

Research on the Improvement and Cultivation of College Students' Academic Innovation Ability—Taking H University as an Example

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Abstract. It is of great significance to enhance the academic innovation ability of college students to promote the in-depth development of higher education. A questionnaire survey was conducted around the degree of emphasis on graduation thesis by students and universities, the source of topics, and the embodiment of their own academic ability. Students have weak awareness of discovery, lack of innovative thinking, topic selection divorced from reality, and lack of communication and discussion with tutors and students in the process of writing a graduation thesis. It is suggested to cultivate students' innovative thinking, improve their "quality awareness" of graduation thesis, build a scientific research training platform, train students' academic writing ability through multiple channels, and enhance their academic innovation ability in collaboration to ensure the quality of graduation thesis.

1. Introduction

In China's higher education law, it is clearly pointed out that undergraduate education should help students to have the preliminary ability of academic research,[1]To highlight the importance of the academic value of undergraduate thesis. However, in reality, the quality of the undergraduate thesis is not high and the academic innovation ability of college students is not enough, which seriously hinders the process of the connotative development of higher education and makes it difficult to realize the revitalization of undergraduate education. In this context, the Ministry of Education issued the notice on the implementation of the spirit of the National Conference on undergraduate education in the new era, emphasizing the core position of undergraduate education in talent training, requiring universities to reasonably improve academic challenges, strictly controlling graduation exports, and effectively improving the quality of graduation papers[2]. As the basis of graduate education, the quality of graduation thesis plays an important role in the cultivation of academic research ability. Academic innovation is not only the consideration to ensure that undergraduate graduates achieve the academic level of degree-awarding, but also the key to ensuring the quality of the dissertation, and the life of academic research. Therefore, in the situation of strict "export" for college graduates, it is necessary to improve the academic innovation ability of college students in different degrees, so as to ensure the smooth graduation of students and improve the ability and level of college education. The perspective of an undergraduate thesis, it can explore feasible methods to improve the academic innovation ability of college students, which has high practical value and theoretical significance.

2. Research Object and Method

This survey is aimed at the senior graduates of H University in Anhui Province. According to the actual situation of graduation thesis writing, this paper input time and academic ability of the graduates; the questionnaire was designed by the anonymous way, electronic questionnaire and random sampling method. The content of the survey basically covers the main problems that undergraduate students encounter in writing their graduation thesis, and basically reflects the academic level innovation ability of university students.

3. Result Statistics and Analysis

In this survey, a total of 600 questionnaires were sent out, 511 of which were recovered, with a recovery rate of 85.2%. 511 of them were effective, with an effective rate of 100%. Among them, there are 212 boys, accounting for 41.49%, there are 299 girls, accounting for 58.51%. The highest proportion of science and engineering majors was 52.25%, and that of literature, history and philosophy was 30.14%, followed by economics and management, agriculture, forestry and medicine, arts and sports, accounting for 17.61%.

3.1. Emphasis on graduation thesis

The degree of emphasis on graduation thesis can directly reflect the time and energy input of graduates in thesis writing and is closely related to the quality of the thesis. Based on the perspective of students, it is generally believed that the school level pays more attention to the graduation thesis, which tends to be conservative. As shown in Figure 1, it is believed that 41.29% of the school pays more attention to the graduation thesis, slightly higher than 38.75% of the school that attaches great importance to the graduation thesis, 17.61% of the school generally attaches great importance to the graduation thesis, 1.37% of the school does not attach great importance to the graduation thesis, and 0.98% of the school attaches great importance to the graduation thesis.

