

Research on the Demand for Professional Chinese Talents in Ecuador

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Abstract: With the proposal and promotion of the “Belt and Road” initiative and the growing bilateral trade between Ecuador and China, the demand for Chinese talents in various industries in Ecuador is increasing. However, there is currently no research on the Chinese talent demand in Ecuador’s industry. To address this gap, this paper analyzes the types of demand for Chinese talents in Ecuador’s industry based on trade volume data between China and Ecuador. The study finds that while the supply of Chinese language talents in various industries is in short supply, Chinese language education in Ecuador is still in its early stages, with an immature teaching system, a wide distribution of talent, and limited industry-specific Chinese language curricula. Furthermore, the training unit lacks attention to Chinese talent training and suffers from a shortage of teachers. In light of these challenges, this paper proposes four suggestions: (1) Ecuador should clarify its talent training goals and train Chinese talents in agriculture, fishery, mining, and manufacturing; (2) talent training work should be implemented at all levels and diversified to cover a range of subjects; (3) attention should be paid to the training of teachers and the construction of Chinese language teaching staff in the industry; and (4) cooperation should be strengthened to provide research and development support for Chinese teaching resources in Ecuador. This paper aims to provide insights and reference for the training of Chinese talents in Ecuador and the analysis of demand for Chinese talents in other countries.

1. Introduction

Ecuador, a small country located in the northwest of South America, has been attracting significant investment in recent years due to its rich mineral resources and strategic geographical location. It is also the first official member of the Asian Investment Bank in Latin America.[1] Since the establishment of diplomatic relations between China and Ecuador in 1980, bilateral economic cooperation has maintained a positive trend. According to the data of the Central Bank of Ecuador, China is expected to become the second largest import source country of Ecuador after the United States in 2021. In terms of exports, Ecuador’s exports to China in 2021 amounted to 4.08 billion US dollars, a year-on-year increase of 23%. In February 2022, the Minister of Commerce of the People’s Republic of China, Wang Wentao, and Ecuador’s Minister of Production, Foreign Trade, Investment and Fisheries, Julio Prado, signed the Memorandum of Understanding between the two countries, officially launching the negotiation of the China-Ecuador Free Trade Agreement, officially launching the negotiation of the China-Ecuador Free Trade Agreement. This agreement is expected to further

boost bilateral trade between China and Ecuador and promote the sustained, stable, and diversified development.

As economic and trade cooperation between China and Ecuador continues to grow, the demand for Chinese talents in Ecuador's industry is also increasing. The single Chinese major and basic skilled talents can no longer meet the trade demand. However, at present, scholars pay little attention to the research of Ecuador's professional Chinese. The existing research mainly focuses on the concept or mode of professional Chinese cultivation, which belongs to the guidance of macro aspects, while the country-based and practical industry Chinese research is less. Therefore, this paper aims to analyze the demand for Chinese talents in the industry in Ecuador. Using a mixed database research method, firstly, analyzing the import and export trade volume between China and Ecuador in the 25 years from 1995 to 2020 to analyze in which industries China and Ecuador have frequent contact and thus analyze the demand for talents in which industries. The second part analyzes the types of Chinese talents in Ecuadorian industries and the characteristics of these talents, with a focus on the industries in which China has frequent contact with Ecuador. To investigate the cultivation of professional Chinese talents in Ecuador, a questionnaire survey was conducted from the perspective of teachers and students. The survey aimed to analyze the supply and demand of professional Chinese talents in Ecuador, and provide relevant suggestions based on the results. This paper is expected to provide valuable reference for the cultivation and demand of Chinese language talents in industries in Ecuador and other regions and countries.

2. Analysis of Industry Types in China-Ecuador Trade

This paper selects highly representative trade data from 1995 to 2020 based on a self-built database. These data cover the past 25 years, which is a critical period since the establishment of diplomatic relations between China and Ecuador, and before and after the initiation of the "Belt and Road" initiative. By analyzing the proportion of industries in the import and export trade volume between China and Ecuador during this period, it can conclude the types of demand for Chinese talents in the industries.

Affected by the relevant policies of the two countries, the trade volume between China and Ecuador has generally shown an upward trend, with the same fluctuation trend in recent years. The trade industries between China and Ecuador in the database are classified according to the latest national economic industry classification standard of the National Bureau of Statistics in 2017. These industries include fishery, agriculture, agricultural and sideline food processing industry, Food manufacturing, mining, chemical raw materials and chemical products manufacturing, rubber and plastic products industry, Leather, fur, feathers and their products and shoe making, Wood processing and wood, bamboo, rattan, palm, grass products industry, Paper and paper products industry, Textile industry, textile clothing, apparel industry, ceramic products manufacturing, jewelry and related articles manufacturing, metal products industry, Electrical machinery and equipment manufacturing and general equipment manufacturing, automobile manufacturing and railroad, ship, aerospace and other transportation equipment manufacturing, instrument manufacturing and special equipment manufacturing, equipment manufacturing, furniture manufacturing, education, industry, sports and entertainment goods manufacturing.[2] Among the trade industries exported from Ecuador to China, agriculture, fishery and mining account for the highest proportion, with the energy industry in the primary and secondary industries as the main contributor. (See Figure 1 for details)

