Analysis on the Training Strategy of Compound Talents in Safety Engineering Against the Background of "Belt and Road"

Chengyu Xie¹, a, Hao Lu¹, b, Dongping Shi¹, c, Nan Jia², d

¹School of Environment and Resources, Xiangtan University, Xiangtan 411105, China; ²Institute of Public Safety, Tsinghua University, Beijing 100062, China.

axiechengyu42@xtu.edu.cn, b187194616@qq.com, c2029931597@qq.com, d575580701@qq.com

Abstract. With the implementation of China's "Belt and Road" strategy, the current problems were summarized in the current situation of the training of Chinese university security engineering professionals. The main problems were: the backward concept of compound talent training; the teaching problems were more; There was not enough communication along the way along the way; the orientation of talent cultivation was relatively lagging behind. Then, through the “Belt and Road” talent training objectives are built; the cultivation of comprehensive talents with broad vision and innovative thinking and the cultivation of innovative and practical talents are proposed, and the unique training model of "One Belt, One Road" is established, the construction of “Belt and Road" will provide more reference for more comprehensive talents in safety engineering.

Keywords: “One Belt; One Road”; safety engineering; compound talents; talent training.

1. Introduction

In 2013, Chinese President Xi Jinping first described the “Silk Road Economic Belt” and the grand blueprint for jointly building the “21st Century Maritime Silk Road”. The countries along the line reached consensus and responded positively, promoting the relationship between countries along the route. At the same time, it also highlights the status of compound talents in the construction of the “Belt and Road” [2]. The proposal of the "Made in China 2025" strategy has also made the high-quality training of compound talents the key to China's move to a manufacturing powerhouse [3]. In addition, the proposal of “New Engineering” also puts forward higher requirements for the delivery of high-quality talents in countries along the “Belt and Road” [4]. The safety engineering profession belongs to the category of new engineering. With the deepening of China's exchanges with countries along the “Belt and Road” [5], the demand for composite talents for safety engineering will continue to increase. Therefore, in the context of “One Belt, One Road”, the cultivation of compound talents is the implementation of the national “Belt and Road” "An important part of the development strategy [6], the universities that open the safety engineering profession should give full play to their own advantages and characteristics, serve the country's "One Belt, One Road" construction overall situation [7], find the target and direction, and keep up with the development of the times. At the pace [8], we will cultivate a multi-disciplinary talent with an international vision and adapt to the construction of the “Belt and Road” to meet the needs of the “Belt and Road” initiative, the development needs of “Industrial Manufacturing 4.0” and the development direction of “New Engineering”.

2. Problems in the Training of Safety Engineering Professionals

2.1 The Concept of Compound Talent Training is Backward

The teaching philosophy of Chinese universities and the concept of “One Belt, One Road” is relatively weak, and we have not realized the great opportunity that “One Belt, One Road” has brought to China's development. In international cooperation and exchanges, many are developed countries in Europe and the United States, and there are relatively few contacts with countries along the “Belt and Road”. They lack the sense of urgency to communicate with the “Belt and Road” countries and introduce the awareness of absorbing the “Belt and Road” undergraduate students. Relatively weak.
2.2 There are Many Problems in Teaching

The main problems in teaching are as follows: 1 The training objectives are not clear. 2 culture mode is outdated. 3 The curriculum system needs to be updated. 4 There are no colleges and universities offering courses in the basic culture of the countries along the “Belt and Road”.

2.3 Insufficient Communication with Countries Along the “Belt and Road”

The level of internationalization related to teachers and countries along the “Belt and Road” has been relatively slow: 1 Most of the teachers in Chinese universities have no experience and background in the teaching of countries along the “Belt and Road”; 2 teachers rarely master the countries along the “Belt and Road” countries. Language is not conducive to the communication and communication between teachers and experts and scholars along the “Belt and Road” countries. 3 Chinese universities lack standard assessment and incentive mechanisms, resulting in little exchanges between university teachers and countries along the “Belt and Road”.

2.4 Talent Training Positioning is Relatively Lagging

Chinese undergraduate students mainly cultivate and develop research talents for the development of China's industry. Such institutions have not included the countries along the “Belt and Road” from the perspective of talent training. Therefore, starting from the actual situation, the initial orientation and talent training plan for undergraduate students in China has not been able to keep up with the pace of development of the times, and there have been serious lags in the cultivation of compound talents.

3. Strategy of Training Professionals in Safety Engineering

3.1 Construction of the “Belt and Road” Talent Training Objectives

Chinese universities should, in light of their actual conditions and the characteristics of undergraduates, formulate a clear combination of talents with the countries along the “Belt and Road” to enable more people in the countries along the “Belt and Road” to understand the different characteristics of Chinese universities. In addition, Chinese universities should rely on the advantages and disciplines of major disciplines, combine the needs of national talent training along the “Belt and Road”, increase the support of demand professions, and rationally adjust the professional curriculum; strengthen the cultivation of undergraduates' practical ability and change Before the "re-theory, light practice" state; actively build the "Belt and Road" "The cooperation platform along the line countries, establish an internship base in the countries along the Belt and Road, create conditions for undergraduates to go to the countries along the "Belt and Road" to conduct internships.

