

Construction of Enterprise Training Model Reform and Evaluation System Based on Practice Teaching

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Abstract: Practical teaching training is an effective way to consolidate theoretical knowledge, enhance practical ability and cultivate staff's innovative ability. Aiming at the problems of weak practice teaching, single teaching means and lack of training effect evaluation system in the process of staff training in nuclear power enterprises, in order to cultivate high-quality skilled personnel, this paper puts forward some suggestions on improving enterprise technology training from the aspects of teacher team building, training mode reform, teaching quality evaluation and improving training mechanism. The measures of training effectiveness emphasize the important role of practice in the training process. Finally, according to the actual situation of training and teaching in this unit, the evaluation index system of training effect is constructed.

1. Introduction

The smooth operation of equipment is the basis of the development and operation of nuclear power enterprises, which is related to the survival and profit of enterprises. The key to the normal operation of equipment is to have a team of engineers with high level of business and high quality. With nuclear power equipment becoming more and more advanced, the demand for talents is also increasing. Cultivating applied and innovative talents has become an important development goal of nuclear power enterprises[1-2]. Therefore, in order to strengthen the competitiveness of enterprises, improve the ability and quality of staff, and enable them to have the ability to use and maintain nuclear power equipment, pre-job training for new employees is particularly important.

From the current training situation, there are still some problems in the training system, and the traditional teaching method with theory as the main body has not been rid of. In the training process, the cultivation of teachers 'personal ability and teaching level is greatly constrained, and it cannot meet the needs of enterprises for high-quality talents.

2. Analysis of Modern Enterprise Training Theory

2.1 Process of enterprise training

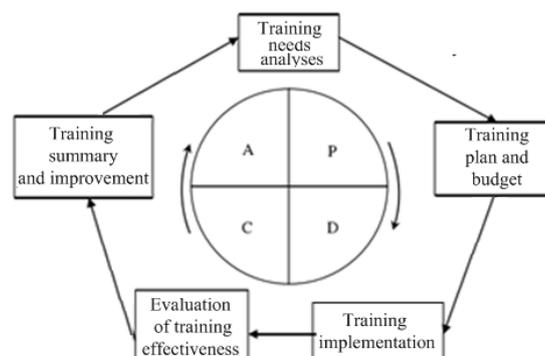


Fig.1 Process of Enterprise Training

The process of enterprise training is essentially a PDCA cycle. P (Plan) represents the planning stage. It mainly carries out training needs analysis, training plan and budget. D (Do) represents the implementation stage, referring to the implementation of specific training in accordance with the

work plan. C (Check) represents the inspection stage, refers to the evaluation, summary and evaluation of training effectiveness. A (Action) represents the stage of countermeasure, summarizing training and continuous improvement [3]. The process of enterprise training is shown in Figure 1.

2.2 The characteristics of modern enterprise training

Compared with school education, enterprise training cycle is shorter, but it can have multiple cycles. It is mainly based on the needs of enterprise management, through the training of production safety knowledge and production skills knowledge, and periodic training of employees' knowledge, attitude and skills. Its fundamental purpose is to improve the quality of employees, solve problems in production process, improve work efficiency, implement innovation process, and serve the development of enterprises.

3. Problems Existing in the Process of Enterprise Training

3.1 The training content is unreasonable and the theory and practice are disjointed

The training of operation and maintenance skills of nuclear power equipment aims at training the practical skills and innovative ability of technicians. But as far as the training content is concerned, there is still too much emphasis on the study of basic theoretical knowledge. The actual case teaching content is few, and the basic theoretical content is obsolete, abstract and tedious, which cannot match the actual equipment, thus causing the problem of separating theory from practical application. The main reason for this phenomenon is that the training department cannot keep pace with the times when compiling the textbooks. Even if some old equipment has been replaced, the structure, principle and use method of the equipment have changed, but the content of the training is unchanged, and a version of the textbooks has been prolonged for a long time, resulting in the slow updating of theoretical knowledge. At the same time, the training department did not seriously investigate the needs of enterprises, overemphasized the importance of theoretical knowledge, did not seek innovation, and neglected the application of practice in the training process. In this case, it is difficult for new employees to meet the employment needs of various departments after training, and their adaptability is poor, and they can not be integrated into the job quickly after work.

