

Responding to “the Asking of Qian Xuesen “-Survey and Exploration on Cultivation of Outstanding Talents in China

Xiaofang Guo, Rong Liu, Xiao Wang *

Qingdao City University, Shandong 266106 , China.

Abstract: “The Asking of Qian Xuesen “ is a problem that the whole education sector has been concerned about and has not been able to answer.” This survey focuses on the cognition and thinking of “ the Asking of Qian Xuesen “ in the context of the “18th National Congress”. We used the method of mutual control random sampling, and according to the questionnaire to organize and analyze the results, and at the same time apply the SPSS software to analyze the factors of perception and recognition, and conduct an in-depth study on the reasons for the emergence of “ the Asking of Qian Xuesen “ and the countermeasures. On this basis, it draws corresponding conclusions and puts forward relevant suggestions.

Keywords: The Asking of Qian Xuesen; Innovation; Outstanding talents

1. Introduction

On March 29, 2005 Qian Xuesen made the last systematic talk in his life: “Today, the Party and the country are attaching great importance to the issue of scientific and technological innovation, but I think it is more important to have talents with innovative ideas. China has not yet a university can be in accordance with the mode of training scientific and technological invention and creation of talents to run the school, there is no unique innovation of their own things, I see, this is China’s current a big problem.” “China always fails to produce outstanding talents. This is a big problem.” “Cultivating outstanding talents is not only a basic principle for education to follow, but also a fundamental for the country’s long-term development.” From July 2005 to August 2009, “why do our schools always fail to produce outstanding talents?” Qian Xuesen repeatedly raised such a deep-rooted question. However, he never got an answer. Countless scholars have discussed and researched this issue, but still could not come up with a unified answer and solution. This is the last words of Qian Xuesen, also widely reported by the media as “ the Asking of Qian Xuesen “.

2. Survey program design and sample analysis

A sample of 195 questionnaires was collected from five universities. This research we use the simple random sampling method, the percentage of the total number of male students in this sample of the research object is 54.4%, the percentage of the total number of female students is 45.6%, from the pie chart of the distribution of the male ratio can also be seen, the proportion of male and female distribution is more uniform, basically in line with the actual distribution of male and female ratios, so our sampling this time is a better, representative sample. Among the random sample, 20% were freshmen, 13.3% were sophomores, 23.1% were juniors, 21% were seniors, and 22.6% were graduate students. The sampling of “ the Asking of Qian Xuesen “ survey is relatively even in the proportion of each grade, and the sampling is reasonable.

3. Survey and analysis on the awareness of “ the Asking of Qian Xuesen ”

3.1 Analysis of the recognition of outstanding talents in the question of “the Asking of Qian Xuesen ”

For college students to “ the Asking of Qian Xuesen “in the cognitive analysis of the type of outstanding talent, we can see that the survey respondents, that outstanding talent is innovative talent accounted for 62.6%, is an academic master accounted for 19.0%, is rich in practical experience accounted for 8.7%, is a successful career accounted for 9.7%.

3.2 Analysis of the awareness of the requirements of outstanding talents in the question of “ the Asking of Qian Xuesen” .

The analysis of college students' awareness of the conditions of outstanding talents in the question of “ the Asking of Qian Xuesen “ can be seen: 80.5% of the respondents believe that one of the conditions of outstanding talents is the sense of doubt and innovation. Innovation has great productivity, and more than 80% of college students think that outstanding talents need to have the sense of doubt and innovation, from which it can be seen that college students regard the condition of doubt and innovation as very important in the process of becoming outstanding talents or recognized outstanding talents. In addition, 65.1% of them think that they need to have the spirit of hard work, while 62.1% of them think that they need to have a reasonable knowledge structure and be able to combine with practice.

4. Reflections on how to answer “the Asking of Qian Xuesen ”

4.1 Reflections on the National Answer to the“ the Asking of Qian Xuesen ”

In terms of the respondents' views on what the state should make efforts in, 79.0% think that promoting the reform of the university system is one of the measures that the state should take, so it is very important to promote the reform of the university system, set up a pilot project for universities and do a good job of monitoring the process and evaluating the effects. 67.2% think that guiding the correct social values is one of the measures that the state needs to take in order to cultivate outstanding talents.

