Research on the Influence of College Students' Discipline Competition Activities on Talent Cultivation in Colleges and Universities under the Background of New Era

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Abstract. Mr. Chen Duxiu, the advocate of the New Culture Movement and the main standard bearer, said: "Youth is like early spring, like the Asahi, like the budding of a hundred flowers, like a sharp sword newly emerging in Dian, and the most precious period of life is also. Youth is still fresh and active in society. " Under the background of the new era, the report of the 19th National Congress of the Communist Party of China clearly stated that colleges and universities should fully implement the Party's educational policy.Combine deepening the reform of colleges and universities with strictly administering the party in an all-round way, and inject youthful momentum into the socialist cause. College students' discipline competition is an important way to strengthen and enhance students' comprehensive ability, and it also has a far-reaching impact on the cultivation of talents in colleges and universities. This article will start with that connotation and necessity of college student' competition activities,This paper further expounds the close relationship between competition activities and talent cultivation in colleges and universities, and finally puts forward a feasible scheme according to some ideas of combining standard questions with talent cultivation existing in college students' competition activities. This is conducive to improving the practical teaching level in colleges and universities and enhancing the professional ability of college students, which has certain practical significance.

Keywords: college students' subject competition activities, talent cultivation in colleges and universities, and feasible schemes.

1. Connotation and necessity of competition activities

1.1. College Students' Discipline Competition Activities in the New Era

In order to better export the needed high-quality talents to the society, colleges and universities should be student-oriented, academic-oriented, constantly blaze new trails, provide channels for college students to communicate academically, cultivate students' professional quality, stimulate their interest in learning, enliven academic atmosphere, and enrich the reserve force of reserve elites.

Disciplinary competitions for college students include the National College Students Market Survey and Analysis Competition, a practical teaching platform that has been supported by the government and recognized by enterprises, and the China International "internet plus" College Students Innovation and Entrepreneurship Competition, which is closely integrated with Industry-University-Research, to cultivate new innovative and entrepreneurial forces, stimulate students' creativity,There is also the National Mathematical Modeling Competition for College Students to cultivate their innovative consciousness and the ability to use mathematical methods and computer technology to solve practical problems, and the "Challenge Cup" competition for extracurricular academic and technological works for college students to promote their academic and technological practice, discover and cultivate innovative talents, and deepen quality education.All these competitions aim at training college students' professional skills and comprehensive application ability, improving teachers' practical teaching skills, deepening the reform of college education and teaching mode, promoting teaching, learning and reform by competition, and cooperating with colleges and universities to cultivate innovative and applied talents.
1.2. The Necessity of Holding Discipline Competition

In order to better understand the research object, we conducted a survey. Questionnaire survey is the main method of this survey, which is restricted by epidemic situation and other factors. This survey adopts online questionnaire survey for college students, using Weibo, Questionnaires, Questionnaire Network and other platforms to randomly distribute a certain number of questionnaires and collect data. The sampling design part is divided into the following two parts:

2. Determination of sample box

This survey takes college students as the survey object, focuses on the experience and experience of college students in academic competitions, relies on various realistic conditions, uses various classic survey methods, and publishes questionnaires on relevant user communities in Weibo, WeChat and QQ and other social platforms.

3. Determination of sample size

Before calculating the sample size, the determinable quantities are confidence interval and confidence level, and it is difficult to determine the standard deviation. Therefore, the sample size is calculated by estimating the overall proportion.

Step 1: Choose the confidence level as 95%. From the quantile table of the standard normal distribution, it is found that \( Z_{a/2} = 1.96 \) at this time, and the maximum allowable absolute error \( E = 4\% \). Although the overall true value is unknown, it is preliminarily known through preliminary research that the number of college students who have participated in the subject competition accounts for about 70% of all college students, so it is determined that \( p = 0.7 \), thus the sample size is:

\[
 n = \frac{Z_{a/2}^2 p (1-p)}{\Delta^2} = 504.2 \cong 505
\]  

(1)

Step 2: After the sample size is preliminarily calculated, our group continues to adjust the design effect \( def \). \( def \) is a specific sampling design, including sampling method and estimation method of overall target quantity. The ratio of variance of estimator to variance of estimator that does not return to simple random sampling under the same sample quantity. The sampling method we choose is simple random sampling. And the efficiency of publishing the recycling questionnaire in the Internet platform is lower than expected, so the design effect value should be greater than 1, so we take the design effect value as 1.7:

\[
 n_1 = n \times def = 505 \times 1.7 = 858.5
\]  

