



TRAINING AND FOSTERING OFFICER AND EMPLOYEE STAFF FOR VIETNAM'S TRANSPORT SECTOR IN THE CONTEXT OF THE FOURTH INDUSTRIAL EVOLUTION

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Abstract

The Industrial Revolution 4.0 has been affecting the socio-economic development of the global economy including Vietnam. Under the impact of technology connecting the real world and the virtual world, many challenges pose which requires the transition and innovation of all industries and sectors, especially in the mission of training and fostering human resources for the transport sector. The training and retraining of cadres and civil servants of the transport sector has been comprehensively affected by many aspects. This issue brings good opportunities, but at the same time poses many challenges, requiring the training and fostering of transportation staff to carry out many appropriate tasks and solutions simultaneously along with the enhancement demand of the industry and the current scientific and technological context.

Key words: Training, officials, transportation, industrial revolution



1. Introduction

In Vietnam, the industrial revolution 4.0 has been profoundly affecting all aspects of social life such as economy, politics, national security, culture and education, ... The effect of the revolution presents not only opportunities but also challenges for the training and fostering of the cadres and civil servants in many sector including the transport sector.

Training and fostering the officials and employees of the transport industry is one of the important missions, solutions and policies to improve the ethical quality and professional competence of the staff in order to meet the increasing demands of the society, and at the same time helping the cadres and civil servants to self-improve. The requirement to implement training and fostering policies is ensuring that all the cadres and civil servants have the opportunity to attend training and fostering courses. Programs, contents and modes of training and fostering need to be practical and appropriate to the job position requirements of the officials and public employees. Therefore, in response to the demands of the Industrial Evolution 4.0, the issue of training and fostering the staff has become an urgent task, requiring recognition and implementation on a scientific basis in accordance with reality situation.

To sum up, the justification for the impact of this revolution on the training and fostering activities as well as the assessment of training and fostering process of cadres and civil servants in the transport sector, from which to propose appropriate solutions to improve the performance of the staff, are profoundly theoretical and practical requirements.

2. Methodology

The article employs a variety of methods, such as: Logic; analysis; synthetic; system; structure; comparison and so on. These methods are flexibly applied to clarify the basis and impact of the Industrial Revolution 4.0 on the training and fostering of the cadres and workers in transport sector and at the same time, it also figures out the achievements, limitations and issues raised in implementing these activities for the transport sector. Furthermore, the authors also utilizes techniques such as generalizing, predicting analysis and so on to clarify the causes and solutions to enhance the effectiveness of training and fostering of cadres and civil servants corresponding to the demand of developing high-quality human resources of the sector and the context of the current Industrial Revolution 4.0.

3. Results

3.1. The Industry 4.0 - The nature and impacts on the training and fostering of officials and employees for the transport sector in Vietnam

Up to now, the world has experienced the development process of some industrial revolutions (industrialization): the first time (1784); the second time (1870); the third time (1969) and now the fourth time starting on the background of the third industrial revolution. This revolution is the connection of technology in the fields of physics, digitization and biology and it creates completely new possibilities and profound impacts on all areas of social life.

The nature of the Industry 4.0 is based on digital technology platform through technologies such as Internet of Things (IoT), artificial intelligence (AI), virtual reality (VR), and augmented



reality (AR), mobile, social, mobile, analytics and cloud (SMAC), and so on to transform the entire real world into a digital world, many development models in the Industry 4.0 have impacts on society in which the transport sector is an integral part. The Deputy Minister of Vietnam Ministry of Transport, Mr. Nguyen Ngoc Dong affirmed that the transport sector will be strongly affected by the Industry 4.0 and it can be easily realized that the impact of the Industry 4.0 is profoundly changing the perception, structure, operation of the sector. At the same time, he emphasized that the preparation of resources, the orientation of skills training, knowledge updating and working according to the system of the sector to keep up with the demand of the era [6].

