Research on Strategies to Retrain the Information Skills of Young Teachers of Military Academies in the Era of Big Data

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Abstract—**Based on the requirements of opportunities and challenges in the era of big data, this paper puts forward the great significance of the information ability retraining of young teachers in military academies in the era of big data. According to the positioning and characteristics of young teachers in military academies, it is necessary to strengthen personal awareness, improve the certification and incentive system of information ability retraining, innovate the practical teaching mode, build the software and hardware environment of information ability training, and establish several full-time organizations for the continuous development of teaching assistants' ability and other aspects to provide the strategies for the retraining of young teachers' information ability, which can provide useful reference for the construction of teaching staff in military academies and the training of high-quality new military talents.**

Keywords—*big data; young teachers; information ability; retraining*

I. INTRODUCTION

Big data has penetrated into all aspects of social life and will become a new driving point to promote the development of national defense and military reform in a deeper direction. To strengthen the army and prosper the country, the key lies in talents and the foundation lies in education. Young teachers in military academies are not only an important part of the information-based military personnel team, but also take on the important responsibility and mission of training high-quality and responsible new military talents, they are the backbone of education of military academies in the next 10 years. The information ability of young teachers in military academies plays an important role in the training of high-quality new military talents. Therefore, the new requirements must be adapted for military development in the era of big data, based on the present and look into the future, take the retraining of young teachers' information

ability as a breakthrough to cultivate high-quality new military talents, and play an important role in seizing the commanding point of world military strategy and competing for new advantages in international competition in the era of big data.

II. THE SIGNIFICANCE OF RETRAINING TO YOUNG TEACHERS OF MILITARY ACADEMIES IN ERA OF BIG DATA

Information ability is an important part of people's comprehensive ability in the information society, and it is also the accomplishment and ability of using information to solve problems [1]. For a long time, the international community has attached great importance to the cultivation of information ability, especially in the military field, which is regarded as the key work of training new military talents.

In recent years, the army of China has gradually strengthened the training of military talents' information ability. Program for the Development of Military Talents before 2020 points out that in the next 10 years, the information ability of all kinds of talents in the army of China will be greatly improved [2], and the training of information ability will become the strategic theme of talent development. It is necessary to focus on improving information ability, and take talent as the first to transform and promote the composite development of military construction.

Firstly, it is an objective requirement for the development of information society to retrain the information ability of young teachers in military academies. The era of big data has led to significant changes in economic and social life style. The high degree of information technology in society inevitably requires that social members have corresponding information capabilities. Accelerating the cultivation of young teachers' information capabilities is an objective requirement to adapt to the development of the times.

Secondly, it is an inevitable requirement of education and teaching in the age of big data to retrain the information ability of young teachers in military academies. The development and reform of the education and teaching mode and content derived from the era of big data urgently need to cultivate and improve the information ability of young teachers, keep up with the characteristics of the era of big data, educate and apply to teaching practice, so as to constantly promote the education and teaching reform in military academies.

Thirdly, the retraining of young teachers' information ability in military colleges is the basic requirement of strengthening the construction of high-quality & new-type military talents. The information ability of military talents is the key factor to win. Young teachers are an important part of high-quality & new-type military talents and the backbone of personnel training. Therefore, to improve the quality of personnel training can only be realized by constantly promoting young teachers information ability.

III. POSITIONING AND FEATURE OF THE YOUNG TEACHERS OF MILITARY ACADEMIES

A. Historical Positioning of Young Teachers of Military Academies

Young teachers in military academies are not only an important part of the information-based military talent team, but also shoulder the important responsibility of training high-quality and responsible the new military talents. They are the backbone of military academies education in the next 10 years. In the era of big data, military school teachers are not only citizens of the information society, but also play the role of knowledge disseminators and information ability educators determined by the profession of military school teachers [1]. The information ability of young teachers in military academies plays an important role in the training of high-quality & new-type military talents.

B. Feature of Young Teachers in Military Academies

Young teachers in military academies are a young, energetic, progressive and courageous team with high academic qualifications, and a new force in the front of military teaching and research. At present, the vast majority of young teachers have master's degree or above, not only have systematic professional knowledge, but also have good military quality and teaching ability; at the same time, they have received the study of relevant courses in the field of information science, and have certain information knowledge and information skills, which is a generation growing up with the rapid development and wide application of information technology, deeply feeling the changes and the convenience brought by information technology, it can be said that this generation has been deeply branded with the mark of the information age. For this reason, the young teachers in military academies have possessed certain information ability, which is the strongest in the group of military college teachers. At the same time, it should be more aware that the development and change of the world are still rapid, the new technology wave constantly promotes the change of the whole social production and life style, and all walks of life are "Phoenix Nirvana" in social development and technological innovation, including the military field and education field.