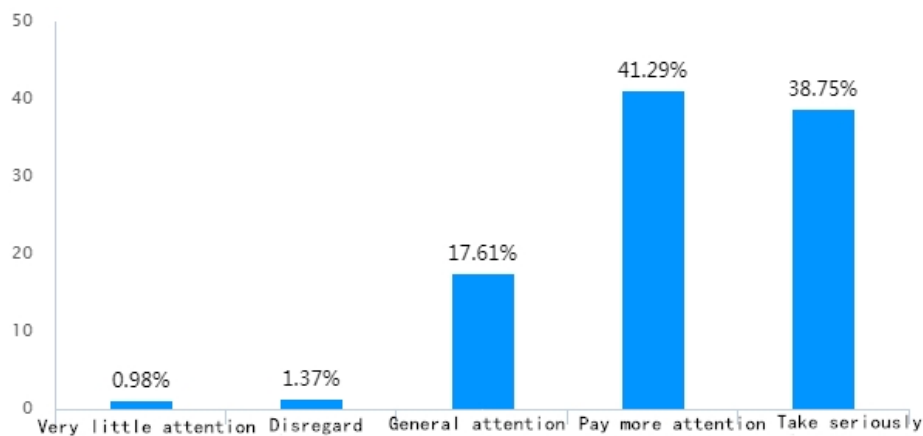


Figure 1. The importance of graduation thesis at the school level

In terms of time input for graduation thesis, 86.5% of college students spend more than three weeks on graduation thesis, 9.2% of them spend two to three weeks, 2.94% of them spend one to two weeks, and 1.37% of them spend less than one week, as shown in Figure 2. It shows that most students spend more time in the process of writing papers.

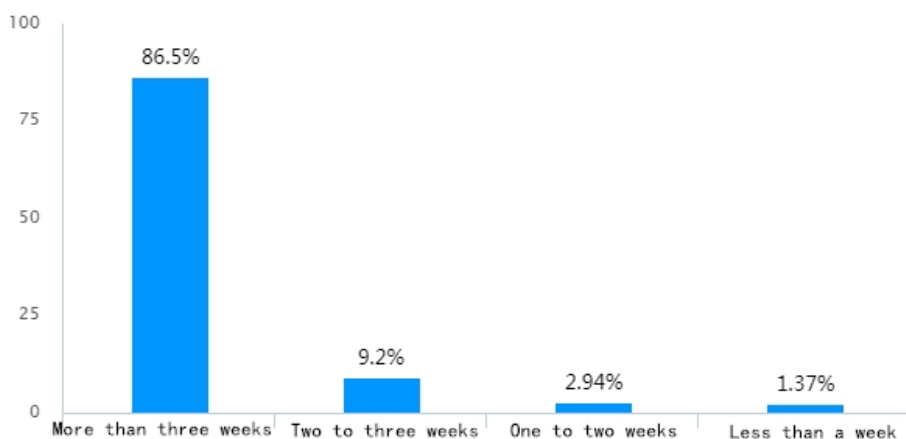


Figure 2. Proportion of time spent on graduation thesis

3.2. Source of graduation thesis topics

Topic selection plays an irreplaceable role in academic paper writing, which determines the key to the smooth development of research. The process of finding problems is the embodiment of testing academic research ability. A good topic selection has a certain depth and breadth, it is a comprehensive process of highly using professional knowledge, and can determine the quality of academic research. As can be seen from Figure 3, 49.9% of the students will decide the topic of their graduation thesis based on their interests, 32.29% of the students will be designated by their tutors, and 9.59% of the students will choose the topic, only 2.74% of students' topics come from practical innovation training projects, and 1.76% of students' topics come from summer social practice. In the topic selection of graduation thesis, the proportion of practical projects is very low, which shows that most college students have not formed the habit of finding problems in social practice, having weak awareness of finding problems, and need to improve their academic innovation thinking.