The Industry 4.0 has impacts on the entire transport sector in Vietnam, in which the training and fostering activities are strongly affected in all aspects such as objectives, training scale, fostering and the role of lecturers in all the training institutes of the sector; from the content, program, method, fostering to regimes, policies and strengthening, reorganizing the system of training institutions and so on. Firstly, the Industry 4.0 requires the objective of training and fostering to create a drastic change in the competence of cadres and civil servants of the industry. The staff need to have sufficient qualifications, professional competence and practical skills, especially working capacity in a creative and highly competitive environment; at the same time, analyzing and synthesizing skills, processing multi-dimensional information, approaching modern technology systems are necessary to meet the demand of serving the citizens and the development of the sector. Secondly, the content and training program need to be updated and designed in the orientation of applying modern science and innovative technology, increasing the foreign language competency in accordance with the standard regulations of the Vietnam Ministry of Education and Training. The officials and employees can actively select training programs and plans depending on their job position requirements, coordinate with enterprises to effectively implement the training and fostering programs for the workforce of the sector. Thirdly, the mode and method of training and fostering the staff must consist of both the theoretical knowledge and the practicing activities, depending on the characteristics and requirements of each job position, especially the application capacity of information technology on the work. However, the current training institutions for officials and public employees in the transport sector in Vietnam, though being invested and upgraded, have not yet met the requirements to apply new teaching methods due to the outdated infrastructure. Fourthly, it is essential to change the way of managing the system of training institutions, reviewing and updating information, supplementing and amending regulations for the administration in accordance with the reality situation. Moreover, the implications of digitizing all data, storing and processing big data require strategic and planned reviews to make timely adjustments, creating opportunities to leapfrog in infrastructure, transport and industrial development orientation. Fifthly, especially for the requirements of the Industry 4.0, it is necessary to improve the quality of teaching staff in the system of training institutions of the sector. In recent years, the quality of teaching staff in training institutions in the transport sector has been standardized with professional qualifications, most of the lecturers have the Master and Doctoral degrees. However, along with the popularity of the Internet and social networks, learners can search and update the information very quickly which is also a great pressure for lecturers in this period.



Therefore, the teaching staff in the training institutes need to take the initiative in approaching modern technology, constantly making efforts to accumulate knowledge, innovating teaching methods to arouse learners' engagement and so on.

These impacts of the evolution on transport sector in Vietnam brings the training and fostering of the staff in transportation industry both development opportunities and challenges. In terms of opportunities, the Industry 4.0 has created many chances for development, system approach, big data collection for the sector. Therefore, the training and fostering of cadres and civil servants for the transport sector in Vietnam need to take advantage of the favorable conditions to have an effective strategy for training human resources in accordance with the current circumstances. In terms of the challenges posed for the training and fostering of officials and employees for the transport industry in the period of the Industry 4.0, the quality and efficiency of training and fostering cadres and civil servants of the sector need to be strictly considered to ensure the capacity, civil service execution skills, sense of responsibility, professional ethics of the staff, and associate training and fostering with the needs of human resource development and long-term planning and so on. These issues require the Vietnam Ministry of Transport to regularly review the planning, assign the staff to attend courses as needed and ensure the right subjects, training and fostering in accordance with the job position, at the same time, developing policies to motivate cadres and civil servants after training and fostering to continue their efforts to strive for the development of the transport sector in the current context.

3.2. Real situation of training and fostering of officials and for the transport sector in Vietnam in the context of the Industry 4.0

Training and fostering are important stages in the training process, improving the quality of human resources for the country. Thoroughly grasping that issue, the Vietnam Ministry of Transport implemented the government's guiding documents on this issue, based on which, elaborated and approved plans, schemes and directives on enhancing training and fostering the staff in the entire transport sector, and at the same time, the Ministry issued and approved schemes and plans on human resource development and implementation of training and fostering programs in accordance with national regulations including programs on professional knowledge, state management skills, specialized management skills; amend and update training and fostering programs in the fields of road, maritime, aviation, inland waterways and railways. In addition, for the training institutes in the human resource training system of the transport sector, they continue to promote the implementation of Resolution 29-NQ/TW on comprehensive radical renovation of education and training, meeting the requirements of development of the sector and the country.

