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Research on the Educational Cooperation Paths Between China and Countries Along the Danube River

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Abstract: As an important link for the extension of the "Belt and Road" Initiative in Europe, countries along the Danube River have achieved remarkable results in educational cooperation with China, becoming a key practice in building the "Belt and Road" Education Community. This paper systematically explores the educational cooperation paths between China and countries along the Danube River. Research shows that, driven by the dual mechanisms of the "Belt and Road" Initiative and the "China-CEEC Cooperation," bilateral educational cooperation has formed a diversified pattern characterized by joint education programs, teacher-student exchanges, language and cultural communication, and industry-university-research collaboration. However, the current cooperation still faces challenges such as insufficient sustainability, mismatched supply and demand of educational resources, and institutional and cultural barriers. To promote the cooperation towards high-quality development, this paper proposes that efforts should be made to improve the long-term cooperation mechanism and quality assurance system, expand new areas of industry-university-research integration and digital cooperation, and provide sustained impetus for deepening bilateral educational cooperation and cultivating international talents by optimizing resource allocation, strengthening teacher team construction, and building a multi-level cooperation network.

Keywords: Countries along the Danube River; "Belt and Road" Initiative; Educational internationalization

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1. Introduction

As the second-longest river in Europe, the Danube flows through 9 countries, including Germany, Austria, Hungary, and Slovakia, connecting Central-Western Europe and Southeast Europe with a unique geographical location. It serves as an important link for the extension of the "Belt and Road" Initiative in Europe. In recent years, with the in-depth advancement of the China-Central and Eastern European Countries (CEEC) Cooperation Mechanism ("16 + 1 Cooperation") and the full implementation of the "Belt and Road" Initiative, educational cooperation between China and countries along the Danube River is in a critical stage

of transformation from scale expansion to quality improvement ^[1]. Systematically sorting out the current status of cooperation, analyzing existing problems, and exploring optimization paths are of important theoretical and practical significance for deepening educational cooperation and building a more dynamic education community. This study will comprehensively discuss the background, foundation, current characteristics, challenges, and development paths of educational cooperation between China and countries along the Danube River.

2. Cooperation background and foundation

2.1. Policy support

The vigorous development of educational cooperation between China and countries along the Danube River benefits from the top-level design and policy support jointly promoted by both parties. The full implementation of the "Belt and Road" Initiative has provided strategic guidance for educational cooperation. In 2013, the Chinese government proposed the "Belt and Road" Initiative, establishing a cooperation framework covering Asia, Europe, and Africa. As an international river running through Europe, the Danube has naturally become an important link for the extension of this initiative in Europe ^[2].

Meanwhile, the China-CEEC Cooperation Mechanism ("16 + 1 Cooperation") has provided an institutionalized platform for educational cooperation. Since its launch in 2013, this mechanism has become an important platform for promoting cooperation between China and CEECs, including countries along the Danube River. Under this mechanism, educational and cultural exchanges have been identified as priority areas of bilateral cooperation, promoting joint talent training, inter-university cooperation, and scientific research collaboration through institutionalized arrangements.

Countries along the Danube River have also actively responded to these initiatives. For example, Hungary, Serbia, Romania, and other countries have actively participated in cooperation. These policy interactions have created a favorable environment for educational cooperation, promoting the sharing and complementary advantages of educational resources between the two parties [3].

2.2. Practical needs

China and countries along the Danube River have obvious complementary advantages in the field of education, providing a solid foundation for cooperation. CEECs have traditional advantages in professional fields such as engineering education, art design, and medicine, while China has accumulated rich experience in information technology, economic management, and infrastructure construction. This complementarity provides a broad space for bilateral educational cooperation, enabling both parties to achieve win-win results through cooperation.

With the increasingly close economic and trade relations between China and CEECs, the structure of talent demand has also changed. According to data from Eurostat, the internationalization level of higher education in countries along the Danube River has continued to improve, with the proportion of international students exceeding 15% in countries such as Hungary, Austria, and Slovakia [4]. China has become one of the world's largest exporters of international students. This two-way flow demand has created a broad space for educational cooperation. Especially against the background of Chinese-funded enterprises increasing investment in CEECs, there is an urgent shortage of compound talents who understand both Chinese and professional knowledge.

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In addition, the internationalization needs of the education systems in countries along the Danube River are aligned with China's strategy of "going global" in education. Hungary, Serbia, Romania, and other countries have signed agreements on the mutual recognition of higher education academic qualifications and degrees with China, removing institutional barriers for deepening cooperation. These countries generally hope to improve the internationalization level of education by attracting Chinese students and carrying out joint education programs, while China also hopes to further integrate into the European Higher Education Area, improve educational quality and international influence through cooperation with these countries.

