

Research on Teaching and Training of Railway Enterprises

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Abstract. Since the 20th century, the numbers of domestic enterprise universities have mushroomed, and an increasing number of enterprises have realized the significance of enterprise education and training. This paper takes the construction of a group enterprise university as an object, aims at clarifying the existing problems in railway education and proposing solutions. Under the guidance of the relevant theories of enterprise education and training, we summarize the relevant knowledge of enterprise university construction and railway education. Besides, we also make online questionnaires. This paper is based on the group employees' answers. Through the questionnaires survey, we found that there are many practical problems in the enterprise, including the outstanding contradiction between working and studying, lacking practicality, etc. Thus providing suggestions or help for the education and training of railway enterprises based on the statistical analysis results.

Introduction

In recent years, more and more enterprises have realized the importance of enterprise education and training, and it is more and more important for enterprises to optimize the enterprise education and training system and give full play to its value. It is a systematic, comprehensive and long-term process from the establishment of enterprise education and training institutions to continuously provide high-quality talents for enterprises. The successful system construction is affected by many factors, including the basic environment, facilities, teachers, curriculum design, frontier, ability cultivation, and practicability and so on.

Enterprise education and training system construction, including the initial research and analysis, the design of the operating system to adapt to the status quo and development goals of the enterprise and the operation process of the tinkering. No matter when the enterprise cannot ignore all the factors mentioned above, so as to build an advanced education and training system suitable for the enterprise.

Literature Review

Since the 21st century, enterprise universities have mushroomed in our country. Enterprises in various fields have built their enterprise universities. Zhang Long, Wang Yong, Bian Kanglin and Ma Shengkun believe that enterprises must build a learning and development system that meets their own development needs and transform the learning ability of employees into the productivity of enterprises, to meet the needs of sustainable development of enterprises. This is also the fundamental reason for the vigorous development of enterprise universities. Enterprise University was first proposed by Hawthorne, Libby and Nash in 1983. Enterprise University is a non-academic education and training institution based on enterprise culture, guided by educational concepts, and aimed at developing employees' abilities. It is an important component of a learning society.

The functions of an enterprise university are various and have great influence on the existence and development of an enterprise. Xu Yushen believes that with the continuous development of the enterprise university, the training target is not limited to the employees of the enterprise, but has been extended to the training of the affiliated enterprises upstream and downstream of the value chain. Therefore, some scholars have paid attention to the "bridge" function of knowledge transmission and

diffusion between internal departments of enterprises and between enterprises and external organizations.

Questionnaire Design and Survey

Design Idea

This survey is used for the research of enterprise university construction, aiming at understanding some problems with enterprise university construction, clarifying needs and expectations, finding problems and determining appropriate methods. Based on the findings and clear objectives, design the oriented training organization management personnel and grass-roots staff questionnaire, problem of the currently business education "environment" multiple parts, hardware and software form is given priority to with radio, multiple-choice, fill in the blanks, aims to from the Angle of management personnel and grass-roots staff the current existing problems, it is concluded that under the two different perspectives of opinions, so that the training management personnel and students contact more closely, suitable for their education system construction. The statistical analysis of the survey results will provide the basis for the construction of railway enterprises and universities.

Questionnaire Content

This paper involves two questionnaires, one is education training organization managers, supervisors and employees part at the grassroots level education training organization management part consists of two parts, classification information, training status, including 14 fills up the topic, eight choice, mainly with training plan, choice of teachers, training method and content, and so on related issues; The part of team leader and basic staff is composed of two parts of classified information training status quo, including 5 blank-filling questions and 20 multiple-choice questions, mainly involving training content, training needs, training methods, training time, teachers' situation, etc.

Questionnaire Collection

A total of 264 questionnaires were collected from the management personnel of the education and training organization. A total of 519 questionnaires were collected from the team leader and grassroots employees, and 519 of them were valid, with invalid answers. Feedback is credible, can feedback enterprise situation.

Research Methods and Data Processing

Data Sources

a) Questionnaire for Educational and Training Organization and Management Personnel.

From the perspective of their units and regions, most of the respondents were from vocational education departments (77). From the department of public works (36) on the most, vehicles, electricity, manpower, railway, workshop, training, aircraft, xichang, dazhou, the station, the base of the same number of people.

From the professional point of view, most of them are engineering students, with more students majoring in transportation engineering (45), railway (38), transportation (25) and vehicle (22), and fewer students are majoring in signal computer. In liberal arts, the number of students majoring in management (33) and human resources (11) is relatively large, while the number of students majoring in economics and education is relatively small.

From the position point of view, the filled personnel are mainly engineers (83) and deputy section level (57), the rest of the economist, such as the number of assistant foremen, relatively few.

b) Questionnaires for Team Leaders and Grassroots Employees.

