

## Mathematics major students' experience of "Internet Plus" and other innovation and entrepreneurship competitions

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**Abstract:** In 2015, A leader clearly put forward the "Internet +" action plan, after which Jilin University undertook the first" Internet +" Innovation and Entrepreneurship Activity Competition for college students (hereinafter referred to as the competition). The launch of the competition further promoted the training of innovative and entrepreneurial talents, and the practice of "mass innovation, Wanwei innovation". The purpose of the activity is to enlighten their sense of innovation, cultivate their entrepreneurial spirit and cultivate their sense of innovation.

Keywords: Innovation Consciousness; The Spirit Of Innovation; Data Analysis; Team Work; Practice

### 1. Understanding of "Internet Plus" and other innovation and entrepreneurship competitions

In competition, the need of innovation business knowledge is not only the technology entrepreneurs need to master knowledge, but also in the enterprise knowledge of basic technology, today's workers need also to logical thinking, cognitive level, communication, determines consciousness, learning, communication and management skills are given in such aspects as full and detailed requirements. At the same time, the competition is also an important measure of the government to encourage the growth and development of college students. It is also a platform for college students' innovation and entrepreneurship, which enhances academic exchanges and cooperation with international countries, and will bring more and stronger social education value and economic and cultural significance to the future. With technological innovation as the focus of the activity, the competition has made innovative breakthroughs in terms of connotation and way, driving colleges and universities to comprehensively.<sup>[1]</sup>

### 2. Requirements for mathematics majors in "Internet Plus" and other innovation and entrepreneurship competitions

Innovation and entrepreneurship refers to the innovation achieved through technology innovation, production innovation, product innovation, technology innovation, business model innovation, operation innovation, management innovation, service channel innovation, brand innovation and other aspects of technology innovation in a specific field. The characteristic of innovation and entrepreneurship is entrepreneurship, and the basic requirement for innovation and entrepreneurship is entrepreneurship. Innovation and entrepreneurship not only require creative spirit and entrepreneurial ability, but also need good team leaders and good team members' cooperation in the process of innovation and entrepreneurship. In the competition, it is very important to know yourself and position yourself correctly, play an individual role in the team, show individual advantages, and make the maximum benefit of individual. Only by recognizing your strengths and avoiding weaknesses can the team get the best results. Before participating in the competition, we should have a thorough understanding of the significance of innovation and entrepreneurship, correctly understand ourselves, evaluate ourselves, and strive to give full play to our value. [2]

# 2.1 Laying a good foundation for professional knowledge of mathematics and improve the ability of comprehensive application of professional knowledge.

A solid foundation of professional knowledge in mathematics is one of the necessary conditions for participating in the competition. Theory is the premise of practice, solid theoretical knowledge to solve problems twice the result with half the effort. Take the use of mathematical modeling theory knowledge to solve mathematical application problems as an example. In mathematical modeling problem solving, it is necessary to first clarify the problem and make reasonable explanation hypotheses from the problem, then build a model for the problem, solve the model with mathematical knowledge, and then analyze and test the model, explain the model, find the deficiency, and constantly improve. The knowledge of functions, derivatives, differentials, indefinite integrals and definite integrals can be used to extract, summarize and draw conclusions from the collected information. Lay a solid professional foundation, constantly learn professional knowledge, constantly think, use mathematical thinking to solve problems. To learn professional knowledge, improve the absorption and understanding of knowledge, thinking and reengineering ability. The different directions of mathematical knowledge to accommodate through, comprehensive, flexible use.

#### 2.2 Learn the ability to analyze data. In innovation, it is particularly important to collect data from the market and analyze the collected data.

