

Exploration on the Reform Path of Innovation and Entrepreneurship Practice Education for Engineering Students in Local Universities

Peng Wang, Xiaoya Qu, Na Li *, Jinfeng Sun

Hebei Key Laboratory of Flexible Functional Materials, School of Material Science and Engineering, Hebei University of Science and Technology, Shijiazhuang 050018, China

* Corresponding Author

Abstract. In view of the serious shortage of practical education compared with theoretical education in the current innovation and entrepreneurship education in local colleges and universities in China, this paper explores and practices how to carry out the practical education of mass innovation and innovation for engineering students in local colleges and universities. This paper analyzes the talent training objectives, the characteristics of students and the practice of entrepreneurship and innovation education in local colleges and universities, summarizes the common problems existing in the education of engineering students in local colleges and universities, puts forward reform measures and solutions, and carries out practice.

Keywords: Innovation and Entrepreneurship Education; Local Universities; Engineering Students; College Students Innovation and Entrepreneurship Team.

1. Current Situation Analysis of Innovation and Entrepreneurship Practice Education in Local Colleges and Universities

At present, the innovation and entrepreneurship reform carried out by colleges and universities in China has made some progress, but there are still many problems. For example, the understanding of the meaning of innovation and entrepreneurship is not deep enough. In the teaching process of innovation and entrepreneurship, the teaching mode is single, the course resources related to innovation and entrepreneurship are few, and the content is not rich enough [2-4]. However, compared with the theoretical teaching of innovation and entrepreneurship, there are more and more serious problems in the practical education of innovation and entrepreneurship in Chinese universities, especially in local universities. "Emphasis on theory, light on practice" is a problem in the process of innovation and entrepreneurship teaching in many local universities, and it is also contrary to the current engineering education. In order to improve the teaching quality of innovation and entrepreneurship in colleges and universities, it is necessary to change educational concepts, promote the reform of training innovative and entrepreneurial talents, and establish and improve the teaching system of innovation and entrepreneurship [8-10].

In view of the lack of practical education in the process of entrepreneurship and innovation education in local colleges and universities, this paper analyzes the root causes of the problems and discusses how to solve them for engineering students in local colleges and universities, and explores and practices the new path of entrepreneurship and innovation practical education.

2. Analysis of the Root Causes of the Problems Existing in the Practice Education of Innovation and Entrepreneurship in Local Universities

The problem that the practical education of innovation and entrepreneurship in local universities lags behind the theoretical education of innovation and entrepreneurship can be attributed to the following reasons.

2.1. Grassroots Teaching Units and Teachers Do Not Pay Enough Attention

Grassroots teaching units and teachers in local colleges and universities, which account for the main body of colleges and universities, generally do not pay enough attention to mass entrepreneurship education, do not recognize the current economic and social situation, do not understand the connotation of national policies, and do not think about the problem as a student. Innovation and entrepreneurship education is not only a matter of “double first-class” universities or a few students, nor is it something to be done for the sake of winning awards and money. It is something that must be implemented in the training of all college students in order to meet the needs of China’s current economic and social development. Only in this way can the country’s innovation-driven development strategy and economic quality, efficiency and upgrading be successfully realized [11-13].

2.2. Students Lack Enthusiasm

The level of students in local colleges and universities is generally at the medium level, the basic innovation ability is not very strong, and the lack of entrepreneurial experience, so the concept of mass entrepreneurship education is generally distant. At the same time, under the influence of traditional educational concepts, engineering college students in school is to learn professional skills, can solve the engineering problems in the professional field can be, innovation and entrepreneurship training is to mix a few innovation and entrepreneurship credits, to spend a lot of effort to engage in innovation and entrepreneurship is not serious business, there are many students with such ideas. Therefore, entrepreneurship and innovation education generally does not have a fertile soil environment among engineering students in local colleges and universities, so the enthusiasm of students to participate in innovation and entrepreneurship practice is not high, the coverage of innovation and entrepreneurship practice education is limited, and the real intention is less.

2.3. Few Successful Cases of Student Entrepreneurship

Compared with the “double first-class” colleges and universities, Almost all undergraduate students can publish papers in high-level international journals or authorize invention patents in high-level universities. Although local high efficiency will occasionally have undergraduate students publish high-level journal papers and authorize patents, the proportion is very small. The current situation of the practice of innovation and entrepreneurship education leads to the general opinion of students in local universities that innovation and entrepreneurship education is just a formality, and it is difficult to achieve any significant results.