4.2 Reflections on the Enterprise's Answer to “ the Asking of Qian Xuesen”

On the respondents' views on what aspects enterprises should make efforts, 81.5% of them think that enterprises attach importance to innovative talents is one of the measures that can be taken for cultivating outstanding talents, and the concept of employing enterprises will directly affect the mode of cultivating talents in schools, and if a lot of enterprises attach importance to innovative talents, an atmosphere will be formed in the society, which will provide a clearer direction for cultivating talents for schools and teachers, as well as Provide students with useful guidance on the direction of learning and endeavor. 77.9% of them think that enterprises should provide more innovative platforms.

4.3 Reflections on the School's Answer to“ the Asking of Qian Xuesen ”

In terms of the respondents' views on what the school should do, 72.8% of them think that the school should adjust the teaching plan and enrich the after-school activities is one of the measures that the school can take to cultivate outstanding talents, and that the school should adjust the teaching plan, enrich the useful after-school activities, be based on the practice, and provide the useful guidance for the development of the students' innovative thinking. 58.5% of the respondents think that the school should organize more innovative competitions and activities, and that innovative talents account for a part of outstanding talents.

4.4 Reflections on Teachers' Answers to Chancellor's Questions

20.6% of the students think that teachers should cultivate students' teamwork spirit, 18.2% think that they should cultivate students' thinking mode, and 18.2% think that cultivating the spirit of contribution is also important. Overall, teamwork spirit, thinking mode and communication skills are more important.

5. Answers to“ the Asking of Qian Xuesen ”

5.1 Requirements for States

The State should create a liberal and free academic atmosphere Qian Xuesen once said about the academic atmosphere in China, “Everyone is polite, academic discussion is not active, how can this cultivate innovative talents.” The loose and free academic atmosphere is conducive to the expression of opinions and mutual exchange of ideas. This also triggers another problem, which is plagiarism in academia. Many people are not able to create good work themselves and thus choose to plagiarize. This also makes many scholars afraid to express their opinions in public for fear of being plagiarized. Therefore, the state should also enact strict laws in this regard to reduce or even eliminate this

kind of thing.

5.2 Requirements for business and society

Enterprises are the source of wealth and an important organization in society as a whole, so the measures taken by enterprises play an extremely important role in solving problems. First of all, enterprises need to pay attention to innovative talents, to understand the importance of innovative talents, secondly, when applying for jobs in enterprises, they should pay attention to innovative talents, increase the publicity of innovation, and create an innovative atmosphere in enterprises as well as in schools, so as to influence the whole society. Finally, enterprises should provide innovative platforms and opportunities for college students to carry out innovative research.

5.3 Requirements for schools

Schools are places where students are trained, and the kind of teaching methods practiced in a school often affects the quality of students in that school. First of all, schools should reform the teacher appraisal and selection system, select outstanding teachers and strengthen the teaching force. Teachers should not only be well educated, but also have scientific teaching methods to break the traditional indoctrination. Secondly, the school should enrich the after-school activities of students, and carry out more innovation competitions and other activities, so that students can cultivate innovation consciousness and enhance innovation ability in practice. In addition, it is also necessary to set up a special innovation fund, not only to reflect the importance of the school by the innovative talents, but also to provide better conditions for students to innovate.

5.4 Requirements for teachers

Qian Xuesen once said, "Nowadays, students have no interest in knowledge, to what extent the teacher educates and the students learn, such education does not work, the textbook is not the main thing, the main thing is the teacher." Through the survey, students are very urgent for teachers to change their teaching methods. Teaching according to the student's ability, individualized teaching, cultivate students' thinking ability, fast learning ability, communication ability, teamwork ability and contribution ability, teachers are not simply to instill knowledge, but to guide the students to learn how to think, that is, "teaching a fish is not as good as teaching a fisherman", instilling will only make the students gradually lose the ability to think independently, while the guidance can make the students think more. Indoctrination will only make students gradually lose the ability to think independently, while guiding can make students think more updated knowledge. Teachers not only know students in learning, but also teach students how to behave. Nowadays, university teachers simply teach knowledge, after the class will leave, but the real teacher, not only to preach and teach, but also to teach students what is "virtue".

How China's education will develop in the future, and how "the Asking of Qian Xuesen" can be satisfactorily concluded, still need our common efforts. We firmly believe that under the guidance of the spirit of the 18th National Congress, we will be able to deliver a satisfactory answer.

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