Based on the database, the paper also analyzed the trade industries exported from China to Ecuador. The electrical machinery and equipment manufacturing and general equipment manufacturing, metal products manufacturing, automobile manufacturing and railway, ship, aerospace and other transportation equipment manufacturing accounted for the highest proportion, with the manufacturing

industry in the secondary industry as the main. China mainly exports cars and spare parts, mechanical and electrical products, steel, plastic products, etc. to Ecuador. On the other hand, Ecuador mainly exports bananas, prawns, oil and other products to China. In terms of investment, China's investment in Ecuador mainly focus on oil, solid minerals, infrastructure and other fields, with oil being the earliest and most profitable project that China has invested in Ecuador. (See Figure 2 for details)

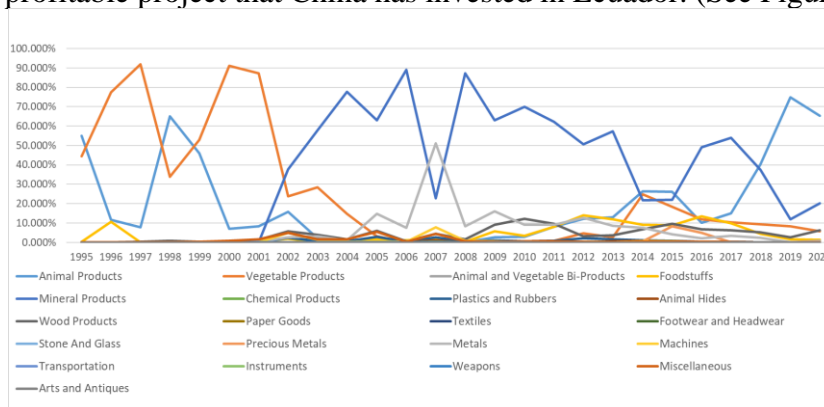


Figure 1: Proportion trend of trade volume exported by various industries from Ecuador to China from 1995 to 2020

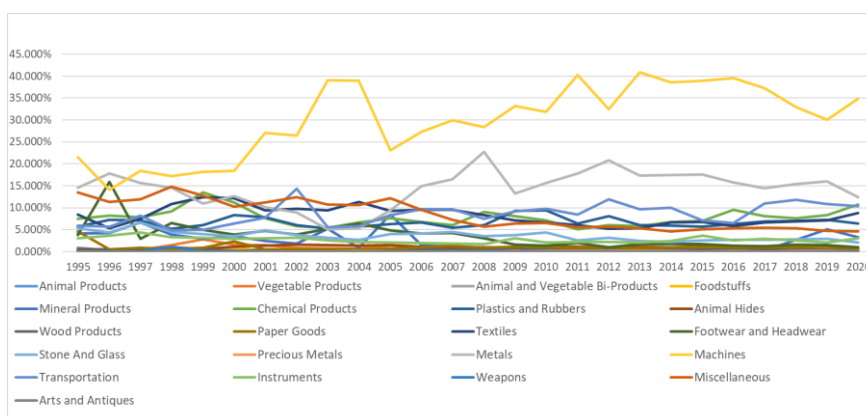


Figure 2: Proportion trend of trade volume exported by industries from China to Ecuador from 1995 to 2020

Under the promotion of the “the Belt and Road” initiative, China’s trade with Ecuador has achieved rapid development, the field of economic cooperation has become broader and broader, and the trade volume has been significantly increased. As of April 2017, over 80 Chinese-funded enterprises have been registered in the Commercial Reference Office of the Chinese Embassy in Ecuador, covering areas such as water conservancy, hydropower, roads and bridges, oil, communications and finance.[3] The importance of trade between China and Ecuador is evident from the economic and trade exchanges and cooperation between the two countries. Both sides are in urgent need of corresponding professionals in various fields of cooperation. In the context of the construction of the “the Belt and Road” initiative and the strengthening of cooperation between China and Ecuador in various fields, China Ecuador economic and trade cooperation has driven the economic development of Ecuador. However, it is evident that single Chinese majors and basic skilled talents are no longer sufficient to meet the trade demands. Therefore, it is crucial to develop more comprehensive and specialized talents to meet the increasing demands of the industry.

3. Analysis on the Demand and Characteristics of Chinese Talents in the Industry

3.1. Analysis of Chinese Talent Types in the Industry

In 2015, China's medium and long-term talent development planning outline (2010-2020) defined talent as "a person who possesses professional knowledge or skills, engages in creative work, and contributes to society. They are high-quality workers with strong capabilities within the human resources field." [4] The methods of talent classification are complex and diverse. This paper employs traditional methods of talent classification and horizontally classifies the social division of talent, dividing the basic social division of labor into productive and non-productive divisions. The industry can be divided into hunting, agriculture and industry. Hunting includes mining and hunting, agriculture includes planting and breeding, industry includes heavy industry, light industry and transportation. The corresponding talents are mining talents, hunting talents, planting talents, breeding talents, heavy industry talents, light industry talents and transportation talents.

Non-production division of labor can divide industries into four main categories: business, social services, administrative services, and education, science and technology. Business can further be divided into currency business and commodity business. Social services include communication, medical and other services. Administrative services include administration, legislation and justice, military police, education, science and culture. Each category requires specific talents such as currency business talents, commodity business talents, communication talents, medical talents, other service talents, administrative management talents, legislative and judicial talents, military police talents, education talents Scientific talents, literary and sports talents. [5]

Based on the analysis of the trade volume and industry types between China and Ecuador, the types of Chinese talents needed by Ecuador in their trade relations with China are mining Chinese talents, planting Chinese talents, breeding Chinese talents, heavy industry Chinese talents, light industry Chinese talents, enterprise management Chinese talents and Chinese education talents. With the acceleration of economic globalization, talent has become the decisive factor in the growth of comprehensive national strength. The trend of talent globalization has been further strengthened, which is reflected in the globalization of talent flow, talent education and professional technology standards.