3.2 Training teachers don't pay attention to practical teaching

Training "double-qualified" teaching team is an important way to transform theoretical knowledge into practical ability, and also an important evaluation index of employee ability training in enterprises. Restricted by traditional educational ideas and teaching concepts, the training teachers are not aware of the importance of practical teaching at present. The idea of "emphasizing theory while neglecting practice" still exists. In the classroom, theoretical knowledge is emphasized, and the mastery of theoretical knowledge is the standard to measure the quality of teaching, which leads to the practice of trainers. Ability is greatly affected. The dull learning atmosphere makes the trainees less active and initiative in learning. Some training teachers are weak in practical ability and unwilling to go to factories to improve their practical ability, which is contrary to the concept of practical teaching and seriously hampers the training of comprehensive ability of trainees.

3.3 Imperfect evaluation system

Training evaluation refers to the evaluation of training results according to certain standards. Generally, through the investigation of the training object and the training subject, the author analyses whether the trainees have corrected the training areas, whether the work has been improved, and whether they have been improved. As far as the current training situation is concerned, it is impossible to evaluate the training effect effectively in the whole training process. Although some units have evaluated the training effect after training, the evaluation process is very random. There are only simple questionnaires. The contents of the questionnaires are too simple in design and are not practical enough. The information reflected is as follows: Limited, only in order

to complete the training process, there is no scientific theoretical basis, leading to the inability to deepen the knowledge system through training, unable to assess the training effect, unable to analyze the effectiveness of training according to the actual situation of training, unable to timely adjust training strategies. Some units only use the theoretical examination as a test of the training effect, lacking the assessment of the actual operation ability, which can not really reflect the training effect.

4. Measures to Improve the Effectiveness of Enterprise Training

4.1 Optimizing training process

The training process system is a combination of a series of different training links. It must follow a certain process and be implemented in accordance with the corresponding steps. The training process system is mainly divided into two parts: the pre-preparation stage and the training implementation stage. The pre-preparation includes two aspects, training needs analysis and training plan formulation. Training is to achieve better development of enterprises and employees [4]. Therefore, every training process must be combined with the actual situation of the company, and take full account of the specific problems that may arise in this link, and propose appropriate solutions, as shown in Figure 2.

