Case-Teaching Exploration and Practice for Graduate of Military Science in Military Academy
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Keywords: Military science, Postgraduate courses, Case-teaching.

Abstract: In order to improve the military training and innovation ability of the postgraduate, implementation process of case-teaching in military postgraduate course is introduced with teaching practice in this paper. Problems of case-teaching in the current military postgraduate courses are also analyzed and the corresponding measures are given. The results has important theoretical guiding significance and reference value for the application of case teaching in graduate students in military science course.

Introduction
Postgraduate education of military science is the highest level of military education in military academy which is closely related to military research and technology and cultivation of high-level talents of commanding and management in army. As an important approach for cultivation of high-level talents in army it is of great importance to generate and improve combat power. To meet development requirement of construction of military informatization and combat power generation mode transformation teaching mode of military postgraduate courses needs to be innovated and optimized. As a heuristic teaching method, case-teaching is of great significance to cultivate problem-solving ability and innovative spirit and improve the comprehensive quality for postgraduate of military science.

The Significance of Case-teaching in Military Postgraduate Courses
Case-teaching is a teaching method that teacher uses typical and true scenes in combat training and working life or important events as theme and describes the specific situation and story in order to lead the graduates to discuss the difficult problems, which is helpful to enlighten them to develop creative thinking, build up self-confidence, courage and perseverance, shorten the difference between book knowledge and experience in army and improve problem-solving ability of graduates. Major courses of military postgraduates are the primary means to cultivate commanding and management ability of graduates in military academy. It is of great significance to implement case-teaching in order to improve the cultivation quality of the postgraduate education [1].

Firstly It Is Helpful for Graduate to Improve the Ability to Use Theory Knowledge to Solve Practical Problems.
Major courses of military postgraduates are comprehensive, theoretical, broad abstract and closely related to the practice. If only the traditional “Cramming education” lecture-style teaching method is used, it is hard for the graduates to understand the book knowledge and integrate theory with practice. If the teacher can complete the courses through case-teaching and integrate the theoretical knowledge with practice of combat training and working life, the graduates can master knowledge through discuss and analysis of the cases. For example during the course of “Equipment support study” for postgraduate when explaining the content of “Characteristics and requirement of equipment support in informationized war”, the case of equipment support of US army in the Iraq war is used. Learning interest of the graduates can be inspired effectively with this case. The
graduates will think deeply about the problems such as equipment support mode of both sides at local war in conditions of informationalization, new characteristics, advantage and shortcoming of the support mode, and inspiration for building information weapon equipments support of PLA. During the practice of cases in class through discussion, analysis and solution of these problems the theory can be applied to practice effectively and the ability of application of theory for solving practical problem of the graduates can be improved.

Secondly It Is Helpful for Graduate to Think Independently and Cultivate Good Way of Thinking to Analyze and Solve Problems.

The object to learn specialized courses for the military postgraduate is not only to learn theoretical knowledge of commanding, management and support but also to cultivate right way of thinking especially to cultivate the ability to solve practical problems with theory knowledge. Through case-teaching the graduates can experience the practical battle, training and management of the army and imagine the problems of equipment tactical application and support in future combat combining with the possible warfare mode in practical. Then the graduates can think and find the way to solve these problems and to develop their ability to find, analyze and solve problems. Therefore with case-teaching method the graduates can cultivate right way of thinking and meet the requirement for the position in future.

Thirdly It Is Helpful for Graduate to Cultivate Military Literacy and Improve Their Organization and Command Ability.

The object of military postgraduate education is to cultivate high level talents of commanding and management for the army. According to the investigation influenced by the peaceful environment for a long time the ideology to lead troops and fight of some students is fading. Although their education background is enhanced, personal military literacy is descended. The ability to organize, manage and lead the army of the graduates is weak and can’t meet requirement of the position. With case-teaching the practical scene of training and management of the army can be reproduced. The graduate student can understand the practical training and management of the army more deeply and overcome the inherent lack of practice. Their subjective initiative can be inspired to improve their military literacy and ability of organization, management and commanding.

