

# The Research of University Librarians Participating in the Guidance of University Students' Discipline Competition

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**Abstract.** The discipline competition of college students is an important part of innovation and entrepreneurship education, and is increasingly valued. As an important teaching auxiliary department, university libraries have a large number of library resources and a sufficient number of teachers, and should actively participate in the guidance of discipline competitions. To this end, we should determine the scope of the subject competition, establish a team of instructors, choose the suitable students participating in the competition, optimize the layout of the library to facilitate students to participate in the competition, strengthen the cooperation between schools and enterprises, and establish the database of the subject competition of excellent entries in the school.

## 1. Introduction

Discipline competitions can improve students' innovative and practical abilities. Some universities have set up an Innovation and Entrepreneurship College to strengthen innovation and entrepreneurship education, which is fully responsible for the innovation and entrepreneurship work of college students. In 2021, the university issued the discipline competition management measures, which for the first time clarified the incentive measures for students to participate in various discipline competitions and the workload calculation method for teachers to guide discipline competitions at the institutional level, and determined the grades of various discipline competitions according to the discipline competition catalogue published by the Institute of Higher Education and the actual situation of the university. For students, participating in the discipline competition can not only improve their comprehensive quality, organization and coordination ability, innovation ability, and obtain awards from the school, but also obtain practical opportunities before graduation and increase employment chips.

Some innovative subject competitions need the support of library collection resources and professional talents; Even entrepreneurial competitions often need the help of library resources, such as business plan writing, questionnaire design and statistical analysis. Libraries have advantages and should actively participate in the guidance of discipline competitions. Although our library has also organized students to participate in the National Information Literacy Competition in recent years, it has rarely participated in the more professional discipline competitions above Class C. However, the library has rich collection resources, ample space and excellent instructors, and should play a necessary role in

innovation and entrepreneurship education, especially in discipline competitions. This paper will discuss how to use library resources to promote college students' subject competition based on the actual situation of our university.

## 2. Delineate the scope of discipline competition

The discipline competition catalog published by the school is based on the discipline competition catalog published by the Higher Education Association, and incorporates some professional competitions that various colleges have already participated in. Students who have won the competitions are rewarded and a certain amount of workload is calculated for the guidance teachers. But there are many subject competitions, and the knowledge and abilities of any unit or individual are insufficient to support their participation in all competitions, especially for libraries. Although there are many competitions suitable for the guidance of the library teacher team, it is difficult to achieve good results if all participate. It is necessary to consider the resource and talent advantages of the library, and determine the priority subject competition list within the school's subject competition catalog. Considering the academic resources and teaching staff of the library itself, six competitions have been preliminarily selected as key competitions.

Among the six competitions, China College Students' 'Internet+' Innovation and Entrepreneurship Competition and the "Challenge Cup" National College Student Curricular Academic Science and Technology Works Competition are among the highest in the national competitions. The Internet+ Contest belongs to the entrepreneurship contest, and the participating students need to submit a business plan. The students in the

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Challenge Cup need to submit extracurricular academic works, including inventions, papers, research reports and other forms. The Shandong University Science and Technology Innovation Competition is organized by the Shandong Provincial Department of Education, focusing on scientific and technological innovation and suitable for science and engineering students to participate. The university students' innovation and entrepreneurship training program requires college students to complete project application under the guidance of teachers, similar to the application of teacher research projects; The form of participation in the National College Student Energy Conservation and Emission Reduction Social Practice and Technology Competition is similar to the Challenge Cup extracurricular academic and technological work competition, but limited to energy conservation and emission reduction; In the National Business Elite Challenge series, three events have been selected for the subject competition catalog of the Higher Education Association. Among them, the International Trade Competition has a special track for international trade and business, and also participates in academic papers, but is limited to international trade and international business. The above competitions all have a certain degree of academic significance, and the library has certain advantages to adopt embedded services<sup>[1]</sup> in this regard.

### **3. Establish a discipline competition guidance team**

The school library has not only books, periodicals and various electronic resources, but also a high-quality team of librarians with different academic backgrounds. It is necessary to use the library faculty to cultivate an excellent team of innovation and entrepreneurship instructors. The incentive measures for discipline competition introduced at the school level are conducive to guiding teachers to actively participate in the guidance of discipline competition. The library should also take the opportunity to introduce corresponding measures to increase the proportion of university competition guidance in the evaluation and employment of posts, so as to guide more librarians to participate in the competition guidance work.

