### Research on the Integration of Innovation and Entrepreneurship Education in the Major of TCSOL: A Case Study of Tangshan University in Hebei

#### **ABSTRACT**

**Aims**: This article primarily investigates the status of innovation and entrepreneurship education in the TCSOL major at local application-oriented undergraduate institutions in China. It also explores pathways for integrating innovation and entrepreneurship into this major, with the goal of enhancing the quality of talent cultivation in this field.

**Methodology**: The study took college undergraduates majoring in TCSOL in Tangshan University, Hebei Province, China, as the survey subjects. The research methods such as questionnaires and interviews are used to collect the data.

**Results**: The findings indicate that most students lack a solid understanding of concepts related to innovation and entrepreneurship. They have limited participation in entrepreneurial projects and competitions, and exhibit a weak willingness to pursue entrepreneurial ventures. Additionally, instructors of specialized courses do not adequately incorporate innovation and entrepreneurship education into their teaching practices.

**Conclusion**: The integration of innovation and entrepreneurship education in the major of TCSOL can be achieved through its comprehensive incorporation into the major's curriculum, course instruction, program development, extracurricular activities, and the student development evaluation system. By adopting these strategies, we can better prepare students for the challenges of the modern job market and foster a spirit of innovation and entrepreneurship among future educators of the Chinese language.

**Keywords**: Major of TCSOL; innovation and entrepreneurship education; integration; pathways

#### 1. INTRODUCTION

In 2015, the State Council issued the *Implementation Opinions on Deepening the Reform of Innovation and Entrepreneurship Education in Higher Education Institutions*, which set the goal of establishing a sound innovation and entrepreneurship education system in universities by 2020. In February 2019, the *China Education Modernization 2035* document emphasized the need to "fully implement the fundamental task of fostering virtue through education and strengthen the cultivation of practical skills, collaborative abilities, and innovative capabilities." Innovation is a prerequisite and foundation for entrepreneurial activities; entrepreneurship is based on innovation, and entrepreneurship drives innovation. Cultivating "double-innovation"

talent that integrates innovation and entrepreneurship is an important direction for talent development in higher education today.

The field of TCSOL (Teaching Chinese to Speakers of Other Languages) has witnessed considerable scholarly attention regarding innovation and entrepreneurship education in China, with researchers approaching the topic from diverse perspectives [7-10]. Li Guo, Fang Fang, and colleagues (2020) examined student engagement in innovation and entrepreneurship practices and training within the TCSOL major at Xinjiang University of Finance and Economics. They proposed various pathways and methods for enhancing students' innovation and entrepreneurship capabilities. Chen Liyuan et al. (2020), utilizing Hengshui College as a case study, analyzed the talent cultivation needs and practical teaching characteristics specific to the TCSOL major. Their discussion emphasized the significance of developing innovative and entrepreneurial talent, identifying current challenges within the existing talent cultivation system, and proposing reform strategies aimed at fostering "doubleinnovation" talent. These strategies included the formulation of talent training programs, the establishment of a layered and progressive practical teaching system, and the development of a comprehensive teaching assessment and evaluation system. Jiang Aoshuang (2020) explored the "Knowledge-Action-Research + Internationalization" training model at Minzu University of China, focusing on the cultivation of competitive innovative talents. Wang Hu (2020), drawing from educational practices at Sichuan International Studies University, investigated methods for the organic integration of professional education with innovation and entrepreneurship education, in light of existing reforms within the TCSOL major. Furthermore, Tong Qiuyue (2023) examined the cultivation of innovative talents in the TCSOL major through the perspectives of establishing clear talent training objectives, coordinating discipline development, expanding international exchange channels, and enhancing teacher training systems. Xu Lihua (2024) addressed issues related to practical teaching in innovative entrepreneurship within the TCSOL major, proposing strategies for improving such practical teaching initiatives.

This paper will explore the paths for integrating innovation and entrepreneurship education into the TCSOL major at local application-oriented undergraduate institutions, based on an investigation of the status of innovation and entrepreneurship education at Tangshan University.

# 2. QUESTIONNAIRE SURVEY ON THE CURRENT STATUS OF INNOVATION AND ENTREPRENEURSHIP EDUCATION IN THE MAJOR OF TCSOL

To gain a comprehensive understanding of the status of innovation and entrepreneurship education in the TCSOL major, the author distributed a questionnaire on innovation and entrepreneurship education to a total of 238 students majoring in from three grades of the TCSOL major at Tangshan University, including 78 students from the class of 2023, 79 students from the class of 2022, and 81 students from the class of 2021. (The grade of 2024 was not included due to their recent enrollment).

