Exploration of the Training Mode of Co-culture Automobile Non-commissioned Officers both Vocational Colleges and Troops under the System of Civil-Military Integration

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Abstract: It is an important way to train non-commissioned officers in local higher vocational colleges under the military-civilian integration system in China. Automobile non-commissioned officers as the backbone of the grassroots combat training and education management of the automobile troops, it is the basis of combat effectiveness and support force of the troops. Co-culture automobile non-commissioned officers both vocational colleges and troops, it shoulders the important task of transporting qualified automobile non-commissioned officers talents to the country and the troops. This paper combines the feedback results of the current situation investigation in the process of automobile non-commissioned officers training, analyze the causes of the problems, the talent training requirements for the co-culture of automobile non-commissioned officers both vocational colleges and troops have been established. This paper also puts forward the talent training mode of co-culture automobile non-commissioned officers from four aspects: strengthening ideological and political education, optimizing talent training mode, perfecting curriculum system, enhancing teacher strength and improving the construction of practical training facilities. It provides a scientific reference for the reform of education and teaching in China's automobile non-commissioned officers training higher vocational colleges, improves the quality of automobile non-commissioned officers training, and accelerates the construction of automobile non-commissioned officers team.

1. Introduction

In 2015, In the report of the 18th national congress of the communist party of China, it was first proposed to integrate civil-military integration development into the national strategy, and then the report of the nineteenth national congress also put forward seven strategies to win the victory of building a well-off society in an all-round way, and civil-military integration development is one of
the seven strategies, which highlights the importance of the strategy of China's civil-military integration and development, and embodies the degree of attention paid to civil-military integration on the national level. Civil-military integration can not only save the cost of military personnel training in China to a great extent, but also improve the quality of military personnel. Higher vocational colleges have the obligation to cooperate with the implementation of this national strategy and cultivate excellent talents for the army.

At present, as an important subsystem of the higher education system of civil-military integration, the directional non-commissioned officers has filled some gaps in the national higher education system, trained qualified military talents on the basis of education and training, and made the civil-military integration system more perfect. In 2023, 48 local colleges and universities have recruited 23225 non-commissioned officers (including 307 female non-commissioned officers) for the people’s liberation army and the people’s armed police force from 17 provinces (autonomous regions and municipalities directly under the central government) across the country, of which 11 non-commissioned officers colleges recruit automobile non-commissioned officers. The proportion of demand for automobile non-commissioned officers is increasing day by day, which effectively strengthens the realization of the dream of a strong army.

2. Investigation and analysis of training status of non-commissioned officers

A questionnaire survey was conducted among 200 students randomly selected from three aspects: the willingness of automobile non-commissioned officers to enlist in the army, the satisfaction of setting up military and political theory courses for automobile non-commissioned officers, and the satisfaction of militarized management and physical training for automobile non-commissioned officers. The results of the survey on the willingness of automobile non-commissioned officers to enlist in the army are shown in figure 1.

Figure 1: The willingness of automobile non-commissioned officers to enlist in the army.

After two and a half years of school education, the number of automobile petty officers who are very determined to join the army accounts for 20%, the number of general determined people accounts for 57.5%, and the number of people who are unwilling to join the army accounts for 22.5%. Although the overall proportion of the 3rd grade automobile non-commissioned officers willingness to enlist in the army is high, there are still some students who are not willing to choose to enlist in the army. The motivation to join the army also tends to be complicated. In addition to defending the country and devoting themselves to national defense, a small number of students are
better treated for national policies, service is conducive to personal development prospects or just want to experience the military life and other reasons for choosing to directional training non-commissioned officers career development.

The results of the survey on the satisfaction of setting up military and political theory courses for automobile non-commissioned officers are shown in figure 2.

![Figure 2: The satisfaction of setting up military and political theory courses for automobile non-commissioned officers.](image)

The number of satisfied people accounted for 25%, the number of basically satisfied people accounted for 60%, and the number of dissatisfied people accounted for 15%. The military's guiding role in the arranged pilot institutions is not fully played, and the guidance system is not perfect, resulting in a gap between the personnel training objectives, teaching and training content, assessment and evaluation standards and the needs of the military positions. For the cultivation of theoretical knowledge, professional knowledge and technical knowledge should be strengthened. Starting from the work needs, systematic teaching with goals, the knowledge structure relevance of theoretical subjects can be taught flexibly and vividly, improve the quality of teaching, and make the theory of directional non-commissioned officers systematic, targeted and vivid. According to the characteristics of students' learning, we should combine the study of professional theory with practical skills. Adjust the proportion of class hours of theoretical knowledge and technical practical knowledge based on job requirements, and transform job requirements into task-driven. The teaching process encourages non-commissioned officers students to explore and practice themselves through task-driven method. From passive learning to active learning, through the continuous completion of the task of this challenging teaching activities, improve the effect of practical teaching.

