Exploration on Improving the Quality of Undergraduate Graduation Design (Thesis) Under The New Situation

-- Take S University As An Example

Mingxing Wang

School of Teaching Affairs Office, Anhui Sanlian University, Anhui, China

Abstract

The undergraduate graduation project (thesis) is an important practical link in the training of applied talents, an important path to achieve training goals and improve professional comprehensive ability, and a comprehensive test of the training effect of students' comprehensive quality and practical ability. Taking S College as an example, this paper analyzes the problems existing in the graduation design (thesis) of the current application-oriented undergraduate colleges and universities, and proposes improvement measures based on the author's actual work situation, so as to improve the quality of the graduation design (thesis) of the application-oriented undergraduate colleges and universities, and also for the future. Graduation design (thesis) work provides a certain reference, and truly cultivates high-quality applied professionals who meet the target requirements.

Keywords

Graduation project; Applied undergraduate; Quality.

1. Introduction

Whether it is a comprehensive undergraduate university or an application-oriented undergraduate university, the graduation project (thesis) is a comprehensive practical course that every undergraduate must complete before graduation, an important part of the undergraduate talent training program, and an important reference index to measure the quality and level of teaching in colleges and universities. In the process of completing the graduation project (thesis), undergraduates condense and apply the knowledge they have learned, which fully reflects their ability to combine theory and practice learned in the four years of university, and also shows the school and teachers their ability to apply knowledge, propose and solve problems, innovative thinking, language expression and writing ability [1].

Due to the new situation of the normalization of the epidemic, the large-scale expansion of university enrollment and the difficulty of employment of college graduates, the decline in the quality of undergraduate graduation projects (theses) has attracted the attention of education departments and relevant scholars, and the quality assurance of graduation projects (theses) has been severely challenged, and long-term development will not only affect the teaching quality of individual universities, but also affect the overall quality of undergraduate education as a whole. At the beginning of 2021, the Ministry of Education issued the Notice of "Measures for Sampling Inspection of Undergraduate Graduation Thesis (Design) (Trial)" (Education Supervisor [2020] No. 5), in order to strengthen and improve the monitoring of education supervision and evaluation and ensure the basic quality of undergraduate talent training, colleges and universities are required to conduct a random inspection of undergraduate graduation theses once a year, and the sampling object is the thesis awarded to the bachelor's degree in the previous academic year, and the sampling ratio should not be less than 2% in

principle, and focus on the significance of topic selection, writing arrangement, logical construction, Professional competence and academic norms are examined [2].

Based on my actual work experience, the author puts forward some practical and effective solutions to the problems existing in the current undergraduate graduation project (thesis), so as to provide certain reference for future graduation design (thesis) work, so that the undergraduate graduation design (thesis) work can be further improved and improved.

2. The Problems of Undergraduate Graduation Project (Thesis)

2.1. Lack of innovation in the selection of graduation project (thesis) topics

S College is an application-oriented undergraduate university focusing on science and engineering, such as traffic engineering, computer science and technology, mechanical design and manufacturing and automation, all of which aim to cultivate students' practice and innovation. However, in the actual graduation project (thesis) topic selection link, most of the traditional selection of the title, most students lack academic literacy and training, although one person one topic, but the graduation design (thesis) topic selection lacks novelty, does not closely track the new problems and new situations of social and industry development, lacks sensitivity to hot topics, and is more blind in topic selection, so that it is difficult to effectively refine and summarize practical problems, can not truly achieve the combination of theory and practice, and it is even more difficult to achieve the purpose of innovation.

2.2. The quality of the graduation project (thesis) needs to be improved

An excellent graduation project (thesis) requires a lot of energy and time from the instructor, in view of the lack of scientific research training in the early stage of most undergraduates, there is no way to start when writing the graduation project (thesis), resulting in the quality of the graduation (design) thesis is not high, excellent graduation design (thesis) accounts for a small proportion, taking the distribution of undergraduate graduation design (thesis) grades of S College 2021 as an example, the number of students with excellent graduation design (thesis) scores is only 2.2%, and the number of students with intermediate grades accounts for 56.9%, The number of excellent graduation projects (theses) needs to be improved.

2.3. The production practice of graduation project (thesis) content needs to be improved

The author counted the completion of graduation projects (theses) in social practice such as experiments, internships, engineering practices and social surveys in the past three years of S College, and the proportion of graduation projects (theses) carried out in social practice in 2019, 2020 and 2021 of S College was 72.03%, 78.12% and 86.62% respectively, showing an increasing trend year by year, far greater than the requirement that the graduation design (thesis) completed in social practice reach 50% or more.

The graduation project (thesis) instructors show a younger trend, but their corresponding practical experience and scientific research ability are relatively lacking when guiding the production of practical graduation projects (theses). Secondly, the full demonstration of the practical graduation project (thesis) is based on the effective support of research data, but during the internship, in view of the confidentiality system of the enterprise company, it is difficult for the intern to obtain first-hand real data, resulting in the content of the student's graduation project (thesis) is relatively empty, and it lacks convincing, pertinence and feasibility when proposing solutions and measures.

