

The research on the cultivation system of innovation ability of graduate students of electrical engineering degree

Jianjun Xu, Longchao Zhu, Limei Yan *, Hongyu Li, Guangjie Fu, Shuang Ren,

Xiaonan Jiang

The Department of Electrical Information Engineering, Northeast Petroleum University, Daqing, Heilongjiang, China

*Corresponding author: 123939274@qq.com

Abstract

The cultivation system of innovation ability of graduate students of electrical engineering degree's student is one of the important means of quality education in Graduates and universities; what's more, it is also an important part for students to know the society deeply and applies what they learn to it. However, the social practice system is not perfect at present stage. There are still some problems, such as the lack of social practice bases, the short practice time, and the single ways of practice. This paper analysis these problems which exist in the social practice activities of graduates, puts forward some improved methods and then makes a useful attempt to improve graduate students' social practice.

Keywords

Electrical engineering, graduate students, Innovation ability, Productive labor

1. Introduction

Electrical engineering students' social practice is an important link in graduate education. It can make the students go deep into society, know the society and serve it. In addition, social practice can make them apply their knowledge to practice and thus identify their own deficiencies and understand the social demand. It is obvious a good way to improve their learning methods and objectives^[1-2]. The CPC Central Committee, the State Council explicitly demand universities should seriously organize students to participate in military training, social investigation, productive labor, voluntary service, public welfare activities, technological invention, work study and so on. This series of activities can cultivate students' spirit of hard-working, enhance their professional knowledge and their competitiveness in employment, and help to plan their future occupation. In a word, it can make preparation for students to enter the society^[3-4].

2. The Connotation of Graduate Students' Social Practice

There are two objectives of graduate students' social practice. The first is to make students understand the society through seeking the reality, and through the practice to test the knowledge, deepen their understanding in practice, temper their wills and qualities, correct outlook on life and values, improve their comprehensive quality and promote the development of their own. The second is the students' eventually purpose is to serve the society. The social practice is a good way for graduate students to serve the society. Graduate students put themselves into the socialist modernization drive through practice, contacting with the masses of the people, giving the knowledge to serve the society and the people to make contributions to the reform and opening up and socialist construction. See Fig.1.

Social practice of graduate students is a systematic project which is graduate students being the subject and the social being stage. It is developed based on the objective requirement of the socialist economic construction and higher education coordinated development, which need the country, society and universities's concern, and the participation of the whole society, catch condominium together, in order to safeguard playing the role and smooth development of graduate students' social practice.

From all the above aspects, we can define the social practice as: Graduate Students' social practice is a educational activity which organize purposefully and designedly the students seeking the reality and society ,deepen teaching,serve society, give full play to students' subject function,being a educational policy of implementing the Party relying on social forces to complete and an educational activity of promoting students' all-round development according to aims and demands of the higher education.

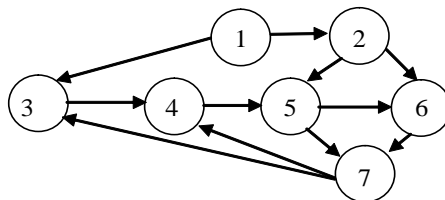


Fig. 1 Graduate Students of 7 Nodes

3. The Significance of Graduate Student Social Practice

Graduate students' ultimate goal is to walk into society, based on society, serve the society, which requires students to learn and master the necessary knowledge, skills and social norms and standards, in order to be social acceptance, and became a member of the society. Graduate students' social practice is the foundation of the graduate students understanding and identity society, is to set up a bridge between the graduate students and the society, which is a key link in the process of graduate students toward society. Through graduate students' social practice, to improve the socialization of graduate students and the level of understanding of society and social adaptation ability, making them master necessary knowledge and skills of going into the social roles, lay the necessary and good foundation for graduate students from the school to the society^[5].

Social practice is an important part of the ideological and political education, which has an irreplaceable role on promoting graduate students' understanding of society, growing talent ,contributing to society, exercising perseverance and cultivating character. In addition to let graduate students has a comprehensive understanding of society, the correct understanding of national conditions, and strengthening the social responsibility and historical mission On another aspect ,with a better understanding of the society, it also can enhance the understanding of the society, the participation of graduate students, consciously combine personal ambition and the development of the motherland with the nation's revitalization. More people can use their knowledge in servicing and contributing to society. The change in Fig.2.

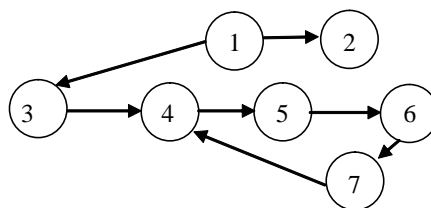


Fig. 2 Change of Graduate Students System

Graduate students' social practice can promote the adjustment of graduate students' knowledge structure, enhance the psychological quality, improve the ability and quality, realize the all-round development of graduate students. Graduate students in the social practice, by using the application and thinking of knowledge, they can prove the correct and the errors can be modified, the lack can be supplemented and perfected . Through practicing, graduate students can understand and experience the development of today's science and technology, which is changing with each passing day profoundly, it can encourage them to adjust and perfect the knowledge structure consciously and tend to reasonable.

4. Problems Existing in Graduate Students' Social Practice at Present

In recent years, Every university has continued to put more emphasis on students' social practice, increase investment, and establish social practice bases in order to create conditions for the social practice of graduate students. But there are still many problems.

First, students do not pay enough attention to social practice, and do not achieve the desired effect.