Especially, along with the strong development of the Industry 4.0, the Vietnam Ministry of Transport issued a decision to approve the plan for training and fostering cadres, civil servants and public employees up to 2020, with the goal of continuing to promote the quality of human resources, considered as one of the important factors, plays a decisive role in the development of the transport industry; building synchronous system of policies for training and fostering the staff in accordance with the conditions of the sector and the requirements of international integration;



encourage civil servants and officials to study and self-study to constantly improve the capacity to perform their assigned tasks.

The reality shows that the training and fostering of cadres and civil servants of the transport sector have always been concerned, led and timely directed by the leader of Communist Party of Vietnam, the Vietnam Ministry of Transport, and also closely and effectively coordinated among agencies, units and training institutions in developing and implementing plans, so the training and fostering of the officials and employees for the sector have achieved significant results. Firstly, the mission of developing annual training and fostering plans for cadres and civil servants has been paid attention and actively implemented on the basis of training and fostering needs of agencies and units. Agencies and units often coordinate to review and plan training and fostering the cadres, civil servants and officials based on their job position requirements in order to equip knowledge, skills and method to effectively carry out the assigned work. Secondly, the training and fostering step by step has been improved, achieving efficiency in both quantity and quality, basically meeting the development needs of the industry in each period. According to the statistics of the Vietnam Ministry of Transport, the annual number of cadres and civil servants sent to training and fostering is 5,958 turns of people, including 328 turns of officials and public employees assigned to train and foster in foreign countries, focusing mainly on three subjects: cadres and civil servants leading and managing; cadres and civil servants making policy and lecturers training for the staff [3]. After training and fostering, cadres, civil servants and public employees are arranged and assigned tasks in accordance with their professional qualifications. These staff has shown better performance, stronger political spirit in applying the knowledge they learned in the performance of public duties and so on.

On the other hand, there are still certain limitations. Firstly, not all the necessary training and fostering content is operated equally, mainly focusing on fostering professional skills and the political level while the issue of fostering management skills, implementation organization, especially handling situations in practice, knowledge, skills on international integration have not been given adequate attention. Secondly, the training program still concentrates on the theory and lacks practical skills, especially soft skills that are not associated with the requirements of reality; the methods is still mainly tradition method, not being able to connect lectures directly to the internet or applying information technology during the teaching process, the way to handle digital data is not appropriate, therefore, there has been no significant change in the quality and effectiveness of training and fostering; no mechanisms and policies to encourage cadres and civil servants to study and self-study to improve their qualifications and capacity to perform their assigned tasks and official duties. Thirdly, the funding source for annual training and fostering is not enough, meeting only a small part of the needs; spending norms are inconsistent with the actual situation and especially the level of support for training and fostering in accordance with Circular 139/2010/TT-BTC of the Vietnam Ministry of Finance has not been implemented yet; the mechanism of allocation and management, use of training and fostering financial resource is not consistent with the actual situation and ensures the initiative of management agencies and units employing civil servants; effectiveness of using training and retraining funding is not high.



Fourthly, facilities and equipment for training and fostering activities have been upgraded, but have not met the requirements to apply modern teaching methods and so on. Regarding to international cooperation in training and fostering cadres and civil servants, currently the staff are only assigned to participate in general training and fostering courses and the number of intensive training courses applied are small. The integration of foreign competent organizations and individuals to participate in teaching and fostering courses in training institute, especially courses for updating knowledge, drilling skills and sharing experiences of improving the capacity of the sector is limited. The main reasons for these limitations are that some leading authorities have not really paid attention to the training and fostering of cadres and civil servants in the process of organizing course and assigning of cadres, civil servants to attend training course; the system of legal documents on training and fostering is not yet consistent and appropriate; the need for training and fostering is higher than the prescribed norms [3], etc., therefore, in order to perform well the training and fostering of cadres and civil servants, it is necessary to have solutions that meet the sector development requirements in the current digital technology era.