The survey covered five aspects: students' understanding of innovation and entrepreneurship education, their participation in innovation and entrepreneurship activities, their expectations for participating in innovation and entrepreneurship education, the implementation status of innovation and entrepreneurship education in the TCSOL major, and students' suitability and willingness to engage in entrepreneurship. A total of 237 questionnaires were collected, resulting in an effective response rate of 99.58%.

## 2.1 MOST STUDENTS LACK UNDERSTANDING OF INNOVATION AND ENTREPRENEURSHIP

Innovation and entrepreneurship involve entrepreneurial practices that leverage innovations in technology, product development, brand image reshaping, service quality and model optimization, business operation model transformation, management strategy innovation, organizational structure adjustments, market expansion, and diversified sales channel development. Since the 2016 academic year, the TCSOL department has offered a "Fundamentals of Student Entrepreneurship" course, scheduled for the second or third semester, totaling 32 class hours. However, due to the early offering and limited class hours, with most classes taught by teachers from the innovation and entrepreneurship center, the knowledge students gain related to innovation and entrepreneurship in the context of TCSOL is insufficient. The survey results indicate that while 87.34% of students recognize the importance of innovation and entrepreneurship skills during university, only 8.86% are very familiar with the concept of innovation and entrepreneurship education, and 38.4% are somewhat familiar, meaning that 47.26% of students have a moderate understanding of the concept, which does not exceed half. This indicates that the TCSOL majors need to further strengthen their understanding and knowledge of innovation and entrepreneurship.

## 2.2 LOW FREQUENCY AND VARIETY OF STUDENT PARTICIPATION IN INNOVATION AND ENTREPRENEURSHIP ACTIVITIES

In terms of enhancing students' innovation and entrepreneurship abilities, actively engaging in innovation and entrepreneurship activities is undoubtedly the most direct and effective approach. Tangshan University has taken proactive measures in this regard by launching a series of diverse activities, such as the Innovation and Entrepreneurship Training Program, which aims to systematically cultivate students' innovative thinking and entrepreneurial skills; the "Internet Plus" College Student Innovation and Entrepreneurship Competition, which provides a broad platform for students to showcase their ideas and business concepts; the Hebei Province College Student Innovation Method Competition, which focuses on inspiring students to explore and practice innovative methods; and the Hebei Province College Student Innovation and Entrepreneurship Education Annual Conference, which emphasizes the exchange and sharing of experiences and cutting-edge achievements in innovation and entrepreneurship education.

Survey results indicate that 71.73% of students have participated in only 1-2 activities or have never participated in innovation and entrepreneurship activities; 59.07% of students believe that the variety of forms of participation in innovation and entrepreneurship education is relatively few or very few. Only 48.1% of students have engaged in more than two types of the activities, with the majority participating in the Innovation and Entrepreneurship Training Program and the "Internet Plus" College Student Innovation and Entrepreneurship Competition. This indicates that the innovation and entrepreneurship activities provided by the school have not fundamentally stimulated students' interest, and there is a need to further enhance the frequency and variety of student participation in these activities.

# 2.3 THERE IS A SIGNIFICANT GAP BETWEEN THE FORMS OF INNOVATION AND ENTREPRENEURSHIP ACTIVITIES PROVIDED BY THE SCHOOL AND STUDENTS' EXPECTATIONS

According to Edgar Dale's Learning Pyramid Theory proposed in 1946, the learning effectiveness of "lectures" is the lowest, with only 5% of the content retained two weeks later, while "learning by doing" or "practice" allows for a retention of 75% after the same period. Survey results show that 51.48% of students believe that participating in innovation and entrepreneurship projects and competitions is the most beneficial form for enhancing their innovation and entrepreneurship education abilities, while 30.38% think that engaging in

research projects related to teachers' innovation and entrepreneurship education is the most advantageous. Only 18.14% of students believe that learning through lectures is the most effective. Currently, Tangshan University provides lectures, innovation and entrepreneurship projects, and competitions. Notably, 88.19% of students express a strong willingness to engage in innovation and entrepreneurship education projects led by faculty; however, the actual rate of participation remains relatively low. If students could actively and deeply engage in the innovation and entrepreneurship projects led by teachers, taking on specific tasks such as market research, data analysis, project planning, and practical operations during the project implementation process, it would not only effectively enhance their professional skills and practical abilities but also inject new vitality into the innovative development of the projects.