The results of the survey on the satisfaction of militarized management and physical training for automobile non-commissioned officers are shown in Figure 3.

![Figure 3: The satisfaction of militarized management and physical training for automobile non-commissioned officers.](image)

The number of satisfied people accounted for 16.7%, the number of basically satisfied people accounted for 50%, and the number of dissatisfied people accounted for 33.3%. Automobile non-commissioned officers students need to enter the army to start half a year of military training and skill improvement. This process is not only the change of the environment, but also the change of the identity, which needs to obey the stricter management system of the army. Therefore, good military and political literacy education has laid a good foundation for the non-commissioned officers students to adapt to the army life as soon as possible. According to the training objectives,
the content, methods and progress of military and political training are refined purposefully, and the class hours, credits and assessment standards of the course are determined, so as to cultivate students' military consciousness and improve their military and political literacy.

3. Automobile non-commissioned officers training requirements

President emphasized that ‘the integration of military and civilian development has been upgraded to a national strategy’, and firstly, the training objectives of automobile non-commissioned officers are formulated, and the basic requirements and basic standards of automobile non-commissioned officers personnel training are clarified. On the premise of concept integration, the army and higher vocational colleges should establish the concept of compatible development, mutual benefit and win-win development and training, reach a consensus, integrate resources, and strive to integrate the two development goals of higher vocational colleges facing the market and the army facing the battlefield, give full play to the advantages of open education and academic democratic atmosphere in higher vocational colleges, and lay a solid foundation for the scientific and cultural quality of automobile non-commissioned officers. Troops and higher vocational colleges must follow the standard requirements stipulated in the training objectives of non-commissioned officers talents, so as to realize the standardization and standardization of the training of non-commissioned officers talents in military and civilian automobiles, and promote the improvement of the comprehensive ability of non-commissioned officers talents in military and civilian integration.

Troops: focusing on the goal of building a strong army under the new situation of building a people's army that listens to the Party's command, can win the battle and has a good style of work. Troops should vigorously cultivate the ability and quality with firm political belief and ability to win the war, good military responsibility, good intelligence quality, compound knowledge structure, excellent innovation ability and forward-looking strategic vision, so as to meet the strategic needs of strengthening the army and the demand for skilled talents in the modernization of the army, cultivate high-quality and high-skilled talents for the army.

Higher vocational colleges: taking advantage of the resource advantages of higher vocational colleges to cultivate talents, consolidate the professional skills foundation of automobile non-commissioned officers students, cultivate their innovative thinking, improve the ability and
quality of non-commissioned officers students, and master the skills of modification, detection and repair of civil vehicles and military special vehicles. Automobile non-commissioned officers should put the education of ideals and beliefs in the first place, ensure that they can listen to the party’s words and follow the party at any time, have the adaptability to fulfill various tasks and the foresight to deal with the development of military automobile equipment, and forge the excellent military skills of automobile non-commissioned officers with practical military training and strict discipline requirements.

4. Training strategy of automobile non-commissioned officers

4.1. Strengthening the ideological and political education

First of all, the ideological and political education should be further strengthened in the content of education, firmly support the leadership of the communist party of China and the socialist system of China, under the guidance of’s new era of socialist ideology with Chinese characteristics, practicing the core socialist values, and having deep patriotic feelings and Chinese national pride[5]. The army will send internal personnel to the school to work with teachers in higher vocational colleges to compile knowledge textbooks for vocational and technical majors, optimize the course content, and introduce the army into the course. The required professional and technical knowledge, such as high-tech information and new equipment, can be integrated into the educational content of higher vocational colleges. Secondly, it is necessary to strengthen the practical education link, adopt the situational teaching method of integrating theory and practice to construct the network system of senior non-commissioned officers training, and build the relevant network information platform. Higher vocational colleges can use the holiday to organize students to enter the army for practical learning, so as to enhance students’ sense of identity to the army.