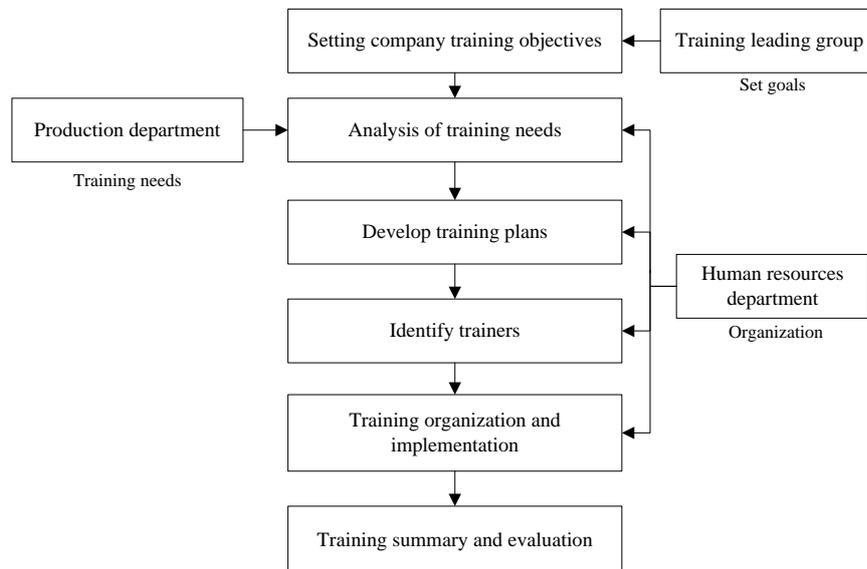


Fig.2 Optimized training process

4.2 Construction of Teachers' Team

Combining theory with practice is an effective way to improve the teaching level and practical ability of training teams. Enterprise training teachers should not only have solid professional theoretical knowledge, but also have strong practical skills. Only by striving to build a "double-qualified" training team of teachers, can we cultivate innovative talents adapted to the development of enterprises. Therefore, enterprises should constantly improve the selection, assessment and incentive system of training teachers, adopt the way of introducing and training both, and constantly introduce high-quality training personnel. Training teachers should be allowed to practice at the front line of enterprises, and skills training should be strengthened. Theory should be constantly applied to practice to prevent the separation between theory and practice. At the same time, the training teachers should constantly reform the teaching mode and training means, constantly broaden their knowledge level, and stimulate the learning motivation of trainees.

4.3 Improving the Evaluation of Teaching Quality

Teaching quality evaluation is an important part of enterprise training process. At present, there are still some problems in the process of evaluating the teaching quality of trained teachers. Firstly,

there are many factors affecting the level of teachers' classroom teaching quality, so the formulation of evaluation content and index system cannot fully reflect the actual situation of the evaluation subject. Relying on a single standard to evaluate often makes the evaluation of classroom teaching quality nominal and unreal. Secondly, at present, classroom quality evaluation only focuses on the theoretical teaching of training teachers, but his practical ability often does not join the evaluation system, weakening the status of practical teaching in the process of personnel training. The current evaluation model of classroom teaching quality is shown in Figure 3.

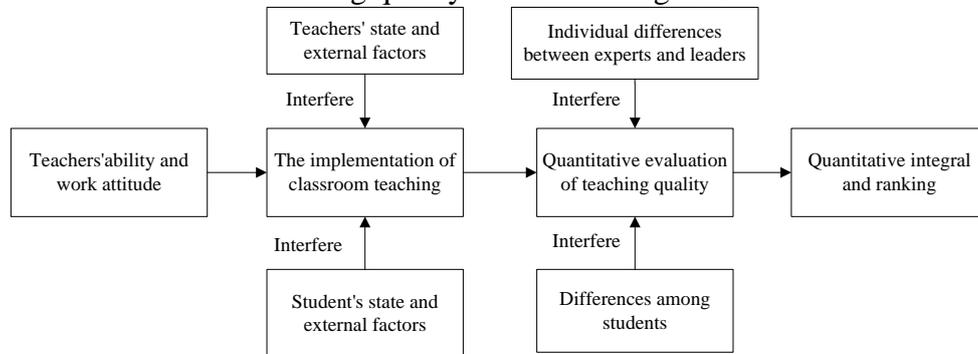


Fig.3 Evaluation process of classroom teaching quality

Teachers' abilities and working attitudes are reflected by the implementation of teaching in and out of class. A reasonable evaluation index system can objectively quantify the abilities and attitudes embodied in the process of teaching implementation. Finally, according to the results of quantification, it can quantify the scores and rank the files. The evaluation process is often influenced by external factors and the individual differences of the evaluators, which has certain subjectivity and affects the quality of classroom teaching. In order to improve the fairness of evaluation, we should minimize all kinds of interference factors in the evaluation process, and reduce the randomness of trainees and peers in the evaluation process. At the same time, the evaluation process is not limited to single theory teaching, but also takes the practical ability and experience of training teachers as an important measurement index to evaluate. Finally, the reasonable evaluation results are given to realize the innovation of classroom teaching quality evaluation program.