From the current situation of information ability of young teachers in military academies, young teachers generally have high educational level, profound professional knowledge, strong sense of enterprise, outstanding ability of relearning, and quick update of knowledge structure. They are easy to keep up with the forefront of information technology in the era of big data. Young teachers have the highest level of information ability, the strongest willingness to improve, and the greatest potential to improve in the faculty. However, due to the influence of information consciousness, information knowledge, information skills, information morality, information psychology and other factors, the information ability of young teachers in military academies does not meet the requirements of building information-based army and winning information-based war, and does not meet the requirements of training high-quality & new-type military talents.

IV. RETRAINING ON INFORMATION ABILITY OF YOUNG TEACHERS OF MILITARY ACADEMIES

In the current period, it is suggested to enrich the connotation of information ability from the perspective of development, objectively evaluate the current situation of the information ability of the young teachers in military academies, and explore the way to improve the information ability of the young teachers in military academies on this basis, and take this opportunity to comprehensively improve the comprehensive ability and quality of the young teachers, so as to make it as a fresh and powerful blood support for military talents education, and inject a dose of heart power into the training of talents in the practice of building a strong army. The retraining of young teachers' information ability in the era of big data is a comprehensive project, which is affected by many factors. The following content will analyze and discuss the strategies for the retraining of teachers' information ability from the bottom to the top from individual, college and other aspects.

A. Strengthening the Awareness to Promote Information Ability of Young Teachers

In the era of big data, military school teachers are not only citizens of the information society, but also play the role of knowledge disseminators and information ability educators determined by the profession of military school teachers [1]. Thus, the information ability of military school teachers has dual meanings; first, as a citizen of the current information society, it is suggested to have the basic personal information ability to adapt to the development of information in the era of big data. Second, as a military school teacher in the era of big data, it is necessary to have the professional information ability to adapt to the needs of development. The former is the general sense of information ability, while the latter is the embodiment of information ability to the profession of military teachers.

Information ability is not only an important component of the professional knowledge and ability of young military teachers, but also the premise and foundation of the development of the professional ability of young military teachers. As a teacher of military academy, who is engaged in the education of military field, should pay attention to the development of military field and education field at the same time, and combine them organically. In the teaching activities, the training target of high-quality & new-type military talents only can be achieved by implementing scientific education idea, using diversified teaching methods and information-based teaching methods, integrating new military theory, and developing innovative military education practice. In particular, the current big data environment has spawned many new ideas and content in the military and education fields. It is necessary to always implement the new trends and requirements in the military field to the teaching content, and apply the new development and mode in the education field to the teaching process. Therefore, the requirements for the comprehensive ability and quality of military school teachers are also improving simultaneously. Especially in the new era, information ability has become the core element of comprehensive ability. Having good information ability will help young teachers to understand the essence of information war more deeply, use information teaching methods more freely, and promote the improvement of learning ability, teaching ability and innovation ability more comprehensively.

Facing the new challenges and opportunities brought by the era of big data, young military teachers must take the initiative to learn, actively practice, strengthen information ability, enhance the ability of information application, take the initiative to give full play to the advantages of information in teaching posts, transfer information application technology and ideas, and actively participate in the tide of the times with a more active and open attitude.

B. *Improving the Certification and Incentive System of Information Ability Retraining*

The training of the teachers' information ability of the military academies is not in a very important position in the training system of the military teaching staff. For the training of new military school teachers, usually, more attention is paid to their classroom teaching ability, and to the training of their information ability whether teachers can skillfully use Photoshop, PowerPoint and other software to make multimedia courseware and other traditional educational information technology.

Although big data has changed our lives and reshaped the appearance of education, the overall level of educational information technology in military schools is far behind that of local universities. On one hand, due to the traditional inertia of military academies, as well as many limitations of military secrecy work, the implementation of modern information technology is not enough. On the other hand, although some teachers are also following the trend of information technology and trying to apply the new technology to the classroom, more teachers are often satisfied with the existing technical means and are not

willing to invest too much precision in the new technology due to the lack of incentive mechanism.