From the perspective of working years, the number of respondents below 10 years is the most (309), and the number of respondents between 10 and 20 years (87) and 20 to 30 years (70) is the same, and the number of respondents above 40 years is the least.

From the perspective of majors, most of them are engineering students. Engineering (147), railway (88) and other majors have a large number of students, while other majors such as signal computer and architecture have a small number. On liberal arts major sees management (54) major number is more, the other major number such as economy is about the same, less.

From academic degree, the personnel filled in are mainly undergraduate (228) and junior college (150) degree, the rest of the master (7), technical secondary school (38), high school (15) less.

B. Data processing and analysis

Statistical software was used to analyze the survey results. Through the description method, the author describes and analyzes whether the current training plan is reasonable, whether the current training facilities can meet the needs of training activities, and whether the curriculum development and update speed can meet the needs of the development of the group company, so as to clarify the deficiencies in the education work of railway enterprises.

Update for training programs, facilities, courses, teachers' whether there is a problem description statistics, output the results are shown in table training software and hardware conditions whether meet the requirements, can be seen from the table, question 5, 6, 8 average close to 2, question 1 average 2.27, 64% of people think that training facilities can meet the demand for training activities, 68% of people think that course update basic meet the requirements of more than sixty percent of that of teachers basic meet the requirements, you can see a lot of people's attitudes towards three questions after are close to "neutral", and for question 5 most people believe that a reasonable plan, Such results are related to the fact that the respondents are educational organization personnel (mostly related to various training jobs). However, from the overall results of the questionnaire, some people still believe that there are problems in these aspects. The training plan is relatively well done. The training facilities should meet the real training needs and should not simply be "just for show". Curriculum development and design should take into account the group's current situation, needs, development goals, planning year market environment, previous experience, staff needs and other factors, to design a diversified, cutting-edge curriculum system; Teachers are generally composed of part-time teachers and full-time teachers, and the sources include experienced staff, management personnel, university teachers and professors. The comprehensive quality of teachers should be improved, regular training and assessment should be carried out, various forms of incentive measures should be formulated to retain talents and encourage talent recommendation.

Table 1. The training software and hardware conditions meet the requirements

	N	minimum	The maximum	The mean	The standard deviation	Can't meet	Basic meet	Completely satisfied
4. Do you think the current training plan is reasonable	264	1	3	2.27	0.525			
5. Do you think the current training facilities can meet the needs of training activities	264	1	3	1.88	0.589	23.86%(63)	64.02%(169)	64.02%(32)
6. In terms of curriculum development, do you think the current pace of curriculum update meets the development needs of the group	264	1	3	1.89	0.555	21.21%(56)	68.18%(180)	10.61%(28)
8. Do you think the quality of the training teachers can meet the training needs	264	1	3	1.86	0.560	23.86%(63)	66.67%(176)	9.47%(25)
Valid N (list state)	264							

As for the deficiencies existing in the current training, it can be seen from the table "problems in the implementation of training" that the mean values of enthusiasm, training evaluation, work-study contradiction and insufficient training funds are quite (higher), the mean values of lecturer coordination and student collection are quite (lower), and the others are the least. Many people believe that there are problems such as arousing initiative, training evaluation, work-study contradiction and insufficient funds. Nearly half of them think there is a problem in the coordination of lecturers, and a small number think there is a problem in the collection of trainees. Employees are willing to take the initiative to learn. Of course, they need time to learn. Therefore, the contradiction between work and study should be solved.

Table 2. Problems in training implementation

	N	minimum	The maximum	The mean	The standard deviation	Can't meet	Basic meet
7.1 what difficulties do you find in the implementation of the training (coordination by lecturers)	264	0	1	0.44	0.498	117	44.32%
7.2 what difficulties do you find in the implementation of the training (the collection of trainees)	264	0	1	0.31	0.462	81	30.68%
7.3 what difficulties do you find in the implementation of the training (to motivate the students)	264	0	1	0.75	0.432	199	75.38%
7.4 what difficulties do you find in the process of training implementation (training evaluation, work-study contradiction, insufficient training funds)	264	0	1	0.77	0.425	202	76.52%
7.5 what difficulties do you find in the implementation of the training (other?)	264	0	1	0.06	0.246	17	6.44%
Valid N (list state)	264						

Incentive policies for lecturers. According to the improvement of part-time teachers' incentive, the mean value is 2.42 and the standard deviation is 1.673. Nearly half of them chose the course reward, followed by training opportunities and promotion system, and a small number chose the remaining options. It is believed that the incentive policies need to be improved mainly in terms of salary and training and promotion, and the "hard" incentives need to be strengthened to effectively meet the needs of employees and appropriately raise wages.