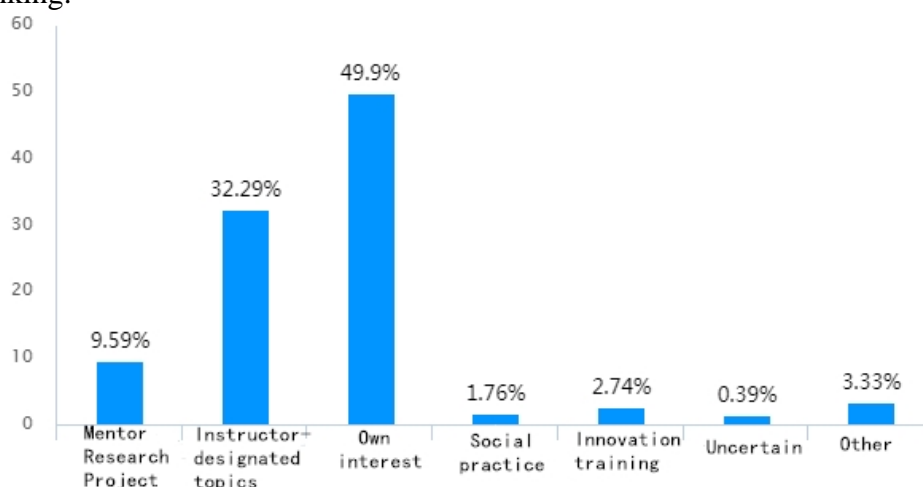


Figure 3. Source of graduation thesis topics

3.3. Reflection of academic writing ability

Graduation thesis is a high embodiment of the four-year academic writing ability of undergraduate courses, which can measure the learning quality of students and the comprehensive ability of academic research to a large extent. In order to complete the opening report and the graduation thesis, college students will actively collect and read the relevant literature to varying degrees, which also proves that the pressure of graduation thesis effectively promotes the students' active learning. Moreover, 24.85% of the students make it clear that their academic writing ability had been greatly improved through the writing of graduation thesis, 37.96% of the students said that their academic writing ability had been greatly improved, 31.12% of the students thought that their academic writing ability had been slightly improved, only 6.07% of the students thought that there was no improvement.

As for the innovation and challenge of graduation thesis, as well as the attitude and handling of duplicate checking, we can see Table 1. First of all, 68.69% of the students think that their graduation thesis is a little innovative, 13.7% of the students think that their graduation thesis is not innovative at all, 11.74% of the students think that their graduation thesis is very innovative. In general, the innovation of graduation thesis needs to be improved. Secondly, 69.08% of the students think that the challenge degree of the graduation thesis is appropriate, although there is some pressure, it can be successfully completed, 24.26% of the students think that they are fully confident to deal with the challenge brought by the graduation thesis, indicating that the difficulty of the graduation thesis still has room to rise. At last, 83.95% of the students support and 12.13% of the students oppose the paper duplication, which shows that most of the students have a correct academic attitude and a preliminary understanding of the students' moral standards. In the case of too high duplicate check, 68.1% of the students choose to complete the modification independently, which is much higher than 27.79% of the students who seek help from their tutors, which indicates

that the tutors can further deepen the guiding role of the undergraduate thesis.

Table 1 Statistics on the innovation, challenge, and attitudes and treatment methods of graduation thesis

Question	Option	Concentration ratio
Do you think your graduation thesis is innovative?	Very innovative	11.74%
	A little innovation	68.69%
	No innovation at all	13.7%
How about the challenge of your graduation thesis?	Fully confident to deal with	24.26%
	Feel the pressure, but can finish	69.08%
What is your attitude towards the graduation thesis?	Support Against 12.13%	83.95%
	Against	12.13%
How will your graduation thesis be overweight?	Seek tutor help to modify	27.79%
	Self-completed modification	68.1%

4. Conclusions and Suggestions

4.1. Conclusions

On the topic of the graduation thesis, college students' ability to find problems is relatively weak, so it is difficult to find research problems in social practice. They are more dependent on tutors in selecting topics and lack the ability of independent research. The ultimate goal of academic research is to serve for solving practical problems, and the ultimate goal of tutor guidance is to help students move towards the path of independent research. The problems existing in college students' selection of topics show that in the process of education, colleges and universities still adopt traditional education concepts and methods, and the selection of topics is divorced from the reality, the graduation thesis can't reflect the social reality problems well. The lack of depth and breadth of research problems surface exposed to the lack of innovative thinking of college students, and in essence, revealed the disadvantages of traditional education mode in Colleges and universities. In order to really improve the quality of the undergraduate thesis, enhance the academic innovation ability and academic level of college students, we need to continue to promote the process of connotative development of higher education.

In academic ability, first of all, the tutor's guidance to the students' graduation thesis is a powerful support to improve the students' academic innovation ability. Students' own academic vision, innovative thinking and professional knowledge application ability can be learned and exercised under the tutor's guidance. Secondly, the undergraduate students have realized that their graduation thesis is less innovative, but they have a correct academic attitude and basic academic literacy. Most of the students support duplication-checking and are willing to abide by the academic ethics. In terms of weight reduction and revision, they are more inclined to complete it by themselves. They lack certain communication with their tutors and the revision of graduation thesis is relatively closed.