Correct data analysis can help the market demand of innovation and entrepreneurship exploration, and avoid inappropriate analysis and wrong judgment in the process of innovation and entrepreneurship. Data analysis skills mainly involve understanding, acquiring, processing, expressing and analyzing information. Information recognition ability requires understanding and recognizing information from clues in real life, treating all information as a system, so that we can deeply discover the data contained in information, and understand and recognize the degree of information from different sources. The ability to obtain information requires mastering the ability to use various means to obtain information, including checking the research reports of securities firms, consulting the prospectus or corporate financial reports, observing, problem groups, questionnaires and other means, and researching the information generated according to the requirements of the subject. The main language expression skill of data analysis is to analyze data by selecting and using appropriate statistical methods. According to the specific requirements of the problem, we can use various methods to show the characteristics of the obtained combination information, thus using measurement to clarify the integration situation of the combination information. By using appropriate measurement to describe the different characteristics of the combination information, we can use appropriate image methods, especially by using histogram, boxplot and scatter plot. Describe the characteristics of combination information vividly, so as to explore and understand the data combination and the correspondence with images, especially by using histogram, stem and leaf diagram, boxplot and scatter diagram to illustrate the characteristics of combination information. The inquiry ability of data analysis is mainly developed by evaluating some inference results obtained on the basis of data analysis, and forecasting them. Two or more samples are selected from the whole process. By examining their characteristic differences, according to the scatter plot and approximate straight line of the samples, the possible relationship between the two variables in the samples is speculated, and new questions and methods are proposed by using the conjecture, so as to carry out more in-depth research. Analytical ability is a person's high-level ideological quality. Only in the process of solving problems, hands-on experiments and research, can it be brought into full play.

#### 2.3 Paying attention to practice, seek truth from facts, and solve problems from reality.

Middle school learning, most of the contact is written traditional education. But in practice to solve, only with books is far from enough, from the paper to feel superficial, must know its thing to practice. Learn theoretical knowledge, but also

learn to use knowledge to solve problems, which is a process from knowing, to thinking, and then to practice. The courage to think, timely writing, in the competition, encountered many challenges in the book did not, from the actual, pragmatic, down-to-earth, step by step to solve the problem. Facts are the only way to solve, facts are the only standard for testing truth. The competition has high standards for practice, in practice to find the gap between theory and reality, find the root of the problem, explore the right method. Starting a business is difficult, even more difficult, and requires long-term practice.

## 2.4 Paying attention to teamwork, establish professional quality, correct attribution of success or failure, be good at reflection and keep forging ahead.

The competition is a team cooperation competition, the team should have a good organization, clear goals and division of labor, members should have complementarity. The organizer and leader of the team should have foresight, excellent ability, bold judgment ability, good expression ability, balance the ability and role of internal personnel, dedication ability to the team, make correct decisions, and be able to lead the team to long-term development. The team should have good organization, excellent leadership and close tacit cooperation between the team members. Members of the team should divide their duties, participate in team work, advance and retreat together with the team, and realize the mutual cooperation between managerial talents and technical talents. Moreover, it is very important to establish a good professional quality, the team honest and trustworthy, practical work, confidential, high moral standards. Starting a business is risky. There are successes and failures. When starting a successful business, you need to continue to keep an open mind and keep improving and moving forward. When a business fails, the correct attribution of success or failure is very important. Find out the reasons for failure, adjust the plan in time, constantly improve the plan, and keep a good attitude. Entrepreneurship needs to progress steadily, based on the actual action, inappropriate risk and unconstrained imagination is not long-term.

#### 3. Epilogue

The main activity of "mass entrepreneurship and innovation" is "innovation", and the important participant is "mass". The intension and essence of the competition is to bring a batch of talents intellectual support to the scientific and technological entrepreneurial activity. The competition can also promote Chinese college students to have a broader understanding of innovation and entrepreneurship, understand themselves, and correct their positioning. Is to promote students to lay a good professional knowledge foundation, have a solid basic skills. And let the students realize the importance of practice, learning theoretical knowledge and practice combined, learn to use theoretical knowledge to solve relevant problems. What is needed is for students to learn to extract data, sort out data and analyze data, and get screening information from data under the background of Internet. The innovation and entrepreneurship competition is also a team cooperation competition, which also exercises students' ability of division of labor and cooperation, ability and organizational ability. The success of a team's innovation and entrepreneurship is closely related to the organizational ability of the organizer and the coordination and cooperation ability of each member of the team. There are successes and failures in entrepreneurship. We should correct our attitude, recognize our shortcomings and forge ahead actively. Therefore, in the innovation and entrepreneurship competition, it is necessary to use more comprehensive, more international, more Chinese, more educational and more innovative competitions to increase the enthusiasm for innovation and entrepreneurship, and make innovation and entrepreneurship become the new mission and new responsibility of contemporary college students, so that college students' innovation and entrepreneurship will be full of vitality forever.<sup>[3]</sup>

#### References

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