

# Analysis on the Status Quo and Paths of Informatization Teaching Ability of Teachers in Rural Primary and Middle Schools in Hotan Area

Yongtang Chen \*

Hotan Normal College, Hotan, Xinjiang, 848000, China

## ARTICLE INFO

### Article history

Received: 18 June 2021

Revised: 25 June 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### Keywords:

Information-based teaching

Rural elementary and middle school teachers

Problems

Strategies

## ABSTRACT

This study conducted an in-depth analysis of the informatization teaching ability of teachers in rural primary and secondary schools in Hotan area through the literature method and questionnaire survey method. The investigation is mainly conducted in the aspects of teachers' informatization awareness, teachers' informatization ability, informatization application status, and existing problems, etc., analyzing the constraints existing in the informatization teaching of rural elementary and middle schools teachers, and making targeted improvements Strategies for teachers' informatization teaching ability in rural elementary and middle schools: raising awareness of informatization teaching; informatization teaching training; informatization evaluation system; establishing a systematic and complete management system.

## 1. Raising the Problem

### (1) Research background

Teacher information ability has become an important part of teacher quality structure. However, in the process of education informatization in our country, too much attention is paid to the construction of infrastructure and other hardware, and the training and improvement of teachers' information capabilities are ignored<sup>[1]</sup>. In order to promote the process of education informatization, teachers' information awareness needs to be changed and teachers' information capabilities and information must be continuously improved. Knowledge, especially in rural areas where the economy is relatively backward, comprehensively improving teachers' information literacy has become an urgent task facing educational informatization. This research takes the rural primary and middle school

teachers in Hotan area as an example, and proposes relevant countermeasures based on the investigation of the status quo of teachers' informatization teaching ability.

### (2) Research methods

This research was carried out through the literature method and questionnaire survey method, inquired about the abundant books and network resources of the school library, and read the literature about the use of informatization by teachers in elementary and middle schools in recent years and the research materials on the development of teacher information skills. And on this basis, I have done a sorting and analysis to understand the status and trends of the research in this field, and use it as an important basis for this research in order to carry out in-depth research. In addition, a questionnaire survey was conducted on the use of information-based teaching by teachers in rural primary and secondary schools in Hotan City and

\*Corresponding Author:

Yongtang Chen,

Hetian Teachers College, Hotan, Xinjiang, 848000, China;

Email: 2451098715@qq.com

Hotan County, and on this basis, they were compiled and sorted out. A total of 120 questionnaires were distributed in this survey, 110 questionnaires were returned, with a response rate of 91.7%, and 110 valid questionnaires with an effective rate of 100%.

## 2. Survey Object

In this study, the SPSS11.5 system software was used to make statistics on the survey data, as follows:

(1) From the perspective of gender, among the 110 teachers surveyed, 49 are male teachers and 61 are female teachers. The gender structure is basically balanced.

(2) Among the selected teachers, the number of teachers with less than 5 years of teaching accounted for 25% of the total, and the number of teachers with 5-10 years of teaching accounted for 35% of the total, making it the largest group of teachers with 11-20 years of teaching experience. The number of teachers accounted for 23% of the total number of teachers, the number of teachers with a teaching experience of 21-30 years accounted for 12% of the total number of teachers, and the number of teachers with more than 30 years of teaching accounted for only 5% of the total number. It can be seen that the proportion of young teachers is relatively large, and the number of old teachers is gradually decreasing.

(3) In the survey respondents, teachers with intermediate professional titles account for the majority, and the distribution of the number of junior professional titles and the number of senior professional titles is the same. From the perspective of the proportion of professional titles, teachers with intermediate professional titles have become the backbone teachers of each school. In terms of utilization, it has its own advantages in terms of consciousness and skills.

(4) Among the selected subjects, 35% have a bachelor degree, and 65% have a bachelor degree or less. It can be found that the current educational level of teachers in rural primary and secondary schools in Hotan is mainly junior college, and the undergraduate rate is not high. The distribution of educational background structure has a substantial influence on mastering informatization teaching resources and informatization concepts.

## 3. Analysis of the Status Quo of Informatization Teaching in Rural Primary and Secondary Schools

(1) Insufficient understanding and outdated concepts

In the survey, it was found that 76% of rural primary and secondary school teachers believe that informatization teaching is better used in curriculum teaching in primary

and secondary schools, 20% of teachers lack the concept of informatization teaching, and only 4% of teachers think it is not suitable. It can be seen that some elementary and middle school teachers in remote rural areas have insufficient understanding of the concept, function, and technology of informatization teaching, and have insufficient subjective initiative in the use of new teaching equipment and resources.

