

Research on the Strategies to Improve Information Literacy of Teachers of Open Universities in the Post-epidemic Era

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ABSTRACT

Distance and open education is an important field in the construction and application of education informatization in China. Developing the information literacy of college teachers is the key to the development of distance and open education. The nature of distance education in open universities requires teachers there to carry out informatization teaching and actively respond to intelligent changes, which means that they must have information literacy to adapt to the times. Starting from the connotation of information literacy, this paper analyzes the current situation of information literacy of distance and open education teachers, and puts forward strategies to improve the information literacy of distance and open education teachers, forming new paths, new methods, and new models to improve teachers' information literacy, providing reference for the improvement of information literacy of teachers in open universities.

Keywords: *Post-epidemic era, Open universities, Information literacy.*

1. INTRODUCTION

In the face of the sudden COVID-19, in February 2020, the Ministry of Education issued an urgent document requiring all colleges and universities to rely on various online course platforms at all levels, advocating schools at all levels to carry out online teaching and do a good job in education informatization to support online teaching. Building online teaching resources and carrying out effective "teaching" and in-depth "learning" is a huge test for teachers' informatization application ability in open universities, and puts forward higher requirements for teachers' information literacy [1]. On March 3, 2020, the General Office of the Ministry of Education released the Key Points of Education Informatization and Network Security Work in 2020, the core goal of which is to deeply implement the action plan of Education Informatization 2.0, vigorously implement the action of comprehensively improving information literacy, and cultivate and improve the information literacy of teachers and students. On March 16, 2021, the

Ministry of Education issued the notice of the Specification for the Construction of Digital Campus in Colleges and Universities (Trial), pointing out that colleges and universities should include the improvement of teachers' information literacy into the basic capacity construction of the teaching staff and into the scope of continuing education to ensure the normalization and continuity of the improvement of teachers' information literacy. The demand of online teaching for resources has become extremely urgent and huge. Faced with a large amount of informatization, teachers must also have the ability to optimize, integrate and select high-quality informatization, which also challenges the information literacy of teachers in open universities. The level of information literacy of teachers in open universities directly affects the quality of online teaching and the effect of activities and its improvement has become the top priority of all work. Therefore, it is necessary to study and analyze the current situation of teachers' information literacy in open universities, propose strategies to improve teachers' information literacy,

and help the deep integration of teachers' informatization level and education and teaching [2].

2. THE STATUS QUO OF TEACHERS OF OPEN UNIVERSITIES' INFORMATION LITERACY AND ITS CAUSES

The traditional teaching model still exists in current college teaching, with some teachers still centering around textbooks, teaching activities mainly being carried out by handwriting, the teaching process inheriting the previous cramming model, and students' evaluation of teaching being in a perfunctory state that in order to meet the school's regulations, they can only passively accept various tasks arranged by teachers. Throughout the entire teaching process, the effectiveness of informatization classroom teaching by teachers is not ideal and both teachers and students are in a passive position. The society is rapidly changing, and the Internet wave is booming. If teaching methods fail to follow the trend of innovation, they are easily overwhelmed by the wave of development. The main reasons for the obstacles to the formation of teachers' information literacy lie in the following points: teaching concepts haven't kept up with the pace of the informatization age; there is a lack of leadership in school informatization; teachers of open universities' information literacy improvement and restriction policies are not in place [3]; teachers lack professional information literacy training.

3. STRATEGIES TO IMPROVE THE INFORMATION LITERACY OF TEACHERS OF OPEN UNIVERSITIES

Through in-depth analysis of the current situation and reasons of information literacy of teachers in open universities, this paper proposes an all-round and multi-dimensional promotion strategy from four aspects.

3.1 Innovating the Training Model and Constructing the Teacher Information Literacy Training System in Layers and Categories

The first is to strengthen the theoretical training of information literacy for newly hired teachers. For example, digital resource training can be

conducted. For newly hired teachers and some teachers who don't use multimedia much in class, they are not familiar with the school's digital resources. During training, they should be introduced with all digital resource libraries to improve their informatization awareness and basic operational skills, so that they know what digital resources can be utilized.