# 2.4 THE INTEGRATION OF INNOVATION AND ENTREPRENEURSHIP EDUCATION INTO TEACHING AND ASSESSMENT OF PROFESSIONAL COURSES NEEDS TO BE FURTHER STRENGTHENED

For the major of TCSOL, its development relies not only on the transmission of traditional professional knowledge but also on a deep integration with the concepts of innovation and entrepreneurship. Research and analysis conducted on the TCSOL majors at our university reveal that although 67.93% of students believe that the faculty's expertise in innovation and entrepreneurship education is considered to be strong, and a significant majority of students, specifically 82.7%, acknowledge the importance of integrating innovation and entrepreneurship education into professional course instruction. Additionally, 79.75% of students consider it crucial to incorporate innovative thinking and skills into learning assessments and evaluations. However, nearly half (45.6%) of the students perceive that the extent to which professional instructors integrate innovation and entrepreneurship education into their teaching is at a moderate or low level. Consequently, it is imperative for subject instructors to enhance the integration of innovation and entrepreneurship education within their course instruction and assessment methods. This approach will not only heighten students' focus on innovation and entrepreneurship but also facilitate a more cohesive integration with professional knowledge, thereby fostering a deeper connection between the major and innovation and entrepreneurship.

#### 2.5 WEAK WILLINGNESS OF STUDENTS TO ENGAGE IN ENTREPRENEURSHIP

Willingness to engage in entrepreneurship refers to the desire of individuals or groups to pursue value creation and self-actualization through entrepreneurial endeavors, with the goal of achieving personal development and social impact. Data indicates that 53.2% of students perceive the TCSOL major as unsuitable for entrepreneurial activities. Additionally, 40.51% of students express a reluctance to pursue entrepreneurship even in the event of unemployment after graduation. Moreover, should they choose to start a business, they exhibit hesitance towards selecting industries related to TCSOL. This trend reflects a notable lack of confidence among students regarding entrepreneurship within this field, which is significantly influenced by the innovation and entrepreneurship education they receive in academic settings and their level of participation in related activities.

## 3. PATHWAYS FOR INTEGRATING INNOVATION AND ENTREPRENEURSHIP EDUCATION INTO THE MAJOR OF TCSOL

The paths for the integration of the major of innovation and entrepreneurship education in the major of TCSOL can be explored from the following five aspects.

#### 3.1 INTEGRATION INTO THE TRAINING PROGRAM OF THE MAJOR

The first pathway involves the integration of innovation and entrepreneurship into the training program. This requires the distillation of educational philosophies that emphasize innovation and entrepreneurship, reflective of the unique characteristics of the major, as well as the optimization of talent training programs to establish a "double innovation" talent cultivation mechanism.

The training program functions as a comprehensive framework for the education and development of students. A well-structured program is essential for providing students with the requisite knowledge, skills, and competencies, thus enabling them to realize their potential and adapt to the evolving demands of society. It is imperative to promote an educational philosophy that is innovative and entrepreneurial in nature, grounded in the discipline, focused on the identification of real-world problems, and aimed at developing practical solutions. This philosophy should be inclusive and seamlessly integrated throughout the educational process.

In the redefinition of the talent training program for the TCSOL major, it is crucial to prioritize the reinforcement of students' knowledge frameworks while simultaneously nurturing their capacities for innovation and entrepreneurship as related to their specialization. Active exploration of pathways for cultivating "double innovation" talents is necessary, which entails constructing an educational paradigm that harmonizes institutional support with students' self-directed growth, integrates classroom instruction with extracurricular engagement, and combines on-campus theoretical and simulated learning with off-campus experiential opportunities. This holistic approach seeks to fully leverage the diverse capabilities of students, educational institutions, and society in the ongoing process of cultivating "double innovation" talents.

#### 3.2 INTEGRATION INTO THE CURRICULUM INSTRUCTION

The second pathway involves the integration of innovation and entrepreneurship into curriculum instruction, with a focus on developing "professional and entrepreneurial integrated" demonstration courses. This approach adheres to a student-centered philosophy, whereby the cultivation of innovation and entrepreneurship capabilities is organically embedded within the teaching of specialized courses. It necessitates a comprehensive exploration of the elements of innovation and entrepreneurship present in each course.