After receiving many years of education, students generally form such a habit as to take the theoretical study seriously but neglect the cultivation of their competence. On one hand, students lack the understanding of the significance of social practice. On the other hand, social practice time is often short and the practice form is relatively simple. Besides, practical content and their professional knowledge is not detached. So it can not stimulate students' practice interest, resulting the students do not like to participate in social practice, or just to muddle through. Consequently, social practice can not achieve its due results.

Second, the policy support is not enough and there are still difficulties in the establishment of social practice bases for graduates and universities.

Although the government encourages university students to participate in social practice, the inadequate fund, imperfect security system and the meager support have seriously hurt the enthusiasm of universities and the practice units^[6-7]. For graduates, the large number of students, the relatively inadequate practice bases and the short practice time result the practical effect is not obvious. For enterprises, accepting students means a longer time to grinding-in which delays production and affects profits. So business units are not willing to accept students' social practice that causes a lot of social practice only to be a formality.

Third, the single way of social practice can not attract students to participate actively.

Now the social practice ways of our graduate students are relatively single. Most of the practice bases are the historical and cultural sites and patriotism education base, or large and medium-sized enterprises and remote rural areas; organizing students to participate in collective in graduates is the main model of social practice, and symposium summary or the submission of comments is made to be a fixed mode as the end. These patterns of activity limit student individual performance and students can not require the abilities that they should have.

Forth, the evaluation mechanism of social practice coupled with the appraisal method is not perfect.

Due to the relative shortage of social practice resources, many universities pay attention to social practice effect of small team, but lack scientific and objective evaluation system for average students' widespread social practice; Meanwhile, there are no clear standards for the process and results of social practice. More often than not we assess students through their summary report and proofs from practice units' .All of these can not make an objective evaluation for student's real performance, and they do not connect social practice achievements with awards and appraising .As a bad result, the enthusiasm of the students is affected seriously.

5. New Ways of Social Practice in Graduates and Universities

In the face of these problems, graduates need to innovate the current social practice, especially in the institutionalization, the whole-staff and the efficiency in order to establish a kind of quality evaluation system of students' social practice that is in accordance with the national quality education.

We can establish a perfect social practice evaluation system to improve the enthusiasm of students. Graduates and universities should establish perfect social practice evaluation system, in which we should have clear goals and requirements for the mobilization stage, the implementation stage and the evaluation stage. In the stage of mobilization, we need to fully mobilize students and define the desired results so that students can realize the importance of social practice fully; In the stage of implementation, we can try to set up a special steering group to organize teachers to guide and supervise the whole process of social practice; In the stage of assessment, we should compare the

final effect with the initial inspection one. We can connect the results with awards, instead of taking the forms of submitting summary to enhance students' enthusiasm. See Fig.3.

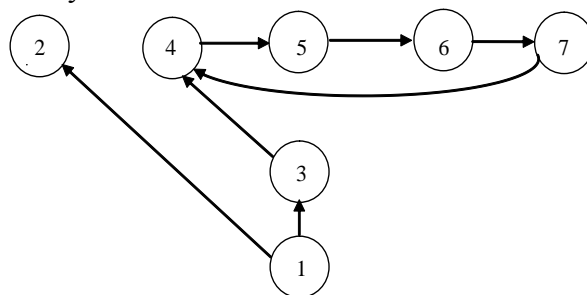


Fig. 3 Summary to Enhance Students' Enthusiasm

We can ensure the effects of social practice by improving students' understanding of social practice. For students, we should mobilize and encourage them to participate in social practice. Most importantly, students should be aware that social practice is a process in which students need to apply what they learn to practice, to exercise personal capacity, and to understand society, moreover they also should pay attention to exercise their patriotic enthusiasm and interpersonal skills, all of that need to be done by the bases for patriotic education and social services.

On the basis of original mode, we can create new modes of social practice, changing from "elite", "open", "visiting" to "full", "system", and "operating". In the way of social practice, we can actively explore new ways of practice, converting to "project", "community", "entrepreneurial". Due to the need for title promotion and the encouragement from our government, university teachers have great enthusiasm for scientific research work, which provide the basis of graduate students' social practice. Teachers can allow students to participate in scientific research projects, thus solving the problems of insufficient research forces and also exercising students' abilities; At the same time, graduates and universities can establish incentive mechanism, encouraging teachers to bring students to participate in the projects and giving some support in funding and awards, to improve students' enthusiasm for scientific research. In social terms, universities can cooperate with nearby to establish the practice bases and regularly arrange their students to practice in internship in community, which can be carried out by the forms of market research, social service and volunteer activities. Finally we can strengthen students' practical ability and reduce this condition where students now have grandiose aims but puny abilities. Now under the circumstances that employment is not ideal and students have entrepreneurial intention, within a reasonable range graduates can encourage students to start their own business and let them to take part in the legitimate business activities organized by universities, which can help students understand the process of product's operation and capital's accumulation, so then can help students to make good preparations for their start-ups in the future.

6. Conclusion

Graduate students' social practice is an important means to teach students to understand and integrate into the society. The normal development of social practice can not be completed by universities independently, and the support of the whole society is also of great importance.

Social practice of graduate students is an essential content under the new situation of the education for all-around development, it provides strong support for students to understand and in-depth the social, grow their ability, success quickly. But there are a lot of problems in the progress of the cultivation and the improvement of graduate students' social practice ability, as a complex system engineering, it need the joint efforts of the state, graduates and society, and hope that all parties strengthen the study of graduate students' social practice work mode, thus it can be more reasonable to recommend graduate students' social education system to cultivate high-quality talent effectively to meet the national and social needs, and contribute to the country and the national revitalization.

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