3.   The Cause Analysis

3.1.   Students do not invest enough time and energy

The graduation project (thesis) is a large and complex system engineering that undergraduates must complete before graduation, which requires students to invest enough time and energy [3]. Even if other courses such as general courses, professional courses, and elective courses are passed during the school period, the graduation project (thesis) is not completed, which will directly affect the successful graduation of undergraduates. However, there are still many students who do not attach importance to the graduation project (thesis) and have a fluke mentality, and every year some students cannot graduate because of the graduation project (thesis). At the student level, the influence on the quality of the graduation project (thesis) is mainly divided into two aspects: external factors and internal factors.

3.1.1. External factors

External factors are mainly manifested at the social level, with the rapid development of China's economy and the improvement of quality of life, the weight of education in people's hearts is self-evident. The education and quality of young people are getting higher and higher, the number of graduates every year is increasing, social competition has become more intense, and more young people have formed an "involution" situation in order to fight for limited social resources. Therefore, many students spend their time and energy on job search, graduate school entrance examination, public entrance examination and other affairs, and lack investment in graduation project (thesis) work. In this case, even if the instructor is conscientious and responsible, the students who face this kind of negative treatment of the graduation project (thesis) are not enough.

3.1.2. Internal factors

Mainly reflected in students' own ability, undergraduate students compared with graduate students their academic level and writing ability is relatively weak. In the usual study life, there is no systematic training in academic writing ability, nor have I learned how to use tools for effective literature retrieval, resulting in students being afraid of difficulties when carrying out graduation projects (theses), and even using negative ways such as procrastination to treat graduation projects (theses), resulting in an embarrassing situation that as long as the instructor does not urge them, they will not write, and even temporarily hold Buddha's feet and scrape together other people's papers to cope with the handover.

3.2.   The scientific research level and informatization ability of teachers need to be improved

Under the background of the "Internet+" era, S College tried the "CNKI" graduation design (thesis) management system for the graduates of the class of 2021 (hereinafter referred to as the "final management system") for the graduates of the 2020-2021 academic year, and officially used the final management system from the graduates of the class of 2022. In the undergraduate graduation project (thesis) work regulations of S College, the qualifications and responsibilities of the instructor are clarified, and in the requirements of the instructor, it is proposed that the instructor should be conscientious and conscientiously undertake the guidance work, regularly check the progress and quality of the student's graduation project (thesis) work, answer questions and guidance in a timely manner, and record the guidance in detail, but there are still deficiencies at the teacher level, mainly manifested in:

3.2.1. The scientific research level of young teachers needs to be improved

In recent years, the expansion of major colleges and universities has increased the number of college graduates year by year, but the number and level of teachers are not compatible with the scale of student increase, and the teacher-student ratio has attracted attention. S College

mainly arranges the number of students guided by each instructor according to the two major types of humanities, economics and management and science and engineering. On the one hand, in addition to guiding the graduation project (thesis), the instructor also has teaching tasks, teaching and research projects, etc., so that the instructor has insufficient energy and extensive management process in guiding and tracking management. On the other hand, in recent years, there are more new young teachers, the instructors are younger, their own scientific research ability is limited, their professional quality needs to be improved, and they need to strengthen their learning in the cutting-edge knowledge of the subject, and at the same time, they lack certain practical experience compared with old teachers when guiding students' graduation project (thesis), especially for the limited guidance ability on the substantive content of the graduation project (thesis).

3.2.2. Teachers' informatization ability is weak

The introduction of the end-of-the-hood management system has improved the management level of the information process of undergraduate graduation project (thesis) of S College, improved the management efficiency of the school's academic affairs department and each second-level college, and realized paperless office. At the same time, it facilitates the form of communication between teachers and students to ensure that teachers and students spend more time on thesis guidance and thesis writing. From the double selection of teachers and students, the assignment of the instructor to the defense and grade evaluation, all of them can be carried out in the final management system.

Teachers' information teaching ability shows a decreasing trend with the increase of age or teaching experience, young teachers mostly belong to the new generation of digital natives, long-term under the "feeding" of electronic products, more sensitive to new technologies, in the face of new education technology products quickly to get started [4]. For old teachers, they have been in a fixed teaching environment for a long time, and the guidance of graduation project (thesis) is also accustomed to offline work, and the new technology equipped by the school is slow to get started, and the operation steps of the final management system are more cumbersome for old teachers due to the limitation of computer operation capabilities.

3.3. There are "two skins" problems in system and implementation in process management

The management department of S College attaches great importance to the quality of undergraduate graduation project (thesis), and adopts the two-level management system framework of the university and college. From the start of the graduation project (thesis) work to the final unified document filing, a series of guiding policies and systems have been formulated, special inspections have been organized and carried out on the management of the undergraduate graduation project (thesis) process, and a three-phase inspection mode of "early, middle and late" with the characteristics of the university has been established. However, because of the problem of "two skins" between the system and the implementation, the top-level system design is still relatively perfect in the process of management and supervision, and the actual implementation is still in an embarrassing situation of form. There are no substantive constraints and specific punishment measures for teachers and students in the graduation project (thesis) work of each college, which affects the quality of the graduation project (thesis).