3.1.1 Mining Chinese Talents

Ecuador's mining industry is a vital part of the country's economy, with the sector ranking fourth in terms of exports and first in non-traditional products. The deputy minister of the Ministry of Mines, Álvaro Ordóñez, said: "It is expected that by 2025, Ecuador's export of mineral products will reach 4 billion US dollars, which will account for 15% of the country's total export." If this goal is achieved, mining will become "the third largest export product, only after oil and shrimp." According to official data, China is the main export market of Ecuador's mineral products, accounting for 51.47%, followed by the United States, accounting for 10.56%, and Switzerland, accounting for 10.35%. By the third quarter of 2022, the mining industry had directly and indirectly created more than 185,000 jobs, benefiting about 722,000 people in Ecuador. Moreover, mining activities generated \$643 million in taxes between January and October 2022.[6] The mining industry has a prominent position in the China-Ecuador trade cooperation, creating many jobs for the Ecuadorian. Chinese enterprises in Ecuador need a large number of local Chinese mining talents. Therefore, proficiency in both mining professional skills and Chinese language can better serve the China-Ecuador trade cooperation and social and economic development.

3.1.2 Cultivation Chinese Talents

In 2019, the Chinese Academy of Tropical Agricultural Sciences and the Ecuadorian Academy of Agricultural Sciences signed a memorandum of understanding on the joint construction of the “China-Ecuador Tropical Agricultural Science and Technology Research and Development Center” during the first China-CELAC National Science and Technology Innovation Forum held in Quito, Ecuador’s capital. On January 3, 2023, Ecuador's President Guillermo Lasso announced that a free trade agreement (FTA) with China had been reached. Through this free trade agreement, Ecuadorian products will be preferentially exported to China. The Ministry of Production, Foreign Trade, Investment and Fisheries of Ecuador said that the agreement would promote the products of Ecuador’s agro-industrial sector to enter the Chinese market, thereby creating more jobs and attracting more investment.[7] The entry into force of the FTA will give preferential access to 99% of Ecuador’s current exports to China, including traditional agricultural products and agro-industrial products such as bananas, roses, cocoa, coffee, and non-traditional Ecuadorian agricultural products and agro-industrial products such as pitaya, pineapple, mango, blueberry, quinoa, among others. The deepening of trade cooperation and mutual benefit between China and Ecuador is more conducive to the export of Ecuador’s agricultural products to China. Ecuador attaches great importance to agricultural scientific and technological innovation and cooperates with the Chinese Academy of Agricultural Sciences in research, which requires Ecuador’s Chinese planting talents to be proficient in Chinese and Chinese agricultural planting technology on the basis of being proficient in agricultural products planting, and to carry out scientific and technological research and development with China to improve the quality of farm products planting and promote the further deepening of friendly cooperation between China and Ecuador.

3.1.3 Breeding Chinese Talents

Among Ecuador’s non-crude oil export products, shrimp ranks as the second largest. The Federation of Exporters of Ecuador (Fedexpor) reported that the export value of Ecuadorian shrimp from January to October 2022 amounted to US \$6.264 billion. Meanwhile, the Ecuador Aquaculture Association (CNA) stated that compared to the same period in 2021, the export volume of Ecuadorian shrimp increased by 43% and the export value increased by 32%. [8] China is the primary market for Ecuadorian shrimp, and in June 2020, the China Yellow Sea Fisheries Research Institute (YSFRI) and the National Chamber of Aquaculture of Ecuador (CNA) signed the cooperation agreement on the Biosafety of Shrimp Culture. The increasing market demand has led to further cooperation between Ecuador Chamber of Fisheries and Culture and China Yellow Sea Fisheries Research Institute, with Ecuadorian aquaculture experts learning the latest breeding technology and introducing new varieties from China Fisheries Research Institute. To promote the high-quality development and construction of Ecuador’s fisheries, these experts must become familiar with Chinese and relevant professional terms, while also mastering their own industry expertise.

3.1.4 Chinese Talents in Enterprise Management

China and Ecuador are jointly building the “the Belt and Road” with a focus on high quality. Currently, there are more than 100 Chinese-funded enterprises in Ecuador, such as Bureau of Geophysical Prospecting INC., China National Petroleum Corporation, Sinochem Geology and Mining South America Co., Ltd., China Petroleum Engineering Co., Ltd., China National Logging Corporation Logging, China XD GROUP CO., LTD., Sinohydro Group Ltd., CHINA NATIONAL ELECTRONIC ENGINEERING CO., LTD., China Road & Bridge Corporation, China Railway 14 Bureau Group, China Yantai Marine Fisheries Co., Ltd., among others. These Chinese-funded enterprises need to recruit local enterprise management talents. As both Chinese and Ecuadorian

employees work in these enterprises, these talents must not only possess excellent enterprise management skills but also need to learn Chinese and combine their professional skills with the language to enhance their ability to conduct enterprise management effectively.

3.1.5 Chinese Education Talents

Ecuador has a great demand for Chinese talents in planting, aquaculture, heavy industry, light industry, transportation and other industries, and the cultivation of Chinese talents in these industries depends on China and Ecuador, talent training institutions and employing enterprises. In Ecuador, schools serve as the main body for Chinese talent training. In addition to Chinese teachers dispatched by the China, there is a significant need for local Chinese professionals and skilled teachers to promote the localization of Chinese education in the industry.