The improvement of teachers' information ability is a part of teachers' on-the-job learning and continuous learning, which can be summarized into the category of military vocational education. If the military vocational education can establish the corresponding learning management, assessment and certification, incentive and guarantee system, this system should be fully used to provide the system and mechanism guarantee for young teachers' information ability training. For example, it is possible to set up courses related to information ability for personnel engaged in teacher qualification certification, professional title promotion, post adjustment, etc., with obtaining relevant course credits or certificates as the prerequisite.

C. *Innovating the Practical Teaching Mode, Constructing Software and Hardware Environment for Information Ability Training*

The information ability acquired through training cannot play a role in teaching until it is integrated with the original cognitive structure of teaching and practiced by teachers in teaching. Finally, the construction of teachers' information ability should be applied to serve teaching and scientific research and improve work efficiency. Young teachers in military academies should innovate the application mode of information technology in the training of military talents in the new era, change the traditional teaching mode and teaching organization form, and explore new ways and new forms. Exploring the use of online courses such as MOOC and Microlecture, combing with the information teaching tools like "Rain class" etc. is to actively develop the online and offline teaching mode, and to innovate the application of modern information technology in the teaching of military colleges.

But it is a must to establish a software and hardware environment matching with information ability training and application if a higher level in use and practice is reached. To build an advanced information platform is to complete convenient information sharing and collaborative interaction functions, and to realize the organic combination among teachers and students and teaching resources, information technology and teaching environment.

D. *Strengthening the Top Design, Setting up the Professional Organizations to Help the Teachers Continuously Improve Their Ability*

Local universities attach great importance to the cultivation of teachers' teaching ability and information ability, and generally have institutions similar to teachers' development centers. However, in military academies, due to the limitation of the establishment system, only a few academies set up similar institutions, which do not mean that military academies do not attach importance to the cultivation of teachers' teaching ability. On the contrary, they attach great importance to teachers, especially new young teachers, there are special training and certification mechanism for new young teachers, but this training is

realized by the education and training department (or entrusted to a subordinate organization) regularly holding short-term training courses every year.

Obviously, this training mechanism is not enough for the cultivation of young teachers' information ability. With the development of information technology, the connotation of teachers' information ability is constantly changing. It is necessary to keep up with the development of modern information technology, especially education information technology, so that teachers can better apply information technology to the classroom and improve the quality and efficiency of classroom teaching. At present, this mechanism ignores the teachers' desire and demand for information technology learning in the long-term career development. Therefore, it is necessary to establish a permanent institution in military academies, which is responsible for the development of education and teaching ability, as well as the cultivation of teachers' information ability.

Compared with the teacher development centers of local universities, and according to the actual situation of the establishment and responsibility setting of the education and training institutions of military academies, the responsibilities of the teachers' teaching ability development institutions of military academies cannot be completely consistent with those of local universities, but it should include the contents of teaching promotion and development, high-quality courses and resources, teaching reform and research, teaching guidance and consultation, etc., as well as the regular release of various academic lectures and skill training courses, the organization of trial lectures and observation, the establishment of high-quality education resources and network training platform, the promotion of education and teaching reform and practice, the provision of personalized expert consultation services, and the provision of necessary site and technical equipment for teaching research and practice. This organization should be responsible for the information ability retraining of young teachers, so as to ensure the pertinence, effectiveness and long-term effect of training.

V. CONCLUSION

Wang Xiaowu, deputy director of National Central for Educational Technology, said: "Education is moving towards the era of big data, whoever can find data will win the future survival; whoever can mine data will win the future development; whoever can use data and provide personalized services will win the future competition." [4] It can be said that the teaching reform of military colleges and universities is moving towards the era of big data, and the level of young teachers' information ability will affect the quality of the reform. It can be said that the level of young teachers' information ability will affect the quality of teaching reform in military academies which are moving towards the era of big data.

Only by recognizing the significance of retraining on information ability and characteristics of young teachers in military academies in the era of big data, enriching the connotation of information ability with developing vision

and objectively evaluating the current situation of young teachers' information ability in military academies, can the way to improve the information ability of young teachers in military academies be explored, and take this opportunity to comprehensively improve the integrative ability of young teachers, make it as a fresh and powerful blood support for military education talents, and provide talent guarantee and intellectual support for promoting the great process of building a strong military and building a world-class army.

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