3. Analysis of current cooperation status

3.1. Main models and characteristics

At present, educational cooperation between China and countries along the Danube River has formed a diversified and multi-level development pattern, mainly reflected in the following aspects:

- (1) Joint education programs have developed steadily

 In recent years, Chinese universities have collaborated with universities in countries along the Danube
 River to launch a series of joint education programs covering undergraduate, master's, and other levels.
 For example, East China Normal University has cooperated with Budapest Business School in Hungary
 to carry out economic management talent training programs, which focus on integrating Eastern and
 Western management wisdom to cultivate business talents with a global perspective.
- (2) Teacher-student exchanges and short-term programs have become increasingly active
 Chinese universities and universities in countries along the Danube River have carried out a variety
 of teacher-student exchange and short-term study programs, such as summer schools and micro-study
 abroad programs. The summer credit courses cooperated by Peking University and the University of
 Vienna in Austria provide students from both universities with the opportunity to study at top European
 universities. Through special lectures, cultural experiences, language practice, and other forms,
 such programs have broadened students' international horizons and improved their cross-cultural
 communication skills ^[5].
- (3) Language teaching and cultural promotion have achieved remarkable results

 Chinese education in countries along the Danube River has developed rapidly, especially in Hungary, which is in a leading position among CEECs. The Hungarian-Chinese Bilingual School has established a Confucius Classroom in cooperation with Capital Normal University and High School Affiliated to Capital Normal University. The school currently has 20 classes in 12 grades with more than 530 students, cultivating a large number of outstanding Chinese-speaking talents for Hungary.
- (4) Industry-university-research cooperation has gradually deepened. In educational cooperation, China and countries along the Danube River focus on integrating with industries and promoting the transformation of scientific research results [6]. In September 2025, the "2025 China-CEEC Industry-University-Research Cooperation Matching Conference" held in Nanjing provided a platform for cooperation between the two parties in technology transfer, joint R&D, and talent exchange.

3.2. Existing problems and challenges

Despite the remarkable achievements in educational cooperation between China and countries along the Danube

River, there are still some prominent problems and challenges:

- (1) The depth and sustainability of cooperation need to be strengthened
 - At present, bilateral educational cooperation is still dominated by short-term projects and primary cooperation, lacking long-term strategic and in-depth cooperation. For example, some joint education programs are small in scale and have limited influence. In addition, the cooperation quality evaluation and assurance mechanism are not sound, affecting the sustainable development of cooperation.
- (2) There is a mismatch between the supply and demand of educational resources

 Differences exist between China and countries along the Danube River in educational concepts, curriculum settings, and teaching methods, leading to frequent resource mismatches in cooperation [7].

 For example, the Chinese side focuses on the systematic teaching of professional knowledge, while the Danube countries emphasize the cultivation of critical thinking and innovative abilities. These differences have caused practical difficulties in curriculum alignment, credit transfer, and academic recognition, affecting the in-depth development of cooperation.
- (3) Institutional and cultural barriers still exist

 Countries along the Danube River have prominent linguistic diversity. In addition to English, the shortage of talents proficient in non-common languages such as Hungarian, Slovak, and Croatian has restricted the breadth and depth of educational cooperation. There are also differences between the two parties in educational management systems, quality evaluation standards, and academic certification mechanisms, increasing the difficulty of cooperation [8,9].

4. Exploration of cooperation paths

4.1. Improve cooperation mechanisms and enhance cooperation quality

To promote the sustainable development of educational cooperation between China and countries along the Danube River, it is necessary to establish and improve long-term cooperation mechanisms and enhance cooperation quality.

- (1) Strengthen strategic planning and policy alignment
 - Both parties should strengthen dialogue on educational development strategies and policy communication, jointly formulate medium and long-term cooperation plans, and clarify cooperation goals, key areas, and priority directions. Chinese educational authorities can establish a regular consultation mechanism with the Ministries of Education of countries along the Danube River to promptly resolve policy barriers arising from cooperation [10].
- (2) Build a multi-level cooperation network
 - Encourage the formation of synergy between the central and local governments, governments and civil society, and schools and enterprises to build a multi-level and wide-coverage educational cooperation network ^[11]. The central government strengthens top-level design and policy support, local governments carry out targeted cooperation projects in combination with local characteristics and needs, schools play the main role, and enterprises provide industry support and employment channels, forming a cooperation model closely integrating industry, university, research, and application.
- (3) Establish a quality assurance and evaluation mechanism

 Jointly develop educational quality standards and evaluation indicators applicable to both parties,

and establish a sound whole-process quality assurance mechanism for cooperation projects. Conduct regular evaluations of joint education programs, joint scientific research projects, teacher-student exchange programs, etc., to ensure cooperation quality. At the same time, establish a cooperation information sharing platform to timely release cooperation dynamics and successful cases, improving the transparency and credibility of cooperation.