Table 3. Pat-Time teacher motivation improvement division

	N	minimum	The maximum	The mean	The standard deviation	Can't meet	Basic meet
15. What do you think needs to be improved in the incentive policy for part-time teachers?		-2	6	2.42	1.673		
Preferential promotion system						47	
Training and learning opportunities						55	17.8%
Class reward, bonus incentive						108	20.83%
Excellent lecturer selection						12	40.91%
The company approved						13	4.55%
Other:						13	4.92%
(empty)						16	4.92%
Valid N (list state)	264						6.06%

As for the effective ways to organize and mobilize employees to participate in training, 0.77 is the largest among all the means, which is linked to the training and performance appraisal and is popular among the public. Most think it should be tied to performance, with nearly half taking cutting-edge courses and open selection and voluntary development, and the rest by executive order and other measures.

The average value of each option (organizational planning ability, coordination and control ability, communication and motivation ability, curriculum design ability, teaching ability, innovation ability, and others) is greater than 0.5 for training organizational and management staff to improve their ability in what aspects. Comprehensive ability needs to be improved through courses or practical operation. Among them, organizational planning ability, coordination and control ability, communication and motivation ability are all around 0.7 (higher). There is obvious room for improvement in many professional skills. It is necessary to go out for study, optimize the curriculum, teach the old and teach the new, and carry out practical training.

Problems Existing in the Teaching and Training of Railway Enterprises

There is Work-Study Contradictions

The contradiction between work and study is serious. 16 feedback out, select the order of the mean value of 0.22, and the open selection and voluntary participation is twice as much as 0.41, also has a lot of people think that in the other options to fill out and learning problems, study time and work time is not good coordination, learning time to take a rest time or study time to take up work time that affects much work. The mean value of the work-study contradiction options in question 7 is also as high as 0.77. As can be seen from the following table, about 30% of people think that the training frequency should be quarterly, and a small number of people think that the training frequency should be once every two months and once every six months. In terms of training duration, 41.62% of people think 5 days is suitable, a small number of people choose 3 days, and a small number of people choose more than 1 day and 10 days. In terms of online learning time, 60.69% of people choose less than 3 hours, while a small number choose 3-5 hours and 5-8 hours.

Ideal successful enterprise, the work and the study should not be contradictory, 3 the relationship should be to promote each other, can be seen in the feedback from the questionnaire, the current demands hard learning lead to work hard to finish after work require more time to finish the work, this not only hit the staff enthusiasm, influence "work environment", for the normal enterprise enterprise operation also have side effects. Rationalized off-job training or other forms of training should be implemented as soon as possible.

The School Has a Single Curriculum from the Grassroots Workers to the Leaders

The results show that the content of training needs to be expanded. Question 10 is there any problem in curriculum development? The average value is 1.89, indicating that people tend to meet the basic point of view. However, in question 10, many people think that the curriculum content is not innovative enough. Management has a great demand for the study of management, psychology, laws and regulations, and management knowledge, which is necessary for the management of enterprises and employees. Base cadres mainly need to increase practical knowledge, business management knowledge, extended training, individual development, as well as new ideas and project management and other content. The current curriculum system is short of comprehensiveness and pertinence.

The Practicality of Teaching Content Needs to Be Improved

According to the feedback of the questionnaire results, due to the different needs of different people for courses, many people feel that some courses are not practical or deviate from the field practice. For the most important factor affecting the training effect, 70.52% of people chose the practicality of the training content. In the seventh question and the other questions 10, 12 and 21, most of the answers were not practical enough. Different levels of demand for practical training is different, the management content thrown on the proportion is 4 advanced strategic concept, enterprise

innovation concept, and grass-roots staff or team leader low demand for theoretical knowledge, they need is to promote the technical ability, to help in the actual work at ordinary times, not complicated, "conceptual" training, regular training and assessment; The higher the level, the fewer practical courses.

The Training Content is Outdated and Fails to Keep Pace with the Times

Blank-filling questions 11 and 12 are related to the training content. The research results show that most of the current training content is outdated and has a high repetition rate, which cannot be combined with the current hot issues and keep pace with The Times. Practicality is not strong, the content is not attractive enough, leading to students learning enthusiasm is not strong, interaction with the teacher is not sufficient, more low teaching effect; At the same time, due to a large number of workers and limited training time, the coverage of the training is very limited, and what I learn cannot be well connected with the problems I encounter in my work.

The training content of vocational education management personnel and part-time teachers is not perfect and the training time is short. Teachers need regular training and assessment to enhance their comprehensive ability and professional ability and constantly improve themselves. 5.

Single Training Methods and Outdated Methods

The survey results show that the training method is mainly lecturing in class, and there is a phenomenon of reading from the book. For a group of people after graduation, it is difficult for them to be motivated by the learning method in the past study era, which is not in line with the trend of The Times, and there is a lack of real work related to the dry goods, and it is difficult to have a real harvest. F.the quality and ability of teachers in the enterprise are not balanced, and there are big differences in educational level and practice level.

