

Research on the Countermeasures of Military Equipment Instructors' Teaching Ability Construction in the New Era

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Abstract. According to the requirements of military education policy in the new era, military equipment instructors must constantly strengthen the construction of teaching ability in order to provide professional equipment technical personnel for the new information war in the future. In view of how to comprehensively improve the teaching ability of military equipment instructors, this paper first analyses the main problems existing in the current teaching ability construction of equipment instructors in our Institute, and then puts forward some specific measures to strengthen the teaching ability construction of equipment instructors, which has certain guidance and reference for rapidly and efficiently improving the actual combat teaching ability of equipment instructors.

1 Introduction

President Xi clearly put forward the new era military education policy of "adhering to the absolute leadership of the Party over the army, serving for strengthening the country and rejuvenating the army, cultivating people by virtue, educating people for war, and cultivating high-quality and professional military personnel with both ability and political integrity", which put forward higher requirements for training military personnel and running military education well. How to run a direct battlefield education, a satisfactory education for the army, and a future-leading education is a heavy responsibility that falls on the shoulders of every military Academy teacher.

Facing the complex international situation, the transformation of quality-efficiency and technology-intensive is the direction of military equipment development. From the perspective of several local wars in recent years, the role of sophisticated weapons and equipment in the war has become increasingly prominent, and it has become a magic weapon to win future wars. The high-quality and professional new military talent phalanx is the talent advantage to support the strong army to win. How to train professional and technical personnel who understand equipment, understand the mechanism, and are good at using it is a new challenge for military equipment instructors. Therefore, military equipment instructors must constantly strengthen their own teaching capacity building, in order to continuously provide nutrition for the training of new military personnel, so that the supply of personnel training can accurately meet the needs of the future battlefield.^{[1][2]}

2 Main problems existing in the current construction of equipment instructors' teaching ability

In order to fully understand the quality of equipment personnel training in our Institute and further find out the new requirements and changes of the army for the professional competence and quality of equipment personnel posts, in recent years, our Institute has organized instructors to conduct targeted research in air force radar brigades in various war zones every year in a planned and targeted manner, and collected opinions and suggestions from the army on the requirements of personnel posts and the reform of actual combat teaching. From the investigation, discussion and analysis, some problems existing in the current construction of equipment instructors are reflected at different levels, specifically as follows:

(1) There is still a gap between the teaching ability of equipment instructors and the job requirements of students. In recent years, although the first post ability and the professional comprehensive quality of combat support of the cadets in the army Academy have been unanimously recognized, there is still a gap in the professional ability and quality of equipment of the cadets. Performance: a small number of students do not understand the meaning of equipment performance indicators, equipment operation is not familiar with the equipment, the ability to use the full function of equipment is weak, the ability to maintain and manage equipment is weak. All these reflect that we have shortcomings in teaching, and we have not done well in training objectives, teaching materials and teaching

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content, teaching mode, practical teaching, classified guidance and other links.

(2) There are still shortcomings in the training objectives of equipment teachers' teaching ability and students' ability and quality. A very important aspect of equipment teaching is to cultivate the students' professional development ability and quality, including the thinking ability to analyse and solve problems independently, the strong ability to learn equipment independently, and the practical skills to use and support equipment, which were not effective enough in the past.

(3) The teaching ability of equipment instructors is not closely related to the actual combat of the army. With the iterative upgrading of the demand for equipment combat support, the army has made new changes in the requirements for the professional competence and quality of personnel at the three levels of command, engineering and sergeants. However, some equipment instructors are not closely connected with the army, and many new cases and combat examples have not been absorbed into the teaching content in time, resulting in a slight lag in the training of post personnel competence compared with the demand for equipment combat support.^[3]

(4) The construction of equipment instructors is not compatible with the transformation of combat effectiveness generation mode. Young teachers still have some problems in varying degrees, such as the lack of solid equipment theory, the lack of actual combat teaching level, and the unskilled operation of full-function equipment. Teachers' follow-up training, information literacy and technical and tactical literacy training, exchanges between academies and troops, and service experience are not enough. Guided by post demand and operational demand, the realistic demand for the transformation of teachers' ability and the upgrading of their quality is constantly improving.^[4]

3 Specific measures to strengthen the teaching capacity building of equipment teachers

3.1 Strengthen the foundation and seek a breakthrough from the basic teaching ability to the professional ability.^[5]

1. Tamping the basic teaching skills of equipment teachers. To equip teachers to stand on the "three-foot platform", the most important thing is to have the basic teaching skills required by a qualified teacher. The so-called basic teaching skills of equipment teaching include the basic teaching abilities of "speaking, acting, writing, drawing and posture", as well as the production and application of teaching AIDS (such as the compilation of teaching plans, the production of multimedia courseware, the application of teaching AIDS, etc.), and the basic skills of organizing and arranging teaching contents. Through training, all teachers are equipped with the basic teaching skills required for the preparation of lessons.