4.2. Expand cooperation areas and innovate cooperation forms

Facing the trend of educational internationalization in the new era, China and countries along the Danube River should continuously expand cooperation areas and innovate cooperation forms.

- (1) Promote in-depth integration of industry, university, and research

 Combine the industrial development needs of both parties to promote the close integration of educational cooperation with industrial upgrading and technological innovation. Encourage universities and enterprises to jointly build joint laboratories, technology transfer centers, and industrial research institutes to promote the transformation of scientific and technological achievements and talent training [12,13].
- (2) Expand online education and cooperative research

 Actively embrace digital transformation, and vigorously develop new educational cooperation models
 such as online education, virtual classrooms, and remote cooperation. Jointly develop online courses
 and digital educational resources to promote the sharing of high-quality educational resources.

 Establish joint research platforms, encourage scholars to carry out cooperative research, jointly apply
 for international scientific research projects, and improve scientific research and innovation capabilities.
- (3) Enrich cultural exchanges and language cooperation
 On the basis of existing Chinese teaching, further expand the depth and breadth of cultural exchanges.
 Promote mutual understanding and appreciation of cultures between the two parties through cultural festivals, art exhibitions, academic forums, and other forms. While promoting Chinese teaching, strengthen the teaching of CEEC languages in China to cultivate multilingual talents.

4.3. Optimize resource allocation and strengthen guarantee measures

To ensure the sustainable development of educational cooperation, it is necessary to optimize resource allocation and strengthen guarantee measures.

- (1) Increase resource investment
 - Governments of both parties should increase financial support for educational cooperation, establish special funds to provide stable financial guarantees for cooperation projects, teacher-student exchanges, scientific research cooperation, etc. At the same time, encourage social forces such as enterprises and foundations to invest resources, forming a diversified investment mechanism.
- (2) Strengthen the teacher team construction
 - Attach importance to the training and development of teachers, and improve their internationalization level and cross-cultural teaching capabilities. Build a high-quality international teacher team through teacher exchanges, joint teaching and research, professional development training, and other methods. Especially for joint education programs, attention should be paid to the participation of foreign teachers and the capacity building of Chinese teachers to ensure teaching quality [14,15].

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(3) Build a partnership network

Encourage universities, scientific research institutions, enterprises, and other entities to establish multilevel partnerships and form a cooperation network. Promote resource sharing and experience exchange through organizational forms such as "university alliances" and "professional associations." For example, a "China-Danube University Alliance" can be established to regularly hold presidential forums, academic conferences, cultural festivals, and other activities to enhance cooperation and cohesion.

5. Conclusion

Educational cooperation between China and countries along the Danube River has become an important part of the construction of the "Belt and Road" Education Community. After years of development, bilateral cooperation has achieved remarkable results, forming a diversified and multi-level cooperation pattern, and building a cooperation network involving both government and civil society with multi-party participation. The cooperation areas are constantly expanding, and the cooperation content is increasingly enriched, making positive contributions to promoting bilateral people-to-people exchanges and economic and trade cooperation.

Looking forward to the future, educational cooperation between China and countries along the Danube River should further strengthen the concept of win-win cooperation, highlight quality orientation, and innovate cooperation models, focusing on deepening cooperation in the following aspects:

- (1) Strengthen strategic alignment, promote the transformation of cooperation connotation from scale expansion to quality improvement, and build a more complete quality assurance system. Both parties should strengthen educational policy communication and development strategy alignment, jointly formulate medium and long-term development plans for educational cooperation, and establish and improve institutional frameworks such as academic degree mutual recognition, credit transfer, and quality certification to create a more favorable policy environment for educational cooperation.
- (2) Expand cooperation areas, extending from language and culture to broader fields such as technological innovation and vocational training. Fully tap the cooperation potential of both parties in fields such as engineering and technology, biomedicine, environmental science, and digital economy, and promote the in-depth integration of educational cooperation with technological innovation and industrial upgrading. At the same time, vigorously develop vocational education cooperation to jointly cultivate high-quality technical and skilled talents.
- (3) Innovate cooperation models, make full use of information technology, and develop new cooperation forms such as online education and virtual teaching and research. Actively embrace the digital wave and promote the digital transformation of educational cooperation models. Jointly develop online courses, virtual laboratories, digital libraries, and other educational resources to promote the sharing and efficient use of high-quality educational resources.

As a cultural corridor connecting eastern, western, southern, and northern Europe, the Danube has historically been a channel for the integration and mutual learning of different civilizations. Under the framework of the "Belt and Road" Initiative and China-EU comprehensive strategic partnership, educational cooperation between China and countries along the Danube River is expected to become a model for cross-regional educational cooperation. The two parties will cultivate more outstanding talents with global perspectives, cross-cultural understanding, and international cooperation capabilities, contributing educational strength to building a community with a shared future for mankind.

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