The second is to improve teachers' information literacy skills training. For teachers with a certain level of informatization knowledge, according to the teacher's teaching schedule, a weekly database retrieval skills training can be conducted, introducing techniques such as one-stop search, advanced search, professional search, cross-library search, and resource integration, to help teachers quickly retrieve the necessary journals, conferences, videos, cases, standards, and other resources.

The third is to improve teachers' information literacy practical training. In order to adapt to online teaching, teachers need to receive specialized training on resource production, such as courseware production, PPT design, micro-course production techniques, and micro-video production techniques, in order to improve their teaching resource design skills. Based on the characteristics of online teaching, training can also be conducted on the operational skills of the online teaching tool Chaoxing software and the use of the Chaoxing live streaming client. Detailed explanations and guidance should be provided on how to build courses, manage courses, hold class activities, and build teacher-student interaction modules, improving teachers' ability to deeply integrate informatization tools with education and teaching.

The fourth is to carry out special training on teachers' information literacy. Schools should organize special training on improving teaching ability and online high-quality course construction, create a structured teaching team, establish new course construction and development concepts, explore new teaching methods, improve teaching quality, form more teaching results, and enhance teachers' teaching ability and level.

3.2 Improving the Incentive and Evaluation System and Enhancing Teachers' Informatization Teaching Ability from Multiple Perspectives

The first is to improve teachers' information literacy incentive system. Schools should improve the information literacy incentive system for

teachers in open universities and can try to make efforts from the following aspects. Schools need to combine the informatization ability with the evaluation and employment that staff and teachers most care about, as an important basis for evaluation and promotion, so as to attract teachers' attention, urge teachers to use informatization technology for teaching, and promote teachers to consciously improve information literacy. For teachers who participate in informatization technology training, their training hours can be counted as continuing education hours. If they pass the assessment, schools will issue a corresponding level of qualification certificate. Schools can organize various forms of competitions to stimulate teachers' motivation to use informatization technology, such as conducting informatization technology application skills competitions.

The second is to establish a sound evaluation mechanism for teachers' information literacy. The evaluation mechanism is of great significance to the development of teachers' information literacy and must be implemented into the actual teaching and management. The evaluation indicators corresponding to different departments and management positions should not be the same. Therefore, it is recommended to adopt a combination of examination and assessment for evaluation. Teachers' information literacy evaluation scores can be listed in the content of individual annual assessment, and their teaching evaluation and teaching quality award evaluation occupy a considerable weight. At each stage, it is necessary to assess the teacher's mastery of basic theoretical knowledge and skills, as well as their comprehensive ability to use informatization technology to solve teaching problems in the actual work process.

3.3 Strengthening the Construction of Informatization Infrastructure and Creating a Good Informatization Technology Environment Through Multiple Channels

The first is to strengthen the construction of teaching facilities. In terms of funding, schools should provide guarantees and continuously strengthen investment budgets for teaching infrastructure construction to ensure that informatization technology can be applied in professional educational activities.[4] Leaders should fully realize the importance of hardware facilities for informatization teaching. Schools'

competent departments should increase the investment to create a digital learning environment, provide sufficient material conditions for the improvement of teachers' information literacy, build a distance learning service center, build a "cloud classroom", achieve long-distance two-way high-definition video and interactive teaching, and form a virtual experiment, exercise and practice environment for learners to choose from. They also need to strengthen the application of informatization technology, improve the level of online education, and at the same time, achieve monitoring, analysis, and regulation of daily school operations and teacher-student education and learning activities, improve service levels, and improve management efficiency.