Curriculum instruction serves as the most direct mechanism for shaping students' perceptions of innovation and entrepreneurship while simultaneously fostering their competencies in these domains. Consequently, the establishment of "professional and entrepreneurial integrated" demonstration courses, along with the formation of a cohesive cluster of such courses, is imperative. During the instructional design process, educators should systematically identify and incorporate elements of innovation and entrepreneurship into various components of teaching, assessment, and evaluation.

For instance, in the core course "Introduction to Chinese Culture", instructors can facilitate students' reflections on the planning of cultural teaching activities, employing innovative strategies to both preserve and promote exemplary aspects of traditional Chinese culture. Similarly, in the course "Grammar and Grammar Teaching", instructors may gather and categorize grammar points from past interview questions used for Volunteers Chinese Language Teacher, enabling students to create their own innovative teaching plans inspired by these exemplary designs.

Moreover, it is crucial to actively pursue innovative pathways for course assessment and evaluation models, placing a strong emphasis on assessing students' practical application skills. This can be achieved through the use of case design questions, which serve to enhance

students' innovative thinking abilities. Additionally, when providing guidance for innovation and entrepreneurship competition projects, students should be encouraged to select themes informed by their professional perspectives and engage in competitions, thereby facilitating the attainment of innovation and entrepreneurship outcomes that are closely aligned with their academic major.

## 3.3 INTEGRATION INTO INNOVATION AND ENTREPRENEURSHIP FACULTY DEVELOPMENT IN THE TCSOL MAJOR

The third pathway focuses on strengthening the development of the faculty team dedicated to innovation and entrepreneurship education, with the aim of integrating student training in innovation and entrepreneurship with faculty research initiatives to enhance students' capabilities in these areas.

In the context of innovation and entrepreneurship education, the quality of faculty development has a direct impact on teaching effectiveness and the cultivation of innovation and entrepreneurship competencies among students in the International Chinese Education major. Therefore, efforts should be directed towards enhancing the pedagogical skills of existing faculty members in the realm of innovation and entrepreneurship instruction. Additionally, the active recruitment of part-time faculty from external sources is essential for enriching the teaching staff.

Furthermore, it is crucial to implement a categorized training approach for faculty engaged in innovation and entrepreneurship education. This approach may involve the promotion of distinct categories of faculty, such as those specializing in "professional and entrepreneurial integration" and those who serve as competition guidance teams. Organizing specialized training activities aimed at enhancing teachers' skills in innovation and entrepreneurship education can serve to motivate and support faculty in exploring and researching advanced topics in this field. It is also important to increase the emphasis placed on innovation and entrepreneurship education within the frameworks of project proposals and outcome assessments.

Moreover, faculty members are encouraged to actively involve students in practical research projects, thereby providing students with opportunities to gain valuable experience and develop their skills through participation in faculty-led research initiatives.

#### 3.4 INTEGRATION INTO EXTRACURRICULAR PRACTICE

This section emphasizes the importance of academic competitions and innovation and entrepreneurship projects, advocating for the active organization of student participation to utilize these competitions and projects as effective tools for enhancing both learning and teaching.

Participation in innovation and entrepreneurship-related academic competitions and projects during extracurricular hours represents a fundamental form of practical engagement for university students. These academic competitions serve as platforms for students to demonstrate their abilities and develop their skills, thereby playing a constructive role in their personal and professional growth. Moreover, they are pivotal in achieving a profound integration of professional education with innovation and entrepreneurship education.

Particular emphasis should be placed on the "Internet+" College Student Innovation and Entrepreneurship Competition. It is crucial to undertake meticulous preparation in organizing this competition, ensuring that dedicated faculty teams provide comprehensive guidance to

students throughout the process. Such involvement allows students to refine their professional competencies within the competitive framework of the competition.

Furthermore, it is essential to maximize the effectiveness of the College Student Innovation and Entrepreneurship Training Program. This program is designed to be problem-oriented, focusing on the development of students' abilities to identify problems, address challenges, and explore practical solutions, ultimately aiming to create value. Initiatives of this nature significantly contribute to the enhancement of students' innovation and entrepreneurship capabilities.

#### 3.5 INTEGRATION INTO THE STUDENT DEVELOPMENT EVALUATION SYSTEM

This section proposes the establishment of a scientifically grounded and rational evaluation mechanism for "innovation and entrepreneurship" talent through the implementation of innovative teaching methods and the reform of assessment forms.

First, it is imperative to integrate classroom instruction with extracurricular practice to optimize teaching methodologies and approaches. This integration seeks to cultivate students' innovative potential and actively promote engagement in innovation and entrepreneurship activities, thereby ensuring that students' knowledge frameworks align with professional standards.