3.3. Solutions to improve the quality of training and fostering the officials and employees for the transport sector in Vietnam in the context of the Industry 4.0

Improving the quality of training and fostering of the staff is the key and decisive step to developing the capacity, qualifications and ethical qualities of officials and public employees. Therefore, due to the requirements of the Industry 4.0 and the necessity of high quality human resources for the transport sector, the training and fostering of the staff should focus on the following basic tasks and solutions:

3.3.1. Raising awareness of the role and tasks of training and fostering officials and employees and responsibilities of managing agencies and units in ensuring the quality and efficiency of the training and fostering

Recognizing the training and fostering in improving the capacity to perform tasks and official duties of the cadres and civil servants is a leading and important solution, contributing to the development of the staff satisfying the requirements of the industry and the Industry 4.0 period, the Vietnam Ministry of Transport has directed the relevant agencies and units to focus on researching, analyzing and clarifying the situation of staff to planning to assign them for training and fostering course in accordance with their job positions. During his lifetime, President Ho Chi Minh always asserted: “Cadres are the root of all jobs” [8, p.309]; “All successes or failures are due to good or bad staff. That is a certain truth” [8, p.280] and he also attaches great importance to the role of cadres: “Cadres are those who bring the policies of the Party and the Government to explain to the people. At the same time they will bring the situation of the people to report to the Party, the Government to understand, to set policies properly. Therefore, staff training is the Party's important mission” [8, p.309]. These issues show that training and fostering not only contribute to building a strong staff to meet the industry's development requirements but more importantly also have a positive impact on many aspects of economic life – society.

Moreover, the sending of cadres and civil servants to training and fostering in agencies and units must be suitable to the job position, and at the same time ensure the planning and requirements



for human resource development at the unit. To strive for the target that by 2020, between 90% - 100% of officials, public employees and officials in Vietnam will meet the requirements of job positions and prescribed standards before appointment of managerial ranks [4]. Therefore, training and fostering needs to focus on providing basic theoretical knowledge, practical skills, work performing, attitude educating to show the enthusiasm, sense of responsibility of cadres and civil servants. At the same time, through training and fostering, the training course can help cadres and civil servants improve the efficiency of work performance, self-discipline and self-conduct independent work.

For agencies and management units that organize the training and fostering for cadres and civil servants, they must prove that the organization, the effective use of their labor force and the re-investment strategy for their labor force are effective to help the staff understand the nature of their jobs, and enhance the adaptability of cadres and civil servants to future jobs; training and fostering well, the organization will maintain and improve the capacity of cadres and civil servants; help the organization improve the stability and flexibility in its official duties to meet the needs of its existence and development; training and fostering activities help to prepare the future staff in the development stages.

3.3.2. Renovating contents of programs and methods of training and fostering officials and employees

Renovating contents of programs and methods of training and fostering cadres and civil servants is the core issue of the training and fostering, a decisive factor for the quality of the staff in agencies and units of the sector. Therefore, renovating the content of training programs and methods is necessary to meet the diverse learning needs of cadres and civil servants and in accordance with the reality of society. Therefore, the content of the training and fostering program needs to thoroughly grasp the objectives and the comprehensive renovation of the Vietnam Ministry of Education and Training in the spirit of Resolution 29 - QĐ/TW; ensuring proper guidance and guiding ideology of the Vietnam Ministry of Education and Training and the government, which are suitable with the training and retraining characteristics of the industry. The training program must combine professional knowledge with the improvement of political, ethical, legal knowledge and practical skills for cadres and civil servants and at the same time, they need updated training programs and methods in the direction of promoting positive and proactive creativity; develop capacity, methods of scientific thinking; independent and creative research capacity of the learners; application of information technology and modern technical means.

Strengthening, expanding and diversifying forms of training and fostering; combining formal training with in-service training; between improving knowledge, professional skills and research capacity; regularly review and plan in detail to ensure stability and sustainable development are also important. The method of organizing training courses must be appropriate to ensure high efficiency, and at the same time coordinate with business enterprises in the transport sector, especially enterprises with international investment capital to organize training and fostering of new knowledge, technologies and practical skills for the staff; signing applied research contracts,



technology transfer with enterprises, social organizations to get funding; proactively integrate and improve the effectiveness of international cooperation in training and fostering.