2. Strengthen the ability of equipment teachers to organize classroom teaching and training. The remarkable feature of equipment preparation is "integration of theory and practice", which is the technical realization of basic theory to equipment, and also the bridge from the basic operation of equipment to the operational application of troops. The ability of equipment instructors to organize training in classroom teaching is particularly important. Through "demonstration class", pre-class trial lecture, in-class supervision and other ways and means, the ability of equipment instructors to tell the principle class is improved, so that they can sort out the equipment process clearly in the classroom, explain the basic principles thoroughly, and analyse and interpret comprehensively the introduction of operational use, the explanation of equipment technology system, and the anatomy of equipment realization principle. Through operation demonstration, situation creation and task drive, the equipment practice teaching is suitable for the actual situation of equipment maintenance and operational application.

3. Strengthen the ability of equipment operation and maintenance support of equipment instructors. It takes the early warning technology and command professional quality of the new era and the ability of three or four generations of equipment operation and maintenance support as the basic criteria. Continuously carry out the "nine one-pass" teaching ability of equipment instructors (mechanical and electrical structure inspection, electrical connection correspondence, principle circuit running, signal flow combing, sensitive point parameter testing, inspection and adjustment operation, equipment maintenance organization, operational application drill and typical fault repair). Through "post competence training, post deepening training and post development training", we can train a team of equipment instructors with the ability of equipment application and maintenance support, and realize the ability of equipment instructors to model experts and famous teachers.

3.2 With the help of training, broaden the way to train the actual combat teaching ability of equipment instructors.^[6]

1. Enhance the awareness of actual combat teaching in the army (acting) posts. Equipment instructors should seize the rare post training opportunity of post exchange activities, go deep into front-line combat troops and forward combat areas, and strengthen their own awareness and concept of actual combat. By taking on daily combat duty and support tasks, equipment instructors have experienced and deeply felt the combat environment in which the front-line troops are facing heavy combat readiness tasks, great air pressure and rapidly changing enemy situations, thus imperceptibly building a strong sense of combat-oriented teaching ideologically.

2. Accumulate actual combat teaching strength in large-scale exercise tasks. The importance of large-scale

exercise tasks for the improvement of individual technical and tactical literacy, as well as the exercise and improvement of comprehensive ability is self-evident. On the one hand, it provides opportunities for young teachers to go to the army and the exercise ground; on the other hand, young teachers should consciously take the initiative to seek opportunities to improve their actual combat level, and strive to be qualified to participate in battlefield training. Young teachers and teaching backbones participate in the task of exercises and drills, which not only enables teachers to learn operation, planning, tactics and coordination, but also cultivates their system combat capability. It has also obtained a wealth of practical cases, laying a solid foundation for the teaching of case courses and seminars in the future.

3. In the normal teaching competition, the actual combat teaching ability is tempered. Young and middle-aged teachers should actively participate in the normal teaching competition, and the teaching team can also organize internal teaching plans, PPT courseware compilation, "teach a good lesson" and other evaluation activities to fully mobilize the enthusiasm and initiative of teaching.

4. The actual combat teaching content is extracted from the deep training and follow-up training of equipment. Every year, equipment manufacturers and research institutes organize activities such as centralized training, follow-up training and in-depth training for various types of equipment. However, during the training period, we should not only be satisfied with the study of general working principles, composition structure, function mode and maintenance support skills, but also dig deeper content from the perspective of equipment overall design, obtain more first-hand information and data, and enrich the teaching content of innovative equipment.