The second is to increase the intensity of informatization technology construction. In terms of campus network construction, it is necessary to do a good job in the relevant content of the school website and webpage, update them in a timely manner, and establish good network resources on the campus. Especially in terms of teaching resources and informatization resources, it is necessary to establish a good office automation application platform, use informatization technology to achieve informatization of teaching management, strive to use video on demand and online live streaming technology to achieve long-distance education and teaching, establish a platform for resource release and sharing, build an electronic textbook database, and accurately equip teachers with electronic textbooks for teaching purposes. In the construction of multimedia teaching facilities, it is needed to ensure sufficient quantity, allocate functions, and configure multimedia classrooms of different types and grades to meet the needs of daily teaching. At the same time, it is necessary to establish a teaching courseware production center, provide support for teachers to produce multimedia teaching courseware, enrich mutual communication and learning between teachers, establish a good campus radio and video interaction, and provide sufficient informatization channels for teachers to obtain teaching resources in the first time.

The third is to strengthen the construction of campus digital libraries. In order to better guarantee teachers' demands for using digital resources outside schools and improve teachers' application ability of information literacy, schools can consider effective combination with mobile terminals, and it's suggested that libraries should open five access channels for the use of off-campus digital resources,

namely "three mobile and two off-campus", that is, three mobile terminal use channels of the library's WeChat official account, mobile library (learning APP) and database APP and two computer terminal use channels of the off-campus access to the WEBVPN channel and off-campus database account. When education informatization encounters an epidemic, open universities should build a comprehensive and 24-hour resource support system and provide applied informatization resources to teachers through multiple channels. While using informatization resources extensively, teachers should improve their retrieval skills and improve the application level of teachers' information literacy.

3.4 Establishing an Expert Team and Carrying out Informatization Technology Competitions to Comprehensively Promote Teaching and Enhance Practical Abilities Through Competitions

The first is to establish a high-level expert team. Schools should establish renowned teachers' studios with provincial and municipal-level famous teachers as the backbone, with theoretical learning, teaching discussions, classroom observation, and expert guidance as the main forms, gradually improving the professional literacy of teachers and effectively improving teaching levels. Schools should establish a platform called "Famous Teacher Classroom" with provincial, municipal, and county-level teachers as the backbone, and upload classroom records, and other teachers can learn through watching live broadcasts, on-demand broadcasts, and other methods to improve their professional level. An informatization technology expert team can be set up to steadily promote the continuous improvement of information literacy of teachers of open universities. A municipal-level informatization technology expert team can be set up to guide teachers and students to participate in various informatization technology application ability competitions, undertake the informatization training tasks of teachers in the city and participate in municipal-level evaluation activities. Informatization technology application activities can be organized and carried out. Teachers' information literacy can be inspected and exercised in practice, creating a new platform for their ability training, so as to help teachers find a breakthrough to develop and improve themselves.

The second is to actively carry out informatization competitions. To improve teachers' comprehensive ability of information literacy, schools should implement General Secretary Xi Jinping's important instructions and the spirit of the National Open University Conference, improve the quality of talent training, continue to run well the informatization teaching ability competition, and promote the wide application of information technology in teaching. Open universities should actively organize and carry out various forms of informatization teaching competitions, micro-course competitions, courseware competitions, information literacy competitions, etc. at all levels. Teachers can sign up individually or as a team to participate, and schools will reward and evaluate teachers who win awards in the competition. By participating in competitions, teachers can engage in learning, discussion, and communication, not only improving the methods and skills of resource production such as courseware, micro-course, videos, and instructional design, but also mastering more teaching methods and skills. Teachers participating in national competitions can not only observe the informatization teaching level and skills of excellent works in the country, broaden their horizons, but also gain valuable experience.

4. CONCLUSION

Teachers of open universities are the true practitioners of informatization technology education. By utilizing various forms of online teaching, traditional teaching models have been changed, leading to significant changes in educational forms and learning methods,[5] and truly promoting the implementation of education informatization. In the face of the tide of education informatization, the application of information technology, the in-depth development and utilization of information resources, and the promotion of teachers' information literacy have become urgent, which is crucial to deepening educational reform and improving educational quality. Improving teachers' information literacy won't happen overnight. It requires organization, coordination, guarantee, support and training from all aspects, as well as national policy support, school guidance and self-improvement awareness. Teachers of open universities should actively adapt to the development of education informatization, establish the concept of lifelong learning, comprehensively improve information literacy, and promote educational modernization.

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