3.2. Analysis of the Characteristics of Chinese Talents in the Industry

3.2.1 Multilingual and multicultural talents skilled in Chinese, English and Spanish

To meet the needs of various industries in Ecuador, Chinese talents should possess not only professional skills but also linguistic and cultural competencies. As the native language of Ecuador is Spanish and English is also widely spoken, Chinese talents should be multilingual and multicultural, proficient in Chinese, English, Spanish, and corresponding languages and cultures. For example, the cultivation and breeding talents have close exchanges and cooperation with the personnel of the China Institute of Agriculture and Fisheries. The cultivation and breeding Chinese talents should be proficient in using Chinese, familiar with Chinese culture, and develop new cultivation and breeding technologies together with relevant Chinese researchers.

3.2.2 Have Broad International Vision and Cross-cultural Communication Ability

In the trade between China and Ecuador, effective communication and cooperation between Chinese talents and relevant Chinese personnel are essential. Furthermore, Chinese talents in all industries in Ecuador must be proficient in Chinese, English, Spanish, and relevant language and culture to facilitate effective communication and collaboration. For instance, in the cultivation and breeding industry, close exchanges and cooperation with personnel from the China Institute of Agriculture and Fisheries are necessary. Therefore, cultivation and breeding Chinese talents should be skilled in Chinese language and culture and develop new technologies together with relevant Chinese researchers. Additionally, for the effective management of Chinese-funded enterprises in Ecuador, management talents need to have a higher education background, professional knowledge of enterprise management, and broad international vision. They must be proficient in Chinese, understand basic economic theory, and possess cross-cultural communication abilities to manage both Chinese and Ecuadorian employees in the enterprise effectively. Furthermore, they must understand the differences in behavior patterns between Chinese and Ecuadorian employees due to diverse cultural backgrounds to avoid potential cultural conflicts.

3.2.3 Combine industry knowledge with Chinese to master advanced international knowledge and skills of the industry

The Chinese talents in Ecuador play a crucial role in the development and innovation of various industries. They are not only required to possess Chinese language proficiency and professional expertise but also need to be well-versed in Ecuadorian and international cultures. Moreover, they should keep abreast of the latest advancements in science, technology, and industrial knowledge to

better serve Ecuador’s production and innovation needs. For instance, with the booming fishery industry in Ecuador, more and more farms are transitioning towards intensification, scale, industrialization, standardization, and informatization. The breeding enterprises require a significant number of Chinese aquaculture talents who can connect with the Chinese market while engaging in aquaculture. These talents need to understand professional technology, Chinese, and international trade regulations. They should also work together with Chinese researchers to develop new varieties and promote the advancement of aquaculture technology while conducting trade with China. In conclusion, Chinese talents in Ecuador should be compound talents of “Chinese + culture + specialty,” with excellent cross-cultural communication skills, a broad international vision, and a commitment to staying updated on the latest advancements in their respective fields.

4. Analysis of Questionnaire Results

4.1. Basic Introduction of Teachers and Students

A total of 18 questionnaires were collected in this study, from teachers at the Confucius Institute of San Francisco University in Quito, the Confucius Classroom of Siyuan Middle School in Ecuador, and Escuela Superior Politecnica del Litoral. The age of teachers is about 20 to 40 years old, of which 55.56% of the total number of teachers aged 30 to 40 years old. The survey results show that 33.89% of the teachers had 5-8 years of teaching experience, 22.22% have 9-12 years of teaching experience, and half of the teachers are senior teachers with more than five years of rich teaching experience (see Figure 3 in details).

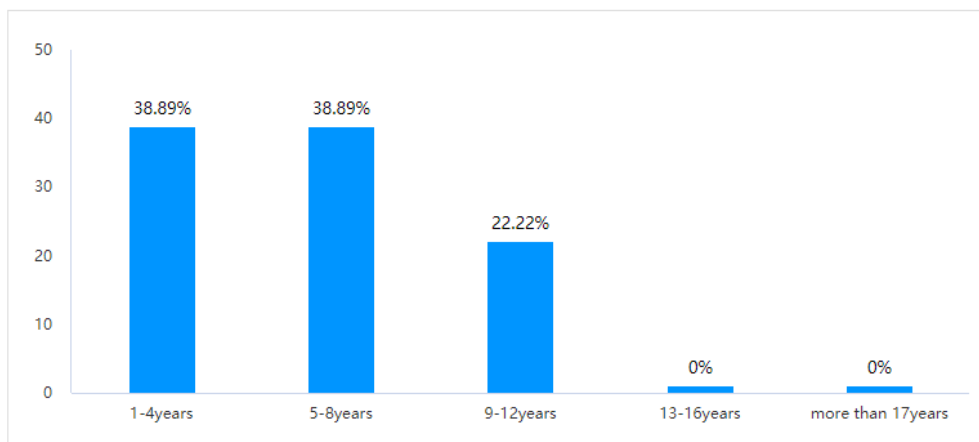


Figure 3: Teaching years of teachers

A total of 39 questionnaires were collected for the student version of this study, most of whom were from the Confucius Institute at the University of San Francisco in Quito, of which 66.7% were women, 33.3% were men, and 48.7% of the total number were students aged 24 and over. 97.4% of students are native Spanish speakers, and 94.4% Chinese study for 1-4 years. The survey results indicated that most students have not taken the HSK exam, and only 13% have passed the HSK1, 8% have passed the HSK3 exam, and 5% have passed the HSK2. (See Figure 4 for details).