(2)

Step 3: After designing the sampling scheme, in order to find out the possible imperfections in various aspects, check the scientificity and operability of the design scheme, and avoid all kinds of irreparable errors and waste in the formal investigation, we conducted a trial sampling survey, and distributed 50 questionnaires online in advance by using the Questioning Star platform. After a period of feedback, the inappropriate words and sentences in the questionnaire were corrected, and during the process of distributing the questionnaire according to the pre-survey, our team observed that many invalid questionnaires were easily collected due to a series of reasons in the process of distributing the questionnaire on the Internet platform, and our team calculated that the effective questionnaire recovery rate was 91.42% based on the results of the pre-survey questionnaire, so the \( R \) recorded here was 90%. In summary, the sample size can be roughly estimated as follows:

\[
 n_2 = \frac{n_1}{r} = 953.89 \approx 954
\]  

(3)

We also cut out some topics that can’t reach the core conclusion, including topics with irrelevant variables. Finally, a formal questionnaire with reasonable structure, strong logic and easy-to-
understand language is determined, which is convenient for later data analysis. Based on the possible situations in reality, it was finally decided to distribute 1,000 questionnaires for formal investigation.

Through the analysis of relevant data, we deeply realize that college students' ability can be improved by supporting discipline competition activities, and a special assessment method can be used to train students' intelligence, improve team cooperation ability, and strengthen and enhance students' innovative spirit and practical ability. In this way, college students can learn more skills, making college students better adapt to the new university environment, improving their ability of information collection and retrieval, stimulating their theoretical knowledge to think independently with the actual situation, and improving their ability to find, ask and solve problems in life are also conducive to the prevailing atmosphere of campus learning, and also play a vital role in the cultivation of talents in colleges and universities.

4. The Relationship between College Students' Discipline Competition Activities and Talent Cultivation in Colleges and Universities

This survey lasted for 98 days and consisted of three stages: pre-investigation, analysis and summary. Firstly, determine our research background, purpose, content and thinking framework. Then, by using the methods of copywriting investigation, inquiry and in-depth interview, the college students are investigated by using their professional statistical knowledge. This paper makes an understanding of college students' knowledge of academic competitions and their ways of obtaining them, explores the relationship between different influencing factors, and finds out the existing problems from the survey results.

In the early stage of the investigation, we used the Internet to search the information we wanted to know, so as to have basic theoretical support and make the current education situation and mode clearer. Questioning is a method to collect facts, opinions and attitudes by using questionnaires, and it is often used to obtain raw data. We use Questionnaires platform to make questionnaires and distribute them online.

Considering the epidemic situation, we conducted in-depth interviews by telephone. The interviewees gave us suggestions for investigation, and also told us about their experiences in participating in some discipline competitions. As the interviewees in this time also engaged in education, we also got a lot of more specialized information from their mouths. Through the collected questionnaire, we concluded that:

The development of college students' discipline competitions is closely related to the cultivation of talents. This year marks the centenary of the founding of the Communist Party of China (CPC) and the first year of the 14th Five-Year Plan. After several years of precipitation, all kinds of discipline competitions have achieved vigorous development in the new era, and the hard-won achievements have been made. Participants should not forget their original intentions, keep their mission in mind and work hard. Pioneering and enterprising, and contributing to the high-quality development of education during the 14th Five-Year Plan period.

In the process of building a team, students from different majors will be combined together, and talents from different fields will have the opportunity to collide with each other, pool ideas and cooperate across fields. This can make up for the systematic lack of objective conditions of single professional thinking in the team, and make more perfect group works, which is conducive to the all-round development of talents, rather than sticking to a certain field. At the same time, according to the questionnaire survey, we can also know that most college students are more willing to participate in activity competitions to broaden their careers.
5. Put forward solutions to the problems existing in the activities.