Favorite instructor type this problem from the side can feedback out of the current problems of teachers' quality, choice of 8 on the teachers quality, the mean is 1.86, everyone's attitude tendency basically met, but fills up the topic of 13, 14 fill in behind many of them are about the quality of teachers, part-time teachers within the enterprise, for example, some teachers are not accepted the professional training of the teacher or no experience as a teacher, so relative to some experienced teachers, ability has the certain disparity, overall faculty at different stations is not balanced; Part-time teachers in the enterprise are not regarded as a "fixed job" like ordinary full-time teachers, so they are not easy to be valued. Meanwhile, the payment method of teaching subsidy is complex, the effect evaluation is not easy to operate, and the policy of fund standard needs to be adjusted, or it can be linked to work performance through other ways.

Countermeasure Analysis

A. Enterprise universities must first have their own clear positioning, overall design, systematic planning, analysis of the current situation, clear strategic direction, set up personal training objectives, integrate with excellent enterprise culture, continuous change and long-term innovation, take on the task of continuously providing excellent, high-quality and qualified personnel for enterprises, and build first-class and high-end training institutions.

B. Based on the characteristics of different personnel in enterprises such as leaders, technical personnel and functional personnel, the specific research summarizes the characteristics of various aspects such as the special needs of different personnel, providing comprehensive personalized and targeted personal training services, providing practical teaching services, so that students can learn what can be applied to work in class. Pay attention to the long-term development of enterprise personnel (including career development), and improve the management ability, technical ability and innovation ability of different personnel in a targeted way. Expand one's thinking and vision.

C. The investigation found that the contradiction between work and study is prominent and the class time is insufficient, which requires the education and management department to reasonably formulate long-term, medium-term and short-term training plans. It can not only not affect the production work, but also enable the trainees to get corresponding promotion in various aspects.

Workers can be allocated to attend classes and participate in training from top to bottom in each production unit or on the premise of not affecting the unit's production tasks, thus improving the teaching quality and learning efficiency of the trainees.

D. The results show that the quality of teachers is also an urgent problem to be solved. There are many problems, such as uneven quality of teachers, teaching methods, low comprehensive quality, lack of practical experience, derailment of teaching and production, etc.

We should make full use of internal and external teaching resources. First of all, we can employ workers with rich experience, transfer practical operations, and train them in teaching to improve their overall quality of teaching. Furthermore, high-level teachers or professors can be employed from domestic and foreign colleges and universities to keep up with the forefront of disciplines and improve teaching quality. Finally, the original teachers and some personnel of the human resources department can take on the teaching of some subjects and carry out teaching training for them. Generally speaking, different teachers need different forms of training and regular assessment.

In terms of teacher qualification and development, it is expected to solve the contradiction between work and teaching time. Hope to have the opportunity to improve their quality and knowledge through training. External teachers pay special attention to the combination of curriculum interior, training methods and methods with work practice. Available funds and teacher resources are important issues to be solved. Pay and bonus are the first, followed by opportunities for further training and promotion.

E. Teaching methods should follow the characteristics of the times. There should be not only online multimedia computers or mobile phone app, but also classroom classes. A variety of teaching methods should be combined. According to the characteristics of their own enterprises and the characteristics of students, a set of teaching methods suitable for them should be integrated. Strict, flexible and personalized teaching methods should be provided for students of different ages and majors. There should be humor and seriousness. Teaching that can be grounded. It is suggested to increase some communication and interaction, such as communication with other enterprises, or to reproduce classic cases, scenario simulation, case analysis, visiting and communication, etc.

F. Attracting and retaining first-class talents requires high salaries and good treatment. From the questionnaire, we can see that in order to build a first-class enterprise university, first-class talents are needed, the current salary level is slightly lower, and attractive salary under the general environment needs to be provided. This salary can be composed of various parts, which truly reflects the ability to make money, at the same time, improve and enhance the welfare benefits and enhance the happiness of teachers.

Conclusion

This, in turn, this paper expounds the research objectives, research methods, research process, data analysis, problem analysis, found the railway enterprise "popularization" of the problems existing in the teaching training and typical problems, such as learning, practicability, lack of motivation, teachers' quality, perfect degree courses, salary, etc., the success of the railway enterprise training is not only to solve the above problem, also needs to make strategic level planning (including every level in terms of specific measures to reasonably guide enterprise university construction) and the joint efforts of the staff for the enterprise success and create greater value also is very be necessary. There is still a long way to go for railway enterprise education and training. When following the general direction of The Times, we should keep innovating, transforming and growing, build a first-class training system and continuously supply talents for the enterprise[7].

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