The Organization and Implementation of Case-teaching for Military Graduates in the Specialized Courses

The process of the organization and implementation of case-teaching consists of three steps including cases preparation, cases analysis and discussion and generalization and summarization. Case-teaching in the course of “Equipment support study” is taken for example to explain the organization and implementation of case-teaching process.

Preparation before Class

Sufficient preparation is the first task to carry out case-teaching. The main tasks during this stage are as described as the following.

Firstly the Characteristics and Requirements of the Graduates Need to Be Analyzed.

Currently the postgraduates of military science only come from military officer in service and have work experience. They are familiar with the operational training, daily life and practical work and own solid theory knowledge. They are highly-motivated and are eager to broaden their vision and improve their capability and quality through further study in postgraduate stage in order to contribute for the modernization construction of the army. Therefore the cases should be prepared according to the training requirement of the graduates and the character of the course. During the preparation stage the teacher needs to know the object requirement, the working experience and their basic knowledge of the graduates through student discussion in order to strengthen the specification and feasibility of the cases.
Secondly the Suitable Case Is Chosen

The teacher should integrate the teaching content and object into the case as much as possible when choosing the case in consideration of restriction of requirement of the graduates, learning content and teaching hours [2]. The selected case needs to be typical and of epochal characteristics. The standards to choose cases are “accurate, innovative and actual” in order to enhance the specification and effectiveness of case-teaching. When choosing cases the teacher needs to pay attention to the following two points. The first is to choose the typical case which can reflect teaching content and demands of the time. The other is to choose the specific case which is suitable for knowledge basis, acceptance and future development of the graduate. For example in the course of “equipment support study” the case of equipment support of US army in the Iraq war is used because the Iraq war is a typical local war under information and the support mode of US army can reflect precise support, timely support and integrated support in informationized war. It is also of great importance and guidance for equipment support building of the PLA. The graduates also know well about the Iraq war and are interested in the equipment support.

Thirdly the Teaching Case Is Designed

The typical cases used in teaching needs to be analyzed the scene setting needs to be vivid. Around the case questions need to be designed from the easy to the difficult and guide the students to think deeply in order to inspire the study interest and thinking ability and improve teaching efficiency. Firstly it is necessary to use multimedia resources including video, voice, picture and text to design and reproduce the case scene and show it to the students intuitively and integrally in order that they can know the case well. Secondly questions need to be designed according to characteristics of the students, teaching objective and requirement [3]. The questions can lead the graduates to think and realize the task through cases study. The questions constitute the principal line and like the catalyst to inspire thought and tap potential of the graduates. The setting questions are from easy to difficult and from the surface to the centre layer by layer. At the same time the practical combat training and management of the army needs to be considered in order to provide a space for the graduates to use their imagination and creativity.

Fourthly Teaching Task and Objective Need to Be Clear and Definite for the Graduates

The teacher needs to introduce the case to the graduates, describe teaching objective and task and put forward the questions one to two weeks ahead of time so that the graduates can be well prepared for class discussion. The graduates study the case, find relative data and think initiatively so as to solve the problem in the case.

Class Discussion

Class discussion is the central part of case-teaching which decides the teaching efficiency directly. Because every graduate has different knowledge, experience and preference they may have different comprehension and view point about questions set in the case [4]. The teacher should guide the graduate to think in multi-perspective and develop personal thinking space and motivate everyone to express their views. Connotation and denotation of the case can be fully excavated through collisions and integration between various views. The teacher should seize the opportunity to guide and deepen understanding of the graduates about the case. Through questions the teacher put forward and statements the graduates make initiatively the teacher leads the graduates think and analyze the problem more deeply. In the case of equipment support of US army in the Iraq war the related technique including radio frequency identification technology (RFID), barcode technology and global asset visualization are brought in to help the graduates open mind.

Case-teaching class is student-oriented and dominated by the teacher which changes the traditional teaching mode. Cramming education is given up by the teacher and the graduate will not accept knowledge passively. The class is changed to a place where the teacher and the graduates can communicate and interact with each other which is hard for traditional teaching to realize [5]. The whole process is beneficial to the graduates to cultivate ability to analyze and solve problems,
strengthen consciousness of innovation and improve military literacy, which will lay the good foundation for them to engage in command and management independently in future.