5. Carry out the actual combat teaching mode in the equipment type term class teaching. Equipment teaching is the only standard "main battlefield" to test the actual combat teaching ability of teachers. The research results of actual combat theory and practice should eventually be transformed into classroom teaching in order to bring its actual benefits into play and reflect its actual combat value. Therefore, we should pay attention to every detail in the process of equipment teaching management (from the selection of teaching content, the writing of teaching plans, the production of PPT, the teacher's trial lecture, the simulation trial, the scientific grouping of students, the support of students' computer time, and the test of students' actual combat ability), and explore how to integrate the concept and method of actual combat into classroom teaching. Strive to become excellent courses and case courses.

3.3 Build an environment and seek benefits in the resource construction of team leadership and teaching and research.^[7]

1. Adhere to the system of collective lesson preparation to improve teaching efficiency and quality. As an effective form of teachers' cooperative discussion,

collective lesson preparation plays an indispensable role in giving full play to teachers' team spirit, drawing on the wisdom of the masses and learning from each other's strengths. Centring on equipment teaching, through collective participation, mutual exchange, joint discussion, and mutual inspiration, it is not only conducive to increasing knowledge, but also conducive to individual teachers better grasping the "ruler" and "degree" of radar equipment theory and practice teaching in the process of preparing lessons, making full use of their strengths and avoiding their weaknesses, giving better play to their teaching level, and improving the quality of teaching.

2. Adhere to the system of "passing on, helping and leading" with the team as the core. Make full use of the advantages of team teaching and scientific research, pay attention to the backbone role, teach by words and deeds, care about the study, work and life of the training objects, help them get familiar with the working environment as soon as possible, understand the characteristics of equipment teaching and master the teaching methods of radar equipment preparation, and carry out centralized lesson preparation in the teaching group according to the situation of lesson preparation and trial lecture of the training objects, so as to improve their equipment teaching level.

3. Adhere to the resource sharing mechanism of teaching and research team. The integration of teaching and research should focus on improving the quality of education, organically combine teaching research with scientific research, take teaching and research as the carrier, take scientific research as the task, let teaching and research drive the development of scientific research, let scientific research promote the progress of teaching and study, and realize the improvement of individual and team comprehensive ability.

3.4 Strict standards and seek development in the implementation of equipment instructor assessment and acceptance mechanism.

The examination and acceptance of equipment instructors is the core link of the equipment instructor access system, and it is necessary to study and formulate the corresponding organization and implementation methods of the examination and acceptance of equipment instructors. In view of the training objects who are going to engage in the teaching of different types of equipment, an expert group composed of department and teaching and research section leaders, department teaching supervision group and teachers with rich experience in equipment teaching and excellent equipment use and support technology is organized to assess the training objects. When conditions permit, military experts can be invited to conduct assessment and guidance. We should adhere to the principle of fairness and justice in the acceptance assessment, put an end to any form of cheating, and ensures the authenticity of the assessment of the ability level of equipment instructors. The standards are directly linked to the mastery of new equipment, and it is clear that the

evaluation results are directly linked to job evaluation, professional title evaluation, priority evaluation, promotion, and overseas selection, so as to encourage teachers to consciously touch equipment, repair equipment and understand equipment.

4 Conclusions

The policy of military education in the new era systematically expounds the objectives, tasks, ways, key grasps and basic requirements of the reform and development of military education under the new historical conditions, and points out for us the major practical issues such as where and how to go in military education in the new era. Efforts should be made to train professionals to meet the needs of army construction and future wars.

Faced with the issue of how to comprehensively improve the teaching ability of military equipment teachers in the new era, this paper first analyses the main problems existing in the current teaching ability construction of equipment teachers in our Institute, clarifies the shortcomings in the construction and teaching of equipment teachers, and then puts forward some specific measures to strengthen the teaching ability construction of equipment teachers. Emphasis is laid on strengthening the teaching ability in the improvement of the ability to strengthen the foundation, teamwork, equipment in-depth training and follow-up training, and equipment model class teaching, and through various activities such as large-scale exercise tasks, normalized teaching competition, teamwork, equipment in-depth training and follow-up training, and equipment model class teaching, to enhance the actual combat teaching ability of equipment teachers.^[8]

In this paper, the ways and methods of faculty capacity building are put forward, which are combined with the achievements of the pilot practice of improving the actual combat teaching ability of equipment faculty in recent years, and are summarized and improved, which have certain guidance and reference for improving the actual combat teaching ability of equipment faculty and improving the conversion rate of actual combat teaching results.

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