress of teachers. Poor use experience will naturally affect the utilization rate. In terms of software equipment, many schools encourage teachers to participate in provincial and municipal training courses, such as micro class competitions, observation classes, and even information training courses, but the impact on teaching is minimal.

#### 2.3 Teachers lack information knowledge and skills

There is no doubt about the ability of university teachers in the professional field, but their understanding of information technology is uneven. Therefore, in the era of information 2.0, teachers of non computer majors need to deeply study the knowledge of informatization, big data and the Internet, and be able to produce micro lecture videos with technical content and design reasonable online and offline mixed teaching programs with high professional level in teaching. In most colleges and universities, teachers' lack of theoretical knowledge and limited operation level are common. There are also some teachers who have a high level of application, usually in order to complete the competition tasks assigned by their superiors, and temporarily learn these operating software. The scope of influence and the final effect are not optimistic.

### 3. The specific path of improving college teachers' teaching ability in the information 2.0 era

#### 3.1 Improve classroom control ability

In the information age, college students can obtain learning resources through various channels, their horizons are opened, and their knowledge reserves are rich enough, which still need teachers' guidance. Therefore, in the actual teaching, college teachers need to update their teaching ideas in time, actively adapt to the changes in the education work in the information age, play their guiding role, and guide students' in-depth learning and effective sorting of professional knowledge in the classroom. This requires teachers to change their ideas, communicate and discuss more with students, understand their problems in learning, and summarize the problems to find solutions through classroom teaching. Compared with the traditional teaching mode, such a teaching mode requires teachers to have higher classroom control ability, which can not only provide students with space to show themselves, but also focus their attention to achieve the purpose of guidance and education.

#### 3.2 Cultivate information awareness and thinking

In the era of information 2.0, the Internet, big data and computers are widely used in teaching, bringing new experience to teachers and students, and accelerating the pace of teaching reform. In this regard, colleges and universities need to focus on cultivating students' big data thinking, keep up with the pace of the development of the times, and actively learn new teaching technologies and methods. According to the current understanding of education informatization, university teachers should further strengthen the application of information technology, extend from the teaching process to teaching evaluation and guide students how to use information technology. Through the in-depth application of information technology, we can find hidden problems in teaching, improve teaching efficiency, and guide students to adapt to the rapidly developing society.

In practical application, university teachers need to combine the actual situation, can not use information technology for teaching, but still follow the principle of "student-centered", and design highly targeted and practical higher teaching programs. This requires college teachers to combine their own understanding of information technology teaching and teaching practice to avoid "copying" and "copying mechanically".

#### 3.3 Actively organize teaching seminars

In the information 2.0 era, colleges and universities need to pay more attention to the importance of teaching seminars and play a positive role in improving teachers' teaching ability. Through the teaching seminar, teachers can communicate on the problems in teaching and quickly solve the problems in teaching. At the same time, other teachers can avoid entering the same misunderstanding, which can improve the teaching ability of teachers as a whole. In the actual teaching, it is not difficult to find that different teachers have different understanding of information teaching and different methods of dealing with practical problems. Through teaching seminars, teachers can form a relationship of learning from each other and learning from each other to make up for their shortcomings, so that the whole teaching team can maintain a posture of learning and progress. Therefore, actively organizing teaching seminars is of great help to improve teachers' teaching ability.

#### 3.4 Actively improve the software and hardware environment

In the information age, it is an inevitable trend for colleges and universities to realize education informatization. Some rules and regulations of colleges and universities are closely related to the national education policy. In the process of reform, we also need to actively use various policy support to strengthen the construction and development of information-based teaching. This requires colleges and universities to improve the software and hardware teaching equipment, provide support from the aspects of construction funds, construction progress and teacher training, and provide sufficient growth space for teachers. For example, according to the reform needs of education informatization, colleges and universities can build a perfect informatization teaching environment, build a teacher exchange platform, and encourage teachers' enthusiasm for teaching innovation. Another example is to make full use of the advantages of the Internet to integrate teaching resources for various majors, encourage teachers to upload the high-quality teaching resources they collected to the information sharing platform, and build a teaching resource library. At the same time, with the update of information, teachers can regularly replace the

content in the data, so that teaching resources can keep pace with the times.

In terms of training, colleges and universities need to improve the training mechanism, build a complete and systematic teaching skills training system, so that every teacher can get the opportunity to learn and improve, and can apply the new skills to teaching. Considering the time and energy problems of teachers, colleges and universities can organize the training content into video as a special module, and teachers can arrange time for learning by themselves. For some important and high-quality training work, colleges and universities can arrange a specific time and require teachers to attend. In this way, teachers' teaching ability can be improved through the combination of online learning and offline training.