The most influential classification of motivation for second language learning is the integrative motivation and instrumental motivation proposed by Lambert and Gardner. According to the survey results, students’ motivations for learning Chinese mainly include three categories: studying abroad, engaging in Chinese-related jobs in the future, and liking the language of Chinese. Among them, 46% of the students said that the purpose of studying Chinese is to pursue a related job in the future; 21% of students said that their Chinese was to plan for studying abroad. The remaining students were

motivated to learn Chinese as integrated, with 33% saying they learned Chinese out of a love of the language of Chinese (see Figure 5 in details). It can be seen that the motivation of Ecuadorian students to learn Chinese is mainly instrumental motivation.

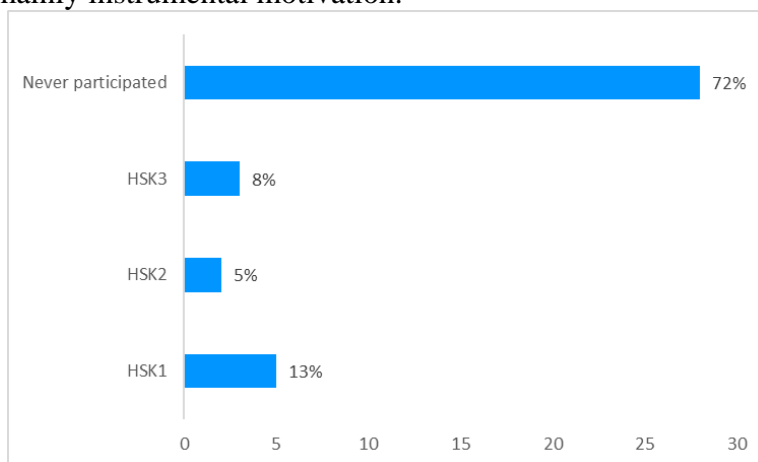


Figure 4: Students' Chinese level

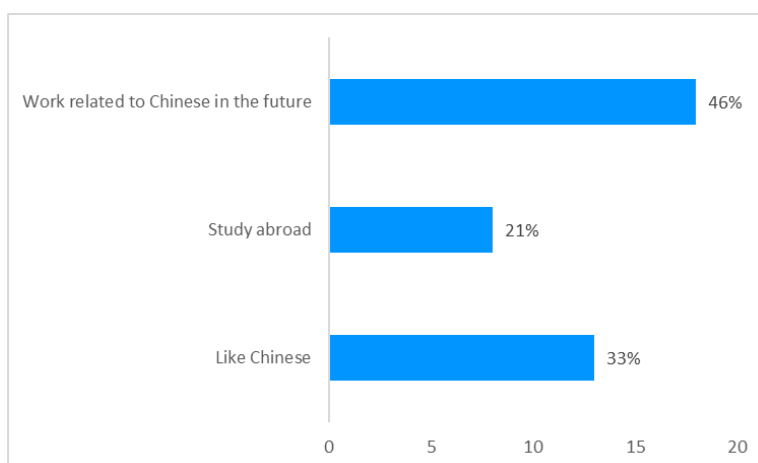


Figure 5: Students' motivation Chinese learning

4.2. Provision of Courses for the Development of Industry Chinese Talents in Ecuador

Ecuador offers a range of Chinese talent training courses that cover cross-cultural communication, humanistic literacy, Chinese language foundation, Chinese plus skills, Chinese culture, etc. (see Figure 6 in details). Currently, almost all schools in Ecuador offer basic Chinese language courses, with a course placement rate of 100%, while other courses are offered in Chinese culture (72.22%), intercultural communication and professional knowledge and skills (16.67%), humanistic literacy (5.56%). It can be seen that most schools prioritize teaching students basic Chinese language courses, and there are still relatively few schools that offer professional knowledge and skills courses. Unfortunately, most teaching institutions have not paid attention to this type of courses.

The survey found that the choice of course content by Ecuadorian Chinese teachers mainly depends on the syllabus, teaching objectives and teaching plan, teachers' own professional abilities, and students' interests (see Figure 7 in details). Only 27.78% of teachers consider the employment needs of students when designing classroom content. This suggests that the current Chinese language curriculum in Ecuador may not adequately address the future employment needs of students, and there is significant room for improvement in the curriculum's content.