4.2. Optimizing talent training mode

In order to optimize the training mode of automobile non-commissioned officers talents in vocational colleges and the army, it is necessary to closely link the training goal of automobile non-commissioned officers talents with the talent demand of the army. Starting from vocational colleges, automobile non-commissioned officers students should master the professional knowledge and technical skills of automobiles. They should be oriented to automobile engineering and technical personnel, automobile manufacturing personnel, automobile maintenance technical service personnel and other professional groups in the automobile manufacturing, automobile repair and maintenance industry. They can be engaged in automobile assembly adjustment, performance test and inspection, quality inspection, production management, vehicle evaluation and technical maintenance services, automobile sheet metal maintenance, accident automobile repair and other high-quality technical and skilled personnel. Starting from the army, strengthen the technical guidance and in-depth communication with vocational colleges, regularly assign army personnel to carry out automobile-related practical training guidance and professional military physical training for students, and jointly agree with teachers in higher vocational colleges on teaching plans and related theoretical knowledge, so as to integrate the skills applied by the army into the teaching classroom of higher vocational colleges.

4.3. Perfecting curriculum system

Combined with the professional knowledge structure and military construction, the training of automobile non-commissioned officers needs to set up courses: public basic course, professional
basic course, military and political theory course. The construction of automobile non-commissioned officers curriculum system is shown in table 1.

Table 1: Construction of automobile non-commissioned officers curriculum system.

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<tr>
<th>Public Basic Course</th>
<th>Professional basic course</th>
<th>Military and political theory course</th>
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<tr>
<td>Ideological and moral cultivation and legal basis</td>
<td>Inspection and repair of automobile circuits and electrical systems</td>
<td>Political and ideological foundation</td>
</tr>
<tr>
<td>Introduction to Mao Zedong thought and the theoretical system of socialism with Chinese characteristics</td>
<td>Engine mechanical system inspection and repair</td>
<td>Military political theory</td>
</tr>
<tr>
<td>Foundation of innovation and entrepreneurship</td>
<td>Engine management system diagnosis and repair</td>
<td>Military quality</td>
</tr>
<tr>
<td>Situation and policy</td>
<td>Vehicle steering, driving and braking system detection and repair</td>
<td>Legal basis</td>
</tr>
<tr>
<td>Vocational basic English</td>
<td>Automobile safety and comfort system diagnosis and repair</td>
<td>Organization and management ability</td>
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<td>Computer culture foundation</td>
<td>Automobile body repair technology</td>
<td>Military style</td>
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<td>Public service labor</td>
<td>Automobile body welding technology</td>
<td>Psychological quality</td>
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<td></td>
<td>Automobile body measurement technology</td>
<td>Military training</td>
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</table>

Public basic course and professional basic course are the strengths of local higher vocational colleges. Strengthening the teaching of military and political theory course is a new topic in local higher vocational colleges. The teaching plan should be reasonably arranged, and the daily management and daily training in the training process of automobile non-commissioned officers should be included in the teaching plan. The teaching time, method, content, venue and assessment form should be clarified to provide a guarantee basis for the teaching of automobile non-commissioned officers.

4.4. Enhancing teacher strength

Establish a deep school-enterprise cooperation model between higher vocational colleges and the army. Teachers in higher vocational colleges use winter and summer vacations to exercise and study in the army, or formulate further education and training systems to improve the military theoretical knowledge and military training ability of teachers in higher vocational colleges, so as to make better use of the teaching in higher vocational colleges and cultivate the automobile non-commissioned officers suitable for the army. Troops send technical backbone into the school part-time teachers, regular military theory education and military skills training for students in higher vocational colleges, only from the technical guidance of the front line of the army, in order to clear and clear training direction, master the necessary military skills, for the troops to transport the required excellent automobile non-commissioned officers personnel.
4.5. Improving the construction of practical training facilities

Military training facilities are very different from ordinary higher vocational colleges and training facilities. In order to make students in higher vocational colleges better adapt to the training content in the army, it is also necessary to establish more training facilities and venues in higher vocational colleges. For example, there is a big difference between the automobile transportation technology in higher vocational colleges and the technology required by the army for the transportation of weapons and rockets. In these aspects, higher vocational colleges can purchase directly, or cooperate with relevant troops, enterprises and military enterprises to improve the training facilities and venues.

5. Conclusions

In summary, the military-civilian integration of automobile non-commissioned officers training mode is an important way to cultivate military talents in China. Under this training mode, we should strengthen the cooperation between the army and the school more deeply, and create a stronger cooperative relationship, so that higher vocational colleges can cultivate more talents for the army. At the same time, we should also give more guarantee in the system, so that the whole system can run more smoothly for a long time.

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