### 3.5 Focus on the growth of young teachers

Young teachers have always been the focus of the construction of college teachers. In this regard, colleges and universities can give full play to the role of teaching quality supervision to supervise and manage the teaching process of young teachers. In the information age, the supervision department can introduce information equipment to collect, summarize and analyze the feedback information of young teachers from the teaching supervision team and student teaching informants, and form a complete report. Colleges and universities regularly organize senior professors, teachers with rich teaching experience and famous teachers in their specialties to evaluate the teaching process of young teachers and guide them according to the problems. In addition, in the final evaluation, colleges and universities also need to focus on the problems of young teachers in teaching organization and teaching management, and carry out unified guidance and training. In this way, by monitoring, feedback and improving the teaching process of young teachers, we can provide young teachers with opportunities and environment for self-improvement, and promote the teaching ability of university teachers as a whole.

## Epilogue

To sum up, in the era of information 2.0, the teaching environment in Colleges and universities is changing, which puts forward higher requirements for teachers' teaching concepts and ideology. In this regard, colleges and universities need to play their own role and actively provide teachers with space for self-improvement, while teachers need to seize various learning opportunities and improve their teaching ability with the consciousness of "lifelong learning" and "lifelong growth". In this regard, colleges and universities can improve teachers' classroom control ability, cultivate teachers' information awareness and thinking, actively organize teaching seminars, actively improve the software and hardware environment, and focus on the growth of young teachers, so as to improve teachers' teaching ability as a long-term work.

## References:

- [1] Xunyou Ni, Bing Zhang, Yunqiang Xue, Mingjun Deng, Xianfei Zhong. Research on the ways to improve the teaching ability of new teachers in Colleges and universities and safeguard measures [j]Education and teaching forum, 2022 (44): 37-40
- [2] Shuo Zhang, Dianxiang Yu, Jing Song. Research on the construction of College Teachers' teaching ability system in the information age [j]Journal of science and education, 2022 (20): 65-67
- [3] Zunxiu Dong, Wenjun Zhao. Research on the path of improving college teachers' teaching ability in the information environment [j]Financial theory and teaching, 2021 (06): 100-102
- [4] Meng Li, Rongyan Zhou. Exploration and Research on the improvement of young teachers' teaching ability in Colleges and universities [j]Science, education and culture collection (zhongxunjian), 2021 (12): 16-18
- [5] Xinyang Liu. Ways to improve college teachers' informatization teaching ability [j]China Press, 2021 (20): 88-89
- [6] Wanjun Wu. Strategies for improving college teachers' teaching ability in the context of Internet + [j]Chinese and foreign enterprise culture, 2021 (09): 201-202
- [7] Lina Yue, Qiang Wang. Research on the improvement of College Teachers' informatization teaching ability from the perspective of education informatization 2.0 [j]Journal of Mudanjiang Institute of education, 2021 (08): 35-38
- [8] Cheng Yang. Improvement of College Teachers' online teaching ability: history, difficulties and prospects [j]Research on higher engineering education, 2021 (03): 152-157
- [9] Dandan Zhu. Research on improving the informatization teaching ability of College Ideological and political course teachers in the "Internet +" era [j] Industry and Technology Forum, 2021, 20 (06): 241-242
- [10] Bo Cong, Youwei Jin. Research on the improvement of College Physical Education Teachers' informatization teaching ability in the era of informatization 2.0 [j]Journal of Shenyang Institute of physical education, 2021, 40 (01): 40-48
- [11] Qian Pan, Xia Sheng. Improvement of College Teachers' informatization teaching ability based on "Internet + virtual reality technology" [j]Journal of Tianjin Sino German University of applied technology, 2020 (04): 65-68
- [12] Lingyan Xiao. Research on the path of improving college teachers' professional ability under the background of informatization [j]Journal of Shandong Agricultural Engineering College, 2020, 37 (04): 49-51
- [13] Yujie Ma. Path selection of improving college teachers' informatization teaching ability in the new era [j]Industry and Technology Forum, 2019, 18 (13): 259-260
- [14] Lihua Lu, Xinyang Sun. Improvement of College Teachers' teaching ability under the background of educational informatization [j]Modernization of education, 2019, 6 (44): 78-80
- [15] Zehong Liang, Kelin Quan. Improving college teachers' informatization teaching ability for smart education [j]China Adult Education, 2018 (19): 145-147

This paper is "analysis of the current situation of teachers' teaching ability based on deep learning (Project No.: 2022JSZXZD09)"The research results of.