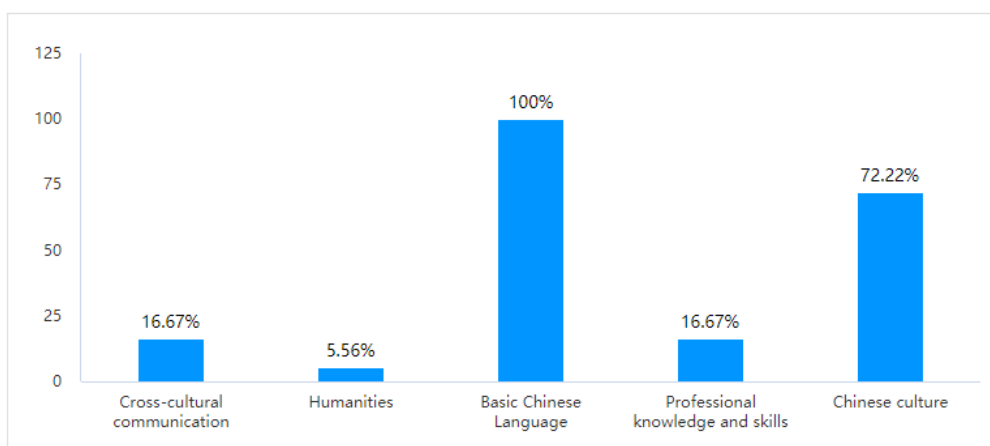


Figure 6: Courses for Chinese personnel training

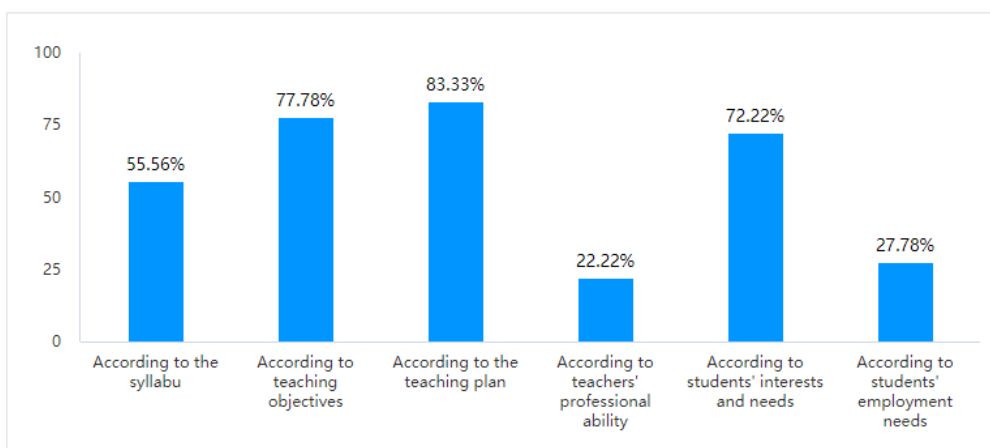


Figure 7: Teachers choose Chinese the basis for course content

In the current Chinese teaching process in Ecuador, the teaching methods commonly used by teachers include explanatory method, discussion method, situational teaching method, game method, and task-based teaching method (see Figure 8 in details). The most commonly used teaching methods are multimedia teaching, picture teaching and online platforms. However, the survey results suggest that teachers mainly based on input-based teaching method, and there is limited between teachers and students. Teachers are more interested in improving the effectiveness of Chinese teaching, and most teachers believe that the professionalism of the current Chinese curriculum should be improved. Among them, 72.22% of teachers have a relatively strong desire to improve, with 22.22% indicating a very strong desire. (see Figure 9 in details). These findings indicate that there is still significant room for improvement in the Chinese language teaching process in Ecuador.

Based on survey, the majority of students said that the content taught in Chinese classroom was novel and helped them improve their Chinese organizational skills, intercultural communication skills, and cognitive skills. However, few Chinese courses in Ecuador include industry Chinese related courses, and the curriculum is not closely linked to the employment of students. Among them, 28% of students said that the curriculum is not closely linked to employment, while 10% noted that it lacks targeted courses based on their individual needs. Additionally, 8% of students reported that the current Chinese course was too difficult and 10% expressed a desire for more modern teaching techniques and means in the classroom (see Figure 10 in details). These findings highlight significant areas for improvement in the current Chinese language education in Ecuador, according to students'

perspectives.