Each university library has purchased a large number of Chinese and foreign language databases, and has a special person in charge of them. However, the teachers and collection resources of the library have not well supported the discipline competition. Innovation discipline competitions usually need to write applications, papers, survey reports or complete designs, which cannot be separated from database resources. Therefore, the library teacher team can play an important role in this regard, and form a team of 3-5 instructors to participate in the innovation and entrepreneurship education and related discipline competitions. At the same time, we will invite experienced teachers from the College of Entrepreneurship to conduct systematic training for employees who are willing to participate in the guidance of the discipline competition. In addition, if

you want to expand the scope of the discipline competition, you can also consider absorbing personnel outside the library or even outside the school to participate in the discipline competition guidance.

The subject librarian system is not only conducive to the service of the library in the subject construction, but also conducive to the service of the library in the subject competition. The subject librarian has a certain discipline background, is familiar with the discipline field, has a certain scientific research ability, and is in close contact with relevant discipline principals and teachers for work needs. Students need to consult information and collect data during the course of discipline competition. If the instructors of relevant disciplines have no time to attend in time due to the heavy teaching and scientific research tasks, the discipline librarian can guide students to complete the information consultation and data collection work, and provide project definition and novelty search services. On the contrary, if the subject librarian is the first instructor, it may be a little weak in project application and academic work writing guidance. A full-time teacher with higher scientific research level can be the second instructor to ensure the excellent quality of the entries. A competent librarian can independently guide students in the subject competition.

### **4. Take multiple measures to solve the problem of student source**

After two years of operation, the award-winning students in the discipline competition have won scholarships. Although the amount is small, they have a sense of achievement. The enthusiasm of the students has been improved. Nevertheless, the library still faces the problem of the source of students. Subject competition is a competition for college students. Teachers are only responsible for guidance. The library does not have its own specialty and needs to recruit students from all secondary schools. Therefore, the library can cooperate with all secondary colleges to select excellent students. Through horizontal cooperation with professional colleges and departments, which can provide better help for students to participate in innovative discipline competitions, write scientific research papers, and develop new technologies. Library professionals have great advantages in information retrieval and data acquisition. Cooperation with professional teachers can better help students improve their performance. Most competitions allow two instructors, so librarians can also cooperate with teachers to give full play to their respective advantages and jointly guide students' subject competitions to achieve better results.

In order to solve the problem of the source of students participating in the competition, the library should also strive to establish direct contact with college students. First, the library can strengthen the information retrieval training for students. It can consider arranging an information retrieval training class or lecture once a week to make students familiar with the library resources and services, and improve the information retrieval ability. Then organize a university-wide information

retrieval competition every year. Among the award-winning teams in the school competition, excavate and cultivate potential student teams to participate in the national competition. Some majors offer information literacy courses, which are taught by teachers in the library. We can consider embedding innovation and entrepreneurship education into information literacy courses<sup>[2]</sup>, and excavate excellent students to participate in teams. Second, the library can arrange academic standard lectures. Since universities control the upper limit of credits in the training program, and strengthen the proportion of credits such as practical teaching, the credits of professional courses are compressed, so few academic standard courses are arranged. The library can give full play to its advantages to teach students about academic norms and avoid academic misconduct in students' entries.

## 5. Optimize the space layout in the library for students to compete

Many competitions require students to form teams under the guidance of teachers, and students need to gather together for discussion and rehearsal before and during the competition; In addition, some of the competitions are held online. In order to ensure the effect of the competition, it is better to compete in an independent space without interruption and with good network conditions. With the continuous growth of the number of students participating in the competition, a large number of venues are required. This is quite difficult for ordinary colleges and universities. Even though some colleges and universities have set up maker spaces, the number is limited after all, and there are still quite a number of competitions that have nothing to do with entrepreneurship, so a large number of students cannot use maker spaces. The library has certain advantages in creating a communication and exchange platform for innovation and entrepreneurship education<sup>[3]</sup>, which can be a supplement to entrepreneurship college. The campus library usually has a certain space for the self-study room or reading room. If the library can transform part of the space into a maker space integrating data and network (Wei Xiaohui, 2020; Wang Yali)<sup>[4-5]</sup>, the studio and seminar room for the application of the participating students, which will largely solve the shortage of the participating space. At the same time, the preparation or participation of the whole school students in these venues will help attract more students to participate in the discipline competition, and also facilitate the formation of teams of students with different knowledge structures and from different majors, which will help the competition team to achieve better results. The library usually has a small lecture hall, which allows students to regularly share the experience of the competition and grow together; You can also invite professional teachers from various colleges to give lectures on competition guidance.