4.2. Suggestions

Firstly, we need to innovate the teaching form. The quality of College Students' graduation thesis is not high and the innovation is not enough. We need to change the traditional teaching form and cultivate students' innovative thinking. At present, the structure of some courses in higher education is aging, the content of knowledge is out of touch with the social reality, too much emphasis is placed on the subject content, and the cultivation of students' interest in scientific research and research methods is ignored. The outmoded curriculum system, teaching content and teaching methods lead to the outmoded knowledge and the lack of methods, which directly affects the improvement of students' innovation ability[3]. The quality of teaching is the core of determining the quality of the graduation thesis. Injecting innovative ideas into classroom teaching can stimulate students' interest in scientific research, create conditions for improving the quality of graduation thesis from the perspective of students' main body, and only pay attention to the accumulation of students' writing knowledge and ability in daily teaching, college students may gradually improve their academic innovation ability and research depth and level. Moreover, the promotion of

academic innovation ability runs through the whole cultivation process of college students, which is the main way to lay a solid theoretical foundation for students' majors. It can discover their interest in scientific research, guide students to take the initiative in learning, and enhance college students' awareness of "innovation", "problem" and "quality" of graduation thesis[4].

Secondly, build a platform for scientific research and training. In view of the lack of academic paper writing courses in Colleges and universities, Tsinghua University took the lead in setting up the required course of writing and communication, which was widely praised by the society and achieved fruitful results[5]. Subsequently, Zhejiang agricultural and Forestry University also set up the course of university writing, seeking a breakthrough in improving the writing expression ability of college students, especially in logical thinking and critical thinking ability[6]. There is no doubt that teaching academic writing skills through courses is an effective way to improve the academic innovation ability of college students, but extracurricular scientific research training is undoubtedly an important way to quickly train students' writing and expression ability. As the Academic Salon and reading seminar activities in the second classroom, they provide opportunities for students to express themselves, and train their abilities of finding, analyze and solve problems. Colleges and universities can integrate the advantages of existing working papers, teaching papers and academic papers Resources of libraries, learn and engineer offices, research centers, science and technology offices and other departments, build a scientific research learning training platform shared by teachers and students, and provide convenience for improving students' academic innovation ability. The establishment of scientific research training platform can smooth the channels of academic communication, make up for the lack of high-quality educational resources inside and outside the classroom, and also alleviate the pressure of the shortage of academic paper guidance professional teachers. Moreover, students participate in academic writing training by writing project applications, social practice projects, campus news publicity, planning summary and other ways, and also test their basic knowledge and skills. Only when scientific research training is integrated into the daily course learning of college students and cultivated in the normal training after class can the quality of graduation thesis change.

References

- [1] China National People's Congress. Higher Education Law of the People's Republic of China [EB/OL].2019-01-07[2019-08-02].<http://www.npc.gov.cn/npc/c30834/201901/9df07167324c4a34bf6c44700fafa753.shtml>.
- [2] Ministry of Education. Notice on the implementation of the spirit of the Undergraduate Education Work Conference of the National Higher Education in the New Era [EB/OL]. 2018-08-27[2019-6-1].http://www.moe.gov.cn/srscite/A08/s7056/201809/t20180903_347079.html.
- [3] Zhu Xuedao, Deng Daogui. Limitations and Countermeasures of Undergraduate Quality Control in Normal Universities[J]. University Teaching in China, 2009(07): 61-62.
- [4] Zeng Guisheng, Luo Shenglian, Tong Yongfen, Luo Xuwei, Zou Jianping. Quality Dilemma and Improvement Strategy of Undergraduate Thesis of Science and Engineering—Taking Applied Chemistry of Nanchang Aviation University as an Example[J]. University Education Science, 2017(06): 57-62.
- [5] Tsinghua University. Tsinghua University's fall semester "writing and communication" course report shows fruitful results [EB/OL].2019-01-13[2019-6-9].http://tv.tsinghua.edu.cn/publish/video/10210/2019/20190110152827409624078/20190110152827409624078_.html.
- [6] College of Liberal Arts and Law, Zhejiang Agriculture and Forestry University. The school started the general course of "University Writing" [EB/OL].2018-07-26[2019-6-9].<http://www.zafu.edu.cn/Info/1003/80720.html>.