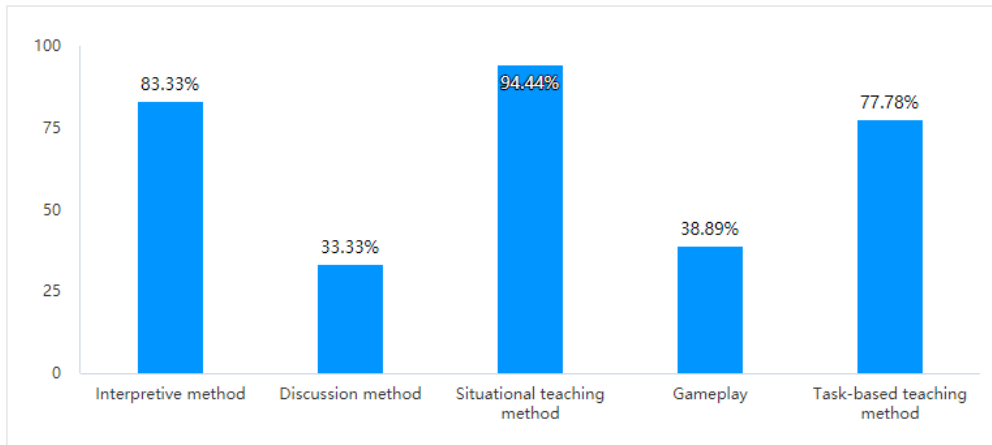


Figure 8: Common teaching methods used by teachers

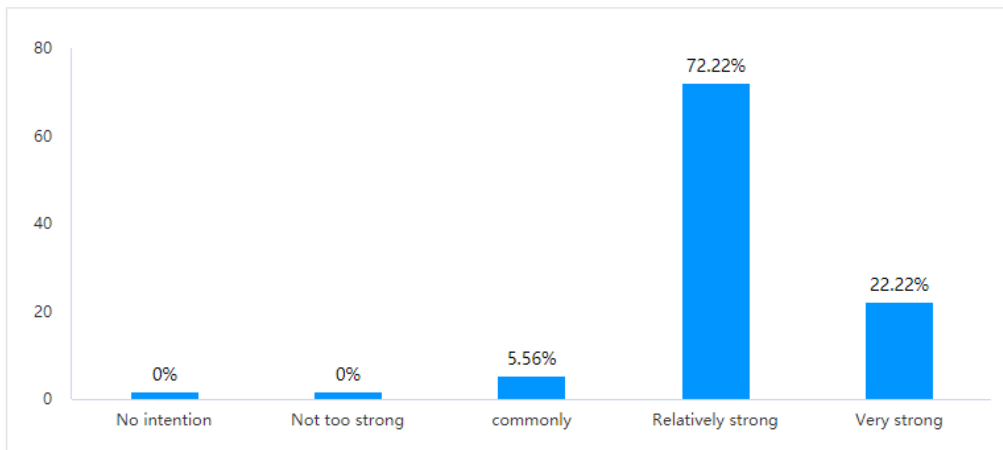


Figure 9: Teachers' willingness to promote Chinese professionalism in teaching

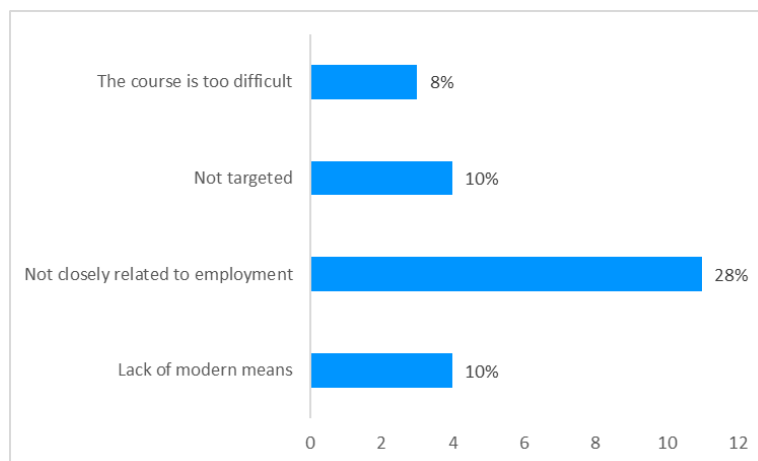


Figure 10: Problems that students think there are in the current curriculum

4.3. Teachers and Students are Aware of Industry Chinese Courses

Based on the questionnaire survey results, the current cultivation of industrial Chinese in Ecuador is still in the initial stage of development. Specifically, 33.33% of teachers said they did not

understand the industry Chinese, 33.33% indicated an average understanding, 27.78% claimed to understand industry Chinese, and only 5.56% said that they knew industry Chinese very well (see Figure 11 in details). These findings suggest that teachers generally have a limited understanding of industrial Chinese, and there are few teachers who have experience teaching courses in this area.

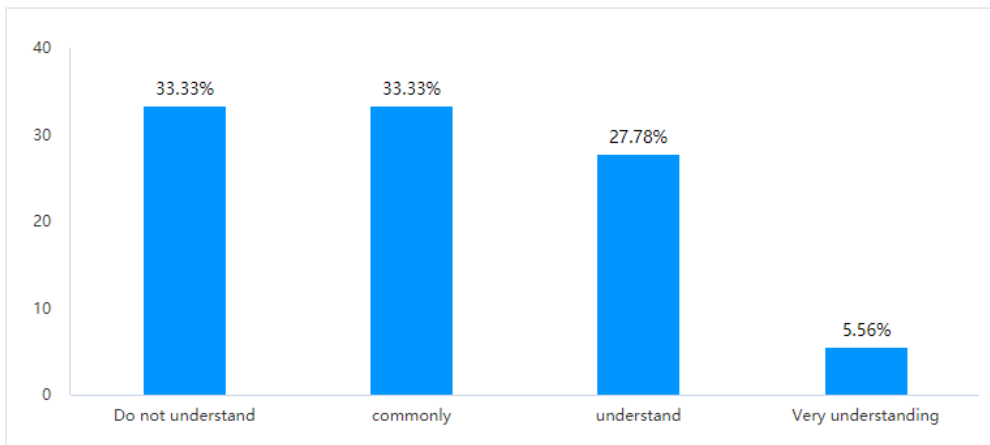


Figure 11: Teachers' understanding of industry Chinese

The survey results indicate that 67% of students have limited understanding of industrial Chinese, 28% have an average understanding, and only 5% possess a high level of knowledge (see Figure 12 in details). This finding suggests that most students lack familiarity with industrial Chinese, which can be attributed to the lack of relevant courses or lectures offered in schools.

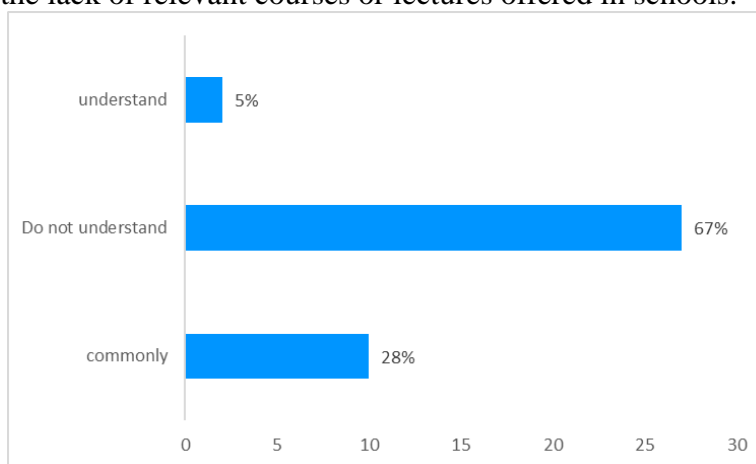


Figure 12: Students' understanding of industry Chinese

4.4. The Attitude of Teachers and Students towards the Chinese of the Industry

Regarding teachers' views on industry Chinese, many teachers expressed interest in industry Chinese courses related to this subject. Specifically, 44.44% of teachers suggested that it was more necessary to set up relevant courses to enable students to learn about industry Chinese; 16.67% of teachers indicated the need for industry-Chinese courses, while only 5.56% of teachers did not think it was necessary (see Figure 13 in details). These findings suggest that most teachers have a positive attitude towards establishing courses related to industrial Chinese.