4. Measures to Improve The Quality of Graduation Projects (Theses).

4.1. Increase students' investment of time and energy to improve subjective initiative

Writing a high-quality excellent graduation project (thesis) requires students to spend time and energy, read a large number of literature in advance, and have a solid professional theoretical

basic knowledge and writing ability. On this basis, the school also assigns a supervisor with intermediate or above professional title or master's degree or above for each student to guide students to complete the graduation project (thesis), which indicates that the completion of the graduation project (thesis) requires effort. Some students study hard for the graduate school entrance examination and are admitted to graduate school as they wish, but if they cannot graduate because of the lack of difficult awareness and mental preparation for the graduation project (thesis), which affects further education, it will not be worth the loss.

Therefore, after students enter the university, counselors and classroom teachers should lead students to study the school's documents on graduation project (thesis), student status management measures and other documents as soon as possible, so that students can realize the importance of graduation project (thesis). Schools should carry out more symposiums and academic exchange meetings to encourage students to actively participate and create a good academic atmosphere. The graduation project (thesis) helps to improve students' awareness of problems, and in the process of completing the graduation project (thesis), they can use the theoretical knowledge and basic skills they have learned to solve the practical problems of the major, so as to exercise their comprehensive ability. These comprehensive abilities are very beneficial for entering social work and further education in the future.

4.2. Explore new models and encourage diversified identification

At present, the graduation design (thesis) work recognition form is relatively single, most college graduation design (thesis) is mainly through writing, plagiarism check rate through the form of later participation in the defense to determine the completion of the graduation design (thesis) work. As a university that cultivates application-oriented compound talents, it should actively explore new methods, further promote the reform of graduation design (thesis), and establish diversified forms of graduation design (thesis) according to the actual situation of the university under the premise of ensuring the high quality of graduation design (thesis). After reaching the double selection of teachers and students, encourage students to actively participate in various discipline competitions at all levels organized by the college, increase students' participation, cultivate students' practical ability and research ability, stimulate innovation awareness, improve students' hands-on ability, and participate in discipline or skill competitions and college student innovation and entrepreneurship projects; Publication of papers; Apply for intellectual property rights, national patents, etc., to improve the coverage of the recognition of diversified achievements of graduation projects (theses).

4.3. Do a good job in "combined fists" and improve teachers' informatization ability

Play a good "combination box", give full play to the quality supervision role of instructors in graduation projects (theses), and further improve teachers' informatization capabilities. First of all, the college should form a technical assistance pairing mechanism for young teachers and old teachers, lead old teachers to improve their computer operation ability, and each college will conduct centralized training once a year on the operation process of the final management system, and arrange professionals to provide answers to questions, and further optimize the combination of online and offline guidance mode.

Secondly, establish a sound guidance and reward system, after the completion of each undergraduate graduation project (thesis) work, the school management department timely counts the number of excellent graduation projects (theses) at the university and college level, commends the selected student authors, issues honorary certificates, and compiles the excellent graduation projects (theses) into a volume for exchanges among colleges. For excellent graduation project (thesis) supervisors, additional lesson time subsidies are included. When the instructor guides the excellent graduation project (thesis) to a certain number of

papers, it will be rated as "excellent instructor" and a bonus will be issued, and at the same time, the college recommendation work will be quantitatively scored, and the score will be included in the flat assessment, so as to achieve the role of promoting reform with evaluation and leading the surface with points.

4.4. Give full play to the advantages of school-enterprise cooperation and improve the ability of the "dual tutor system"

As an application-oriented university, it is located in the provincial capital city, with unique geographical advantages, and enjoys the resources of the provincial capital city. School leaders and management departments should give full play to the resource advantages of talents, disciplines, experimental conditions and other resources, and achieve complementarity and win-win through the integration of industry and education. To coordinate the resources of school-enterprise cooperation, it is necessary to unite relevant enterprises, institutions and scientific research institutes, etc., and seek talents with rich practical experience in cutting-edge enterprises and internship bases in the field for joint guidance, so as to train students and cultivate a large number of outstanding talents for the society [5].

The "dual tutor system" under the school-enterprise cooperation model reflects the academicity and rigor of the graduation project (thesis) requirements, and also realizes the authenticity and innovation of the graduation project (thesis) requirements, so that students can focus on case enterprises according to their internship practice, employment intentions and interests, organically combine theory and practice, take research tasks to practice, and study with practical experience.

5. Conclusion

As the backbone of China's universities, application-oriented undergraduate universities have arduous responsibilities and tasks. Graduation design (thesis) is one of the important means to exercise and cultivate the comprehensive ability of undergraduates, its quality is one of the standards to measure the teaching level of colleges and universities, and accompanied by the characteristics of long cycle, wide content, and many aspects, so to improve the quality of undergraduate graduation design (thesis) requires the management department, instructors, students three subjects to work together to solve the problems existing in the current undergraduate graduation design (thesis), ensure that the quality of undergraduate graduation design (thesis) is effectively improved, and lay the foundation for the society to continuously transport application-oriented and composite talents.

Acknowledgments

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