(2) The active consciousness is not strong, and the cognition is biased

4% of teachers have never used information-based teaching, and 36% of teachers often use information-based teaching in teaching, and the largest 60% are teachers who rarely use information-based teaching in teaching; in primary and secondary schools. In the teaching process, teachers' initiative in using information-based teaching is not high. After using informatization teaching, most teachers think it is very helpful and the effect is very good, but there are also a small number of teachers think it is not helpful and the effect is not obvious. It can be seen that some teachers have insufficient cognition on the evaluation of information teaching effect.

(3) Coping attitude is greater than attentiveness

The survey shows that in the courseware production survey of the teaching process in elementary and middle schools, only 19% of teachers can make their own courseware according to the students' cognition, the difficulty of the content, and the teaching environment, so that they can truly prepare for their studies and prepare for teaching methods. Thereby improving classroom efficiency; 31% of teachers download them online and integrate them with their own teaching content. 48% of teachers basically rely on online downloads for direct use, and 2% of teachers hope that the school can provide it. The survey found that most teachers use information-based teaching mainly to cope with the inspection of superiors, and they did not really consider the problem in terms of classroom effectiveness and student acceptance. The information resources used are mainly pictures and videos.

(4) Low utilization of information resources

Teachers make full and reasonable use and selection of teaching resources are also the key to information technology teaching. From the statistical data of the question "What is your main purpose of using the Internet", it can be seen that 52% of teachers search for information on the Internet, and teachers who use the Internet to watch news Accounted for 26%, and 10% engaged in games and chat. It can be seen that teachers spend very little time on the use of the Internet for professional development. Regarding the question of which software teachers choose to develop courseware, 72% of teachers usually use Pow-

erpoint to make courseware, because these teachers think that Powerpoint is convenient, fast, and relatively simple to make, and 10% of teachers are more interested in Flash. It is believed that the use of flash to make courseware is more attractive to students and the teaching effect is better. 14% of teachers do not use software. This shows that teachers in rural primary and secondary schools are still lacking in information-based teaching.

(5) The training is not paid enough attention to, and the form is single

Due to the remote location of the school and the low level of economic development in rural areas, school leaders believe that teaching is the key, neglecting the training of teachers' information literacy, and not encouraging and supporting the training of teachers. When an old teacher has been trained, he said: "Information technology teaching is popular now. Originally, we should learn the new teaching model. However, the current teacher training is basically a formality, and there is no careful and serious teaching at all. The effect after the training is no different from the previous one. Actually, there is no difference. How much help is it? Basically every year, the higher education leadership department organizes relevant business training for primary and secondary school teachers. The concept is good, but in the process of implementation, the taste has changed. The hired lecturer will indoctrinate, and the teacher will passively accept it. In addition to the organization and management issues, most of the training teachers drifted away from the classroom, blindly in close contact with mobile phones, the stage of the main teacher became a one-man show, the effect can be imagined.

#### 4. Suggestion

With the deepening of informatization teaching in the field of education, countries all over the world attach great importance to the information skills of teachers. In this regard, a series of teacher informatization teaching training plans have been proposed.

(1) Improve the understanding of information teaching

Strengthen the awareness of the leaders of the education administration department. As the instructor and leader of education and teaching, the leaders of the education administration department should not blindly pay attention to the rate of achievement and the rate of enrollment in the evaluation of education and teaching<sup>[2]</sup>. The evaluation should be diversified, and the corresponding evaluation index system should be formulated, and the ability of informatization teaching should be included in the scope of various monitoring and supervision of education. When evaluating the quality of classroom teaching, education leaders should look at whether the corresponding class-

room teaching is helpful to "burden reduction and quality improvement", whether it is beneficial to the implementation of quality education, and whether it is beneficial to cultivate students' innovative spirit and practical ability<sup>[3]</sup>.

Improve teachers' awareness in teaching. First of all, grassroots teachers are the main force in the implementation of informatization teaching. Improve the informatization concept of grassroots teachers, fully understand the role of informatization in classroom teaching, encourage the use of information resources in normal classroom teaching, increase the interest and vividness of the classroom, and stimulate students' interest in learning. Subjective initiative. Secondly, it is necessary to guide teachers not to be vassals of informatization teaching. They must actively integrate courses and informatization, develop informatization education resource packages, and develop targeted electronic resources based on students' differences to teach students in accordance with their aptitude. Finally, one-to-many and one-to-one transmissions can be used. Young backbone teachers can provide professional training on informatization teaching to older teachers to further improve the informatization ability of old teachers, thereby improving the school as a whole. The utilization rate of informatization teaching, and timely teaching and research activities, discover problems, rectify and reform in time, and make progress together.

(2) Strengthen the training of teachers' information teaching

Strengthen the training of information teaching skills for normal students. Normal school students are the new force before teachers<sup>[4]</sup>. All universities and colleges should increase the training of informatization skills teaching for normal students during their school period, so that they can master basic informatization software, informatization resources and informatization awareness. It will help to better carry out education and teaching in the future as a teacher.