**Generalization and Summarization**

When the discussion is finished the teacher should generalize and summarize the case which is very important. The teacher needs to evaluate and analyze the advantages and disadvantages of the graduates and present the question which needs further thinking. Teaching reflection is also necessary for both the teacher and the graduates after class. The graduate should think about the theory contained in the case and analyze personal view according to the summarization of the teacher. The teacher should think about teaching efficiency, draw less from the case-teaching and improve case-teaching level.

**Analysis of the Problems**

**Countermeasures of Case-teaching in Specialized Courses for Military Postgraduate**

Firstly Recognition for Carrying out Case-teaching should Be Further Strengthened.

Case-teaching class is student-oriented and dominated by the teacher. Recognition for case-teaching of some teachers and graduates are insufficient influenced by traditional teaching mode during its implementation process. Some teachers think that case-teaching wastes time and energy and sometimes the discussion is not passionate because of restrictions of knowledge of the graduates. Some graduates think that the task to find related data for questions increases their burden, which is just an excuse or the teacher be lazy. Some graduates think that can’t taking the initiative and think deeply and the discussion can be finished with others. These views are mainly resulted in traditional teaching mode and insufficient recognition for case-teaching.

Teaching leading organizations at all levels should strengthen education and guidance of recognition for case-teaching. The proportion of case-teaching in courses needs to be increased during the courses designing. Then teachers and graduates can regard case-teaching as important measures of promoting development of academy education close to the actual combat and the army.

Secondly Professional Competence of Part of Teachers Needs to Be Strengthened Further.

Case-teaching raises high request for professional competence of teachers. Not only the solid specialized knowledge but also the working experience in the army is necessary for the teacher. The teacher should understand the contents included in the cases and set questions linking the practical training and management in the army. They can also provide guidance for the graduates to answer the questions. A teacher without solid professional knowledge can’t understand the specialized theory comprehensively and a teacher without working experience in the army can’t integrate theory with practice of the army.

Therefore teachers in the academy should keep on studying, enrich personal mind with new knowledge and theory and improve theoretical level and professional quality. Each teacher should know and achieve that teacher is the one with both high knowledge and moral integrity. At the same time the academy should also use joint education and training and strengthen exchange with the army. More teachers can work in the army or function in an acting capacity which is helpful for them to accumulated practical experience and know more about the army.

Thirdly Quantity of the Teaching Cases Is Not Enough and Building Quality of Cases Library Is Not High.

“If you have no hand you can't make a fist.” The basic condition to insure the implementation of case-teaching is to have enough teaching cases with high quality. Currently many courses carry out case-teaching courses and promote the building of cases library. But because of copyright, confidentiality and lack of communication with the army quantity of the teaching cases are not sufficient and quality of cases library building is not high during the process to build cases library and carry out case-teaching.

Therefore teaching leading organization in academy should be well linked with teachers and take
effective measures to generate cases in multiple ways. Teachers should pay more attention to collect source material of cases and write cases. Teaching leading organization in academy should play an active role of command and coordination. On one hand teaching leading organization in academy should coordinate the teaching and research office with the army to exchange positively and offer help for teachers to investigate and survey in the army. On the other hand teaching leading organization in academy should take effective measures to inspire teachers to write cases such as giving preference to teachers with outstanding achievements in professional title evaluation and reward for a meritorious action. The academy should strengthen the communication with the army and coordinate experts coming from the army, scientific research institution to participate in writing the cases.

**Summary**

The objective of case-teaching is to cultivate the ability to analyze and solve problem of the graduates. Because the teaching cases are close to combat training and weapon equipment development the cases and questions are also close to army post and develop requirement. The graduates can realize “coming from the practice, practicing in the practice, operating in the practice” during the learning process. During the first stage to carry out case-teaching various problems and difficulties exist in practice. So long as we keep going on and insist on carrying out case-teaching step by step case-teaching can become an edged tool to promote educational reform.

**References**