5. Establishment of Evaluation Index System for Enterprise Training Effectiveness

5.1 Evaluation Index System Model

According to the actual situation of training and teaching in our institute, four-level evaluation model is used to evaluate the training effect. The model mainly includes response assessment, learning assessment, behavioral assessment and outcome assessment. The model focuses on the final effect of training, and realizes the refinement and standardization of training effect evaluation. The structure of the model is shown in Figure 4.

1) Response assessment. It refers to the basic attitude of trainees towards training. This level of evaluation is mainly carried out through the form of question-and-answer, so that trainees can get the most intuitive feelings by answering the satisfaction of training form, content, teachers and methods, and then make statistical analysis.

2) Learning assessment. It refers to whether the students have achieved good changes in attitude, knowledge and skills after the training. It is used to examine whether trainees have acquired relevant knowledge and skills after training. If the knowledge is improved and new skills are acquired after training, it will represent learning gains.

3) Behavior assessment. To what extent do trainees achieve their training objectives after training? In general, the change of behavior should be carried out in the students' positions. In practice, the change of attitudes, the improvement of knowledge and the mastery of abilities of the students should be observed. Although some trainers have achieved good results in the evaluation of the learning level, they cannot achieve the training objectives in the job.

4) Result evaluation. It refers to whether the trainee's position will ultimately benefit in the next period after the training. The evaluation at this level mainly depends on whether the performance of the trainee's organization has been improved, or whether the economic level has been benefited.

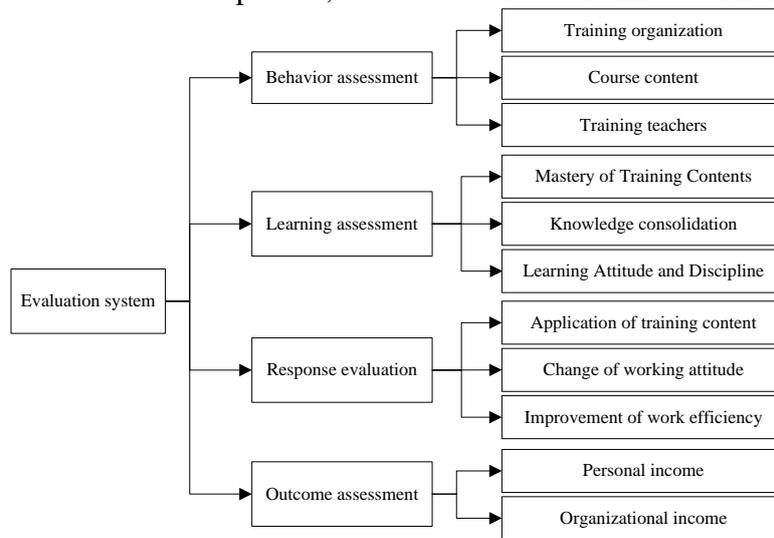


Fig.4 Evaluation Index System Model

5.2 Establishing Judgment Matrix

After determining the structural relationship of the whole index system, relevant experts are invited to evaluate and score the indicators, and the importance of each indicator is judged according to the results of the experts' scores. The judgment matrix is as follows:

$$A = \begin{pmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \cdots & \cdots & \cdots & \cdots \\ a_{n1} & a_{n2} & \cdots & a_{nn} \end{pmatrix} \quad (1)$$

The weights of each index are calculated by the judgment matrix, and then the training contents are evaluated according to the weights, and the specific evaluation results are obtained.

6. Conclusions

Practice teaching is an important means to cultivate talents in enterprises. However, there are still some problems in the process of training, such as backward teaching ideas, insufficient awareness of the importance of practice teaching and insufficient practical ability of teachers, which restrict the cultivation of employees' practical ability and innovative ability. In view of the existing problems in the current training process, this paper puts forward corresponding measures and suggestions on how to improve the effect of teaching and training in enterprises, in order to give full play to the advantages of enterprise resources, mobilize the initiative and enthusiasm of trainees in learning, and provide reference for enterprises to train high-quality talents.

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