5.1. Strive to create a good atmosphere of respecting knowledge and talents.

Nowadays, it is common practice to respect labor, knowledge, talents and creativity. The society is also constantly creating a good atmosphere to encourage people to pursue their careers and support them to succeed in their careers, giving new connotations to the concept of talents in the new era. Today's society is a society where science and technology are changing with each passing day and are full of science and technology everywhere. Learning has become the top priority of social life. Obviously, without knowledge, it is difficult to walk in the society, and it is difficult to stand in this society, let alone serve the society and make a difference to it. Everyone's knowledge structure is different, some have depth and some have width, and thinking is greatly influenced by the knowledge structure. More need to use knowledge flexibly. At the same time, college students should also consciously establish the awareness of advocating knowledge and respecting knowledge, so that the atmosphere of respecting teachers and respecting morality on campus becomes a common practice, and constantly explore their own independent personality.

5.2. Encourage innovation, implement fair competition and improve the reward mechanism.

Colleges and universities should set up associations related to academic competitions, provide technical support, and encourage and guarantee students to take part in competitions. For example, school leaders attach great importance to this innovative and entrepreneurial project and give special multimedia classrooms for team discussions; Provide technical support, guide teachers and students to work together, teachers patiently guide projects and put forward pertinent suggestions, Always follow up the team's projects; Provide financial support, and provide corresponding funds for the team's project investigation and research according to the actual investigation. Establish a fair and reasonable reward mechanism and a sense of competition. First of all, the principle of fairness should be taken into account, and then an effective management system should be established, which should be strictly followed in the reward and persisted for a long time. At the same time, we should give consideration to the scientific nature of the system, give full play to the entrepreneurial vitality, not adopt a single reward form and means, improve the reward mechanism, export high-quality and high-level compound talents to the society, and encourage students to demand themselves with high goals and standards at ordinary times.

5.3. Cultivating high-quality talents, keeping the mission in mind, is not timely.

Universities should not only receive knowledge in the classroom, but also acquire knowledge from various channels and fields, not only for personal development, but also for the whole society. At the beginning of 2020, novel coronavirus first attacked Wuhan, and then spread to the whole country. Among the medical teams struggling in the front line of the epidemic, "post-90s" and "post-00s" doctors became the main force. Some of them have just come of age, others have just left school. Faced with the unknown, they did not flinch because of fear, and they became the protectors of people's lives. In this invisible war, young people who are not doctors are also contributing to the country in their own way. Restaurant operators provide meals for medical staff free of charge; The obligation of transportation is to transport materials for epidemic prevention front line; Record the progress of epidemic prevention work around you from the media; Now college students also participate in community epidemic prevention work and become a glorious volunteer. Young people of the new era handed in qualified answers in this big exam. The "post-90s" and "post-00s" generation of young people were the protected party during the SARS period, but at this moment, We have really grown up, and we have been able to use our own strength to gather in the whole army of the motherland, and we have not lived up to our expectations to hand in this satisfactory answer sheet with our own hands-on. As a young man in the new era, he may not be able to make vigorous contributions to the development of the country and society, but he can fulfill his obligations and responsibilities from trivial matters. After all, heroes become ordinary. We grow under the national
flag and in the spring breeze. Colleges and universities should strive to export high-quality talents to the society, so that students will not forget their ancestors' contributions and continue to forge ahead in the future.

6. Conclusion

In today's rich variety of subject competitions, how to choose a suitable competition and how to prepare for a competition is a kind of knowledge. What interesting things and interesting souls will be encountered in the process of competition are also valuable experiences. Reading is to nurture the soul. If you don't read, there will be no suitable words to quote when you talk, There will be no literary color. Reading is very important. If you don't read, you can't have a foothold in today's society. It is also futile to read only and not to use the contents of the book. The rapid development of science and technology makes all kinds of learning resources particularly rich, access to means is also convenient, and we can not indulge in mobile phones all day long, idle time. The general secretary once said, "the young generation has ideals, With ability and responsibility, the country has a future and the nation has hope." As a contemporary college student, it is more necessary to pursue their dreams in precious time, continue the road of predecessors, and blaze new trails, so as to open up a prosperous situation with innovation, and make great use of the spring and Autumn Annals. To be a nation with one's own strength, to serve the country with one's own body, to pay for one's ambition, and to display one's elegant demeanor is not only like those of our predecessors, but also to show the demeanor of today's people. Diligence, encouragement and determination to serve the country are the light of youth! Be a new young man with faith in his heart and strength at his feet, always be positive and always have tears in his eyes.

References