Diversifying methods and forms of examination and evaluation in the direction of ensuring accuracy and objectivity is also necessary. They can step by step apply modern technologies and advanced techniques into examination and evaluation of training and fostering results; disseminating active teaching methods according to the following criteria: equipping learners with the learning method and promoting the activeness of the learners; apply and maximize the advantages of applying information technology to achieve the highest efficiency, quality and productivity in scientific training and research; supplementing learning materials; compiling, translating and publishing textbooks; choose the world's advanced curriculum as teaching materials and reference; innovating teaching aids, applying advanced methods and new training processes.

3.3.3. Strengthening the implementation of remuneration, investment and international cooperation in training and fostering officials and employees

It is necessary to implementation of the remuneration policy is to motivate both physically and mentally for the improvement of the capacity of the staff, creating conditions for transportation officials and employees to have a stable life, a favorable working environment to maximize the working performance and encourage them to fulfill their tasks, and at the same time attract talented trainers to participate in the development of the training institutes of the sector. It is to ensure an appropriate and reasonable salary system; clearly identify the objectives to be achieved by officials and public employees; building better working environment; recognize the contributions of cadres and civil servants; take care of and protect the legitimate rights and interests of the staff, etc. Besides, it is essential to create motivation for cadres and civil servants to improve themselves. When being motivated, the staff will have more efforts to learn, to gather experiences at work, improve their knowledge and qualifications to improve themselves. The creation of motivating labor stimulating work has the effect of linking cadres and civil servants to agencies and units to retain good cadres and civil servants. It can help increase the level of satisfaction, confidence, engagement and devotion of faculty members in the school office; reduce time spent on recruiting and training new lecturers. That is the foundation to increase the scale of training to improve quality and improve the living standard of officials and employees of the transport sector.

Accordingly, the allocation and investment of funds for training and fostering cadres and civil servants in accordance with regulations to enhance facilities, modern technical equipment, and innovating curriculum and teaching methods; encourage teachers and learners to be active and enthusiastic in researching and improving their qualifications; attracting visiting lecturers, prestigious scientific researchers to participate in the training, etc. Therefore, the Vietnam Ministry of Transport needs to increase the investment budget for training, fostering and especially scientific research activities and allocating funds to invite leading experts to participate in training and fostering courses. Encouraging lecturers of training institutions of the industry to actively research and associate research with training activities at schools; at the same time, finding more sources of funding and rationally using the funding sources to effectively the training and retraining of cadres



and lecturers in training institutes, contributing to fulfilling the development requirements of the transport sector need to be concerned.

Moreover, the strengthening of international cooperation in training and fostering cadres and civil servants of the transport sector in Vietnam is now aimed at acquiring and applying advanced techniques in training and fostering of the world in accordance with the reality situation. In fact, this cooperation will create pressure to renovate the training and fostering activities for the staff. Therefore, to accomplish these goals the Vietnam Ministry of Transport should study and develop short-term and long-term training and fostering models according to the annual budget norms to appoint cadres and civil servants to attending abroad training courses in accordance with job position requirements and organizing training and retraining courses in the country with the assistance of foreign experts in the fields of transport industry. On that basis, it will increasingly assert the position of the sector in the training and fostering of cadres and civil servants in the context of the Industry 4.0.

4. Conclusion

Training and fostering the staff are always considered as important jobs to improve the performance of officials and public employees. Recently, the transport sector in Vietnam has achieved significant enhancement in both quality and efficiency of the work due to the results from the staff training programs; however, it is necessary to continue and expand the training activities mentioned above for a stronger development of the sector. Therefore, to satisfy the demands of the Industry 4.0, more than ever, the training and fostering of cadres and civil servants is a must in both short-term and long-term period which requires the investment and collaboration among agencies and units in the sector for reviewing, planning, evaluating and implementing appropriate remuneration policies for trained and fostered officials.

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