3. The Solutions to the Problems Existing in the Practice Education of Local Colleges and Universities

According to the root causes of the problems existing in the practice education of innovation and entrepreneurship in local universities, the following solutions are put forward.

3.1. Strengthen Education and Guidance

Innovation and entrepreneurship education should not stay in slogans and theories. Local colleges and universities should strengthen the publicity, education and guidance of the importance of innovation and entrepreneurship education in personnel training, not only for middle-level teaching units, but also for each teacher and student, so that all teachers and students can realize that innovation spirit and entrepreneurial consciousness are the necessary qualities for talents training in Chinese colleges and universities, students can exercise, understand, and enhance their ability and quality in practice.

3.2. Fully Stimulate Students’ Enthusiasm

To stimulate students’ enthusiasm for innovation and entrepreneurship practice, we should not only work hard from the school’s policy system and establish an incentive mechanism, but also give full

play to the ideological guidance role of teachers in innovation and entrepreneurship practice. The ideological and political education will be integrated with innovation and entrepreneurship education to enhance students' feelings of home and country and sense of responsibility, so that students can realize the importance of innovation and entrepreneurship education to the country and society, and the importance of their own development. Make students understand that innovation and entrepreneurship education is an education that all students should receive, not a small number of students should receive education, innovation and entrepreneurship practice education is a practical process of exercise, rather than simply participate in competitions or declare projects to deal with the final results, to improve the spirit of innovation and entrepreneurship in the practice, so as to improve their own quality.

In short, in order to improve the current situation of shortage of teachers, low enthusiasm of students and shortage of practical resources in local colleges and universities, it is necessary to take multiple measures at the same time, establish a correct concept of innovation and entrepreneurship education, train teachers with a strong sense of responsibility, stimulate the enthusiasm of all students for innovation and entrepreneurship practice, establish a long-term incentive mechanism, and improve the guarantee conditions for innovation and entrepreneurship education.

4. Conclusion

To sum up, the improvement of the quality of innovation and entrepreneurship practice education for engineering students in local universities needs the attention of grassroots teaching organizations, make full use of the new concepts, new methods and new ideas of young doctors, as well as their high enthusiasm for work, incorporate them into teaching and research teams, train them to become responsible and capable teachers of innovation and entrepreneurship practice, and integrate ideological and political education with innovation and innovation education. The establishment of innovation and entrepreneurship teams among undergraduates and the integration of teachers' research topics with undergraduate' innovation and entrepreneurship practice education not only solved the problems of teacher shortage and funding shortage, but also stimulated students' enthusiasm for innovation and entrepreneurship.

References

- [1] Information on <http://job.hebust.edu.cn/news/view/aid/177814/tag/tzgg>.
- [2] CAI Jigang. Research on the main contradictions of foreign language education in Chinese universities in the new era: review and reflection of 70 years [J]. Chinese University Teaching, 2020, (1):51-55(In Chinese)
- [3] Yanhua Liu, Guangwei Hu. Mapping the field of English for specific purposes (1980-2018): A co-citation analysis[J]. English for Specific Purposes, 2021, 61:97-116.
- [4] Dana Rus. Assessment techniques in teaching English for specific purposes to Engineering students[J]. Procedia Manufacturing, 2019, 32 (9): 368-373.
- [5] Yongyan Li, John Flowerdew. Teaching English for research publication purposes (ERPP): A review of language teachers' pedagogical initiatives[J]. English for Specific Purposes, 2020, 59:29-41.
- [6] CAI Jigang. Japanese Scientists' Nobel Prize and English teaching for specific purposes: reflections on English education in universities after 40 years of reform and opening up [J]. Journal of University of Shanghai for Science and Technology (Social Science Edition), 2017, 39(4): 301-307(In Chinese).
- [7] Xu J. The History, Current situation and reform of English Education in Korea and Japan: An analysis based on the OECD language proficiency survey [J]. World Education Information, 2015, (8) : 11-16(In Chinese).
- [8] Zhang Zhenbang. On the problems of foreign language teaching reform in China. Foreign Languages, 2003,(4) : 1-6 (In Chinese).
- [9] Xu Xiaosu, Sun Yilin, CAI Jigang. A research on the framework of technical teaching content Knowledge competence of specialized English teachers in Chinese universities [J]. Foreign Languages and Foreign Language Teaching, 2020, (1) : 51-60(In Chinese).