3.2 Cultivate Compound Talents with Broad Vision and Innovative Thinking

When Chinese universities carry out international talent training along the “Belt and Road” countries, they must change their original educational concepts and cultivate a multi-disciplinary talent with an international vision to adapt to the “Belt and Road” economic development. At the same time, we must change the teaching philosophy of Chinese universities: 1 to promote the international cooperation and exchanges of Chinese universities through new networks, television, and self-media, so that undergraduates can form an international strategic thinking and vision; 2 The advanced education experience and concepts of more advanced countries such as Singapore in the “Belt and Road” countries will improve the quality and level of undergraduate education in Chinese universities.

3.3 Cultivate Talents with Innovative Ability and Practical Ability

Innovation is the foundation for China's development along the “Belt and Road” countries. In the context of the “Belt and Road”, in the face of the rapid development of regional industrial industries, the compound talents cultivated by Chinese universities must have strong innovation and practical
ability. The cultivated innovative talents should have sustainable competitiveness and continuous breakthrough and innovation, which is a powerful guarantee for improving the industrial strength of China and the countries along the “Belt and Road”.

3.4 Establishing a Unique Training Mode of “One Belt, One Road”

In the professional setting and training programs of Chinese universities, it is necessary to strengthen the strategic infiltration of “One Belt, One Road”, abandon the old undergraduate training methods, and open some regional language disciplines along the “Belt and Road” to build a unique undergraduate training model that conforms to the “Belt and Road”. To cultivate a combination of talents with both professional knowledge and language and cultural literacy. Unified planning of undergraduate training programs, scientific setting of undergraduate courses, increasing professional and practical courses for the “Belt and Road” urgently needed disciplines, building an interdisciplinary training model, actively exploring cross-regional or cross-regional practice and innovation platforms, and ultimately promoting Chinese universities "One Belt, One Road" to build a composite talent training.

4. Conclusion

In the context of the Belt and Road Initiative, with the continuous deepening of the undergraduate education reform in China, Chinese universities should proceed from reality and deliver modern and innovative talents for China and the countries along the Belt and Road. At the same time, Chinese universities must focus on the overall development of the country and the region, keep up with the pace of the times, improve the innovation consciousness and entrepreneurial enthusiasm of undergraduates through various new paths, focus on compound talent training, and realize the transformation of education direction. To train more modern, high-quality and innovative talents for China and the “Belt and Road”, and provide necessary protection for the “One Belt, One Road” construction.

Acknowledgements

This work was financially supported by Hunan Province Teaching Research Reform General Project (Exploration on the Reform of Safety Engineering Education Based on Cloud Information and Data in the Background of New Engineering & Research on Undergraduate Talents Training Program of Safety Engineering Based on Multidisciplinary Intersection) , the Hunan Province Science Foundation for Youth Scholars of China fund (2018JJ3510) and The Tenth Batch of Teaching Reform Research of Xiangtan University (Exploration and Construction of a New Teaching Continuous Improvement Model & Reform and Innovation of the Teaching Mode of College students’ Public Safety Education course).

References

[1]. Ferdinand P. Westward ho—the China dream and ‘one belt, one road’: Chinese foreign policy under Xi Jinping[J]. International Affairs, 2016, 92(4):941–957.
[2]. Chang H L, Zhao J L, Hassna G. Government-incentivized crowdfunding for one-belt, one-road enterprises: design and research issues[J]. Financial Innovation, 2016, 2(1):2.
[3]. James D. Sidaway, Chih Yuan Woon. Chinese Narratives on “One Belt, One Road” in Geopolitical and Imperial Contexts[J]. Professional Geographer, 2017, 69(2):1-13.
[4]. J Blanco Pitlo L, Karambelkar A. India's Perception and Response to China's “One Belt, One Road” Initiative: Views from Indian Mainstream Media[J]. Asian Politics & Policy, 2015, 7(4):667-671.
[5]. Lin J, University T. The Construction of China's New Engineering Disciplines for the Future[J]. Tsinghua Journal of Education, 2017, 38(2): 26-35.

[6]. Fei S U, Cao L, Sun F. A Solution to the Teaching of Mine Fixed Machinery Course under New Engineering Situation[J]. Theory & Practice of Contemporary Education, 2018, 10(1): 46-50.

[7]. Tian W T. Exploration and Practice of the Mould CAD/CAM Course Reformed under the Background of New Engineering[J]. Education Modernization, 2018, 19: 51-53.

[8]. Zeng T, Chang Q B, Wang Y Q, et al. Application of Oriental-Analogy Thinking in Teaching Semiconductor Physics under the Background of New Engineering[J]. Education Teaching Forum, 2018, 24: 194-196.