Second, it is imperative to focus on enhancing students' problem perception and cognitive expansion training. Traditional summative assessment standards should be replaced with process-oriented evaluation strategies. This necessitates innovation in the scope and format of course assessments, thereby providing additional opportunities for self-directed learning. By implementing self-directed learning tasks, requiring the preparation of practical teaching reports, facilitating the analysis of innovative case studies, and engaging students in teaching projects, educators can effectively stimulate students' innovative thinking.

Key components such as cognitive expansion, knowledge accumulation, and pedagogical skills must be incorporated into the course evaluation framework.

Furthermore, students' academic performance should be assessed in a comprehensive manner, taking into account multiple factors related to the learning process. These factors include the interaction and performance of learning groups during task execution, the degree of innovation exhibited, the level of engagement in discussions, peer evaluations of assignments, the effectiveness of class discussions, and the quality of practical reports. The evaluation criteria should be designed to establish core assessment components that prioritize capability testing, quality measurement, and the evaluation of innovative elements. This approach will effectively integrate the principles of "innovation and entrepreneurship" with competencies within the student growth and development evaluation system.

#### 4. CONCLUSION

In local application-oriented undergraduate institutions, the integration of innovation and entrepreneurship education within the major of TCSOL can be pursued through five distinct pathways: (1) incorporating it into the training curriculum, (2) integrating it into course instruction, (3) embedding it within professional development initiatives, (4) including it in extracurricular activities, and (5) incorporating it into the student development evaluation system. This multi-dimensional and comprehensive approach not only fosters the advancement of innovation and entrepreneurship education within the TCSOL program but

also enhances students' practical innovative abilities and optimizes the overall quality of talent cultivation.

#### **CONSENT (WHERE EVER APPLICABLE)**

The authors declares that 'written informed consent was obtained from participants for publication of this case report. A copy of the written consent is available for review by the Editorial office/Chief Editor/Editorial Board members of this journal.

#### ETHICAL APPROVAL (WHERE EVER APPLICABLE)

The studies involving humans were approved by Ethics Committee of Siyue Educational and Technological Institute (SETI 2023025). The studies were conducted in accordance with the local legislation and institutional requirements.

#### **DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

The author hereby declares that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

#### REFERENCES

- 1. Chen, L. Y., Li, C. Y., Liu, Q., Zhang, X. R., & Zhao, D. Construction and exploration of the "innovation and entrepreneurship" talent cultivation model and practical teaching system for the Chinese International Education major. *Cultural and Educational Materials*, 2020,49(5):181-182.
- 2. Li, G., Fang, F., & Wang, X. Y. Research on the cultivation of innovation and entrepreneurship abilities of students majoring in TCSOL. *Industrial Innovation Research*, 2020,5(17):139-141.
- 3. Jiang, A. S. Exploration of the innovative talent cultivation model for the undergraduate major in TCSOL: A case study of Minzu University of China. *International Chinese Education (Chinese and English)*, 2020,5(3):20-29.
- 4. Tong, Q. Y., Shi, D., & Cai, F. L. Exploration of the innovative talent cultivation model for the undergraduate major in TCSOL. *National Common Language and Writing Teaching and Research*, 2023,14(1):1-3.
- 5. Wang, H. Realization paths for integrating innovation and entrepreneurship education into the TCSOL major. *Cultural and Educational Materials*, 2020,49(33):126-127.
- 6. Xu, L. H. Research on innovation and entrepreneurship practical teaching in TCSOL programs at universities. *Henan Economic Daily*, March 14, 2024 (12).
- 7. Soares FO, Sepúlveda MJ, Monteiro S, Lima RM, Dinis-Carvalho J. An integrated project of entrepreneurship and innovation in engineering education. Mechatronics. 2013 Dec 1;23(8):987-96.

- 8. Harkema SJ, Schout H. Incorporating student centred learning in innovation and entrepreneurship education. European Journal of education. 2008 Dec;43(4):513-26.
- 9. Yang Y, Xie J. [Retracted] Feasibility Study on the Integration of Innovation and Entrepreneurship Education and Occupational Therapy Training Mode for College Students Based on Big Data. Occupational Therapy International. 2022;2022(1):3911326.
- 10. Tan L, Du F. Integrating entrepreneurship and innovation education into higher vocational education teaching methods based on big data analysis. Wireless Communications and Mobile Computing. 2022;2022(1):4616446.