## 6. Strengthen collaboration between schools and enterprises<sup>[6]</sup>

For domestic ordinary undergraduate colleges and universities, the orientation of running a school is mainly to serve the regional economy, especially to provide high-quality applied talents for local enterprises. There is a certain connection between schools and employers. Many employers want to recruit excellent graduates, which is usually difficult to achieve only by the campus recruitment fair before graduation, so some enterprises intend to establish contact with students in advance. In addition, in response to the needs of university students' discipline competitions, the library can cooperate with the Youth League Committee, the Student Office, the College of Entrepreneurship, the Employment Guidance Center and other departments to carry out some targeted services, invite enterprises outside the school to hold the theme lectures of the discipline competitions, which can draw on the current hot "real person library" activities. These targeted services can not only spread the spirit of discipline competition, cultivate competition awareness and stimulate potential energy to students through enterprises, but also help enterprises establish contacts with students in advance.

If enterprise resources can be introduced into the discipline competition system, it will be a win-win situation for both schools and enterprises. First, many competitions have school competitions and a large number of students to participate. If enterprises are allowed to sponsor the school competitions, it can play a very good role in publicity, and it is easier to get students' recognition when recruiting on campus. The financial sponsorship of enterprises can not only be used for the title of the school competition, but also for the reimbursement of the competition costs for students. Especially, the finals of some national-level competitions are live competitions. Students who need to participate in other cities under the guidance of teachers will inevitably incur more travel expenses. Many schools do not have sufficient funds for running schools, so they cannot support too many students to go out to participate in the competition, so to corporate sponsorship is very important. Second, the establishment of enterprise mentoring system, inviting enterprise leaders or senior business personnel to participate in the guidance of the discipline competition, so that enterprises can contact with students in advance and conduct in-depth exchanges, which is conducive to the discovery of talents by enterprises, and also conducive to the familiarization of students with enterprises, thus promoting the employment of students. Third, many competitions require competitors to provide innovative knowledge products, such as innovative entrepreneurial projects, the development of a new technology or new product, or business model innovation. In the process of guiding the student competition, the enterprise mentor may also be inspired to improve the operation and management of the enterprise or start new projects. Fourth, some national competitions require cooperation with enterprises and use their products or brands to

participate in the competition, such as the National Business Elite Challenge International Trade Business Simulation Competition and the National Innovation and Entrepreneurship Competition of Financial Institutions Cross-border E-commerce Live Competition. For enterprises, they do not need to provide financial support, but only need to arrange professional personnel to assist and guide them, and they can get free promotion services nationwide.

## 7. Create the excellent discipline competition database of the university

The library can also use its own advantages to establish a database of discipline competitions. Both students' participation in the competition and teachers' guidance in the competition need a process, from unfamiliar to skilled, and then to refined. This process requires not only the accumulation of experience and capital investment, but also the accumulation of knowledge and the inheritance of experience. In this regard, the library should play an important role, making use of the advantages of the library to establish the discipline competition database. Colleges and universities with sufficient funds can purchase professional databases, such as the University of Science and Technology of China, which has purchased the global university student innovation, entrepreneurship and employment database for the study and use of teachers and students. Most ordinary undergraduate colleges and universities have limited funding, and the library has no ability to purchase similar databases, which can consider establishing an online knowledge database of excellent subject competition works of the university, which includes the award-winning works of important competitions participated by students of the university, the notice of each competition over the years, scoring rules, award-winning documents, award-winning experience and other materials. After the establishment of the database, the participating students can not only understand the rules of various competitions, be familiar with the competition process and work requirements, but also learn from the excellent works of previous years and learn from the experience of previous years to ensure that the quality of the entries is improved year by year. In addition, the management of the discipline competition is still at the initial stage. The statistics of the items, personnel, achievements, awards and other information are handled manually, which is relatively chaotic. It is urgent to carry out digital management, and all materials are archived. After the establishment of the discipline competition database, the relevant information is included, and the authority can be provided to the heads of relevant departments, allowing them to search relevant files according to any keyword. With the help of financial media, we can actively strengthen publicity and promotion, through the library's home page, bulletin board, library's WeChat official account, campus news, school's WeChat official account and other publicity reports, to improve the utilization rate of the subject contest database.

## 8. Conclusion

Subject competition is an important component of innovation and entrepreneurship education, which helps to improve the innovation and entrepreneurship abilities of participating students. University libraries should play an important role in innovation and entrepreneurship education. So libraries should take the following measures: fully utilize their teaching staff to form a competition teaching team, establish incentive mechanisms for students, transform the library's internal venues to facilitate students' participation in competitions, establish a school enterprise cooperation mechanism to introduce social resources, and establish a database of excellent entries from the school. As long as the above measures are implemented, the library will inevitably achieve excellent results in guiding subject competitions.

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