Transform training methods and establish assessment mechanisms. Traditional training concepts, methods and methods can no longer better meet the needs of the rapid development of informatization. The educational administration level should pay more attention to the requirements of informatization in the field of education in the new era, formulate targeted training programs, and carry out informatization training for rural and urban teachers in different ways. Platforms such as China MOOC and Intel Future Education can be used to improve teachers' informatization ability and teacher quality. Adopting the principle of proximity and selecting local colleges and universities to train grassroots teachers is conducive to the grounding of the training content, and the training results

can truly be implemented. In addition, the supervision and assessment of the training process should not be ignored, and an effective mechanism should be established to ensure that all aspects of the training are effective.

From the research results of the above researchers, it can be seen that the training of teachers using informatization teaching ability is diverse, such as pre-service and on-the-job training, which provides a theoretical basis for the training strategy of teachers in this research.

(3) Establish a systematic and complete management system

A sound education and teaching management system can greatly promote the improvement of teachers' teaching ability. The following two measures can be adopted to encourage teachers to use informatization teaching.

Increase investment in education funds. Improving modern teaching facilities and equipment conditions school hardware facilities are the basis for applying modern educational technology in classroom teaching. On the basis of making full use of existing modern teaching facilities and equipment, we must further do a good job in the planning and addition of modern teaching facilities and equipment, increase funding, and build campus networks, multimedia classrooms and other modern educational technology facilities and facilities. Places to ensure the basic conditions for modern educational technology training and the use of modern educational technology methods. At the same time, we should also pay attention to the construction of teachers' electronic reading room, implement electronic lesson preparation, and encourage teachers to use multimedia courseware for teaching.

Establish a reward mechanism for teachers. A set of scientific evaluation standards for informatization teaching quality should be formulated as soon as possible, which can reasonably evaluate the degree of teacher's investment in the work, and the implementation of teacher learning and application of informatization in the classroom should be included in the assessment content, and formulated accordingly Policy rewards, punishments and support programs to encourage teachers to take the initiative to create a good environment for multimedia teaching.

(4) Establish a contract construction model for urban and rural schools

Educational administrative departments should actively start from the situation of local educational resources, establish a one-to-one contract construction model for urban and rural schools, and implement in-depth exchanges between the two schools in terms of student exchanges, teacher exchanges, and teaching reforms to implement specific contract construction measures<sup>[5,6]</sup>. The training

plan for outstanding cadres can be implemented. Select relevant leaders and excellent teachers in charge of teaching and personnel to study, train, and exercise in the contracted school, and learn the advanced concepts of education management, education and teaching, talent training, scientific research projects and other aspects of the contracted school.

In short, through the basic information of teachers in rural primary and secondary schools, the use of information for teaching by teachers, the mastery of information knowledge and information skills, and the participation of teachers in information technology training, the problems existing in teaching and the solutions to them However, because the application of informatization teaching in education and teaching is a very practical topic, it is necessary to find, analyze and solve problems in actual operation. The author has theoretical knowledge and practicality in the application of informatization teaching Limited, so it is very challenging for me. Therefore, the topic of informatization teaching application still needs further improvement and perfection, needs in-depth investigation and analysis, and needs to continue thinking and research.

## Funding

Hotan Teachers College's school-level project "Research on the Dilemma and Path of the Development of County-level High School Education Quality in Hotan Prefecture under the Background of Rural Revitalization", (Project Number: 10765020269). Phased research results.

## References

- [1] Sun Yanyan, Wu Xueqi, Wang Chao, Gu Xiaoqing. Investigation on the information teaching ability of primary and middle school teachers[J]. *Open Education Research*, 2021, 27(01): 84-93.
- [2] Kong Zhen. The status quo and improvement strategies of teachers' informatization teaching literacy in elementary and middle schools [J]. *Education Observation*, 2020, 9(31): 42-43+87.
- [3] Zhang Maocong, Liu Kaiyue. Research on the Informatization Teaching Ability of Primary and Secondary School Teachers——Taking 1579 Primary School Teachers in a City as an Example [J]. *China Education Informatization*, 2020, (16): 63-69.
- [4] Zhang Minjie. A case study on the improvement strategy of primary school Chinese teachers' information teaching ability under the mobile Internet environment [D]. Inner Mongolia Normal University, 2020.
- [5] Wang Keqing. Investigation on the status quo of

information teaching ability of junior high school teachers in Dongxiang Autonomous County, Linxia Prefecture, Gansu Province [D]. Northwest Normal University, 2020.

[6] Zhang Zhenkang. Research on the development of informatization teaching ability of young teachers in rural primary schools[D]. Northwest Normal University, 2020.