In response to the question of whether industry-related Chinese courses are necessary, 46% of students indicated a strong need for such courses, while 10% considered the need to moderate. Meanwhile, 38% of students believed that some industry Chinese related courses were necessary, and

only 5% of students felt that such courses were unnecessary (see Figure 14 in details). These findings indicate that most students believe that industry-related Chinese courses are necessary and have high expectations for the establishment of such courses. Therefore, it is highly feasible for Chinese educational institutions in Ecuador to offer industry-related Chinese courses.

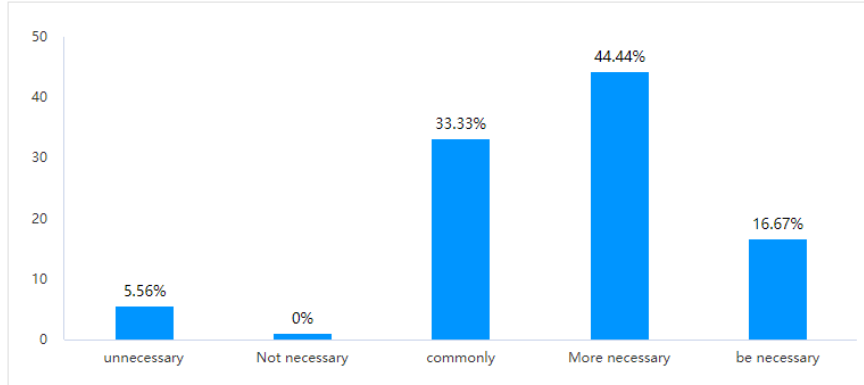


Figure 13: Necessity of Chinese courses in industry (teachers)

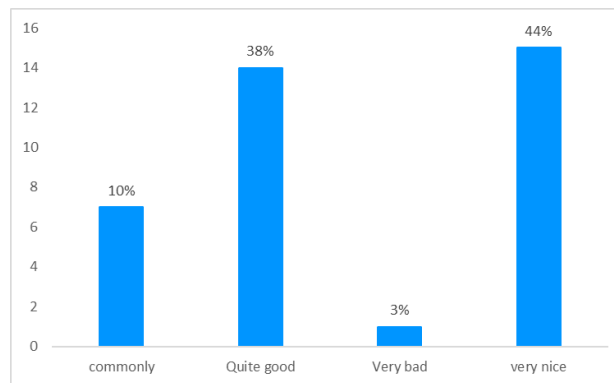


Figure 14: Necessity of Industry Chinese Course (Students)

4.5. Curriculum Construction for Industry Chinese Talent Training

According to the survey, teachers generally believe that in the process of cultivating talents Chinese in the industry, they should provide Chinese language skills courses, cross-cultural communication courses, industry practice courses and industry knowledge and skills courses (see Figure 15 in details). Regarding how to promote the cultivation of Chinese talents in the industry, the teachers put forward three suggestions: first, they can cooperate with local Chinese-funded companies to carry out industry Chinese courses; the second is to train teachers in relevant knowledge in advance; the third is to understand in advance the local industries closely related to Chinese.

According to the survey, more than half of the students said that they hope to expand their knowledge through industry-Chinese study, find a satisfactory job after graduation, and study abroad. Additionally, 83.7% of the students think that the employment prospects of industry Chinese are very good, 41% of students said that they will definitely engage in industry-Chinese-related jobs in the future, and 25.6% of students say that there is a high probability of engaging in industry Chinese-related jobs in the future (see Figure 16 and 17 in details). Regarding the learning style of industry Chinese, most students prefer part-time learning. In addition, students are also interested in using digital resource platforms, reading relevant extracurricular books, and participating in internships to support their learning of industry Chinese.

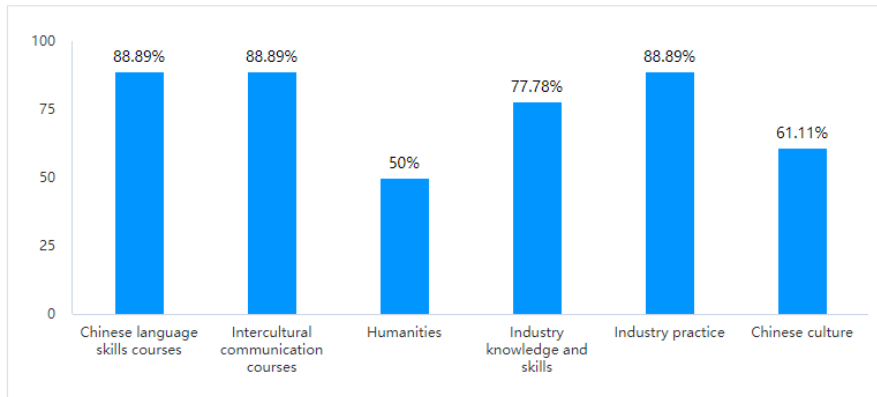


Figure 15: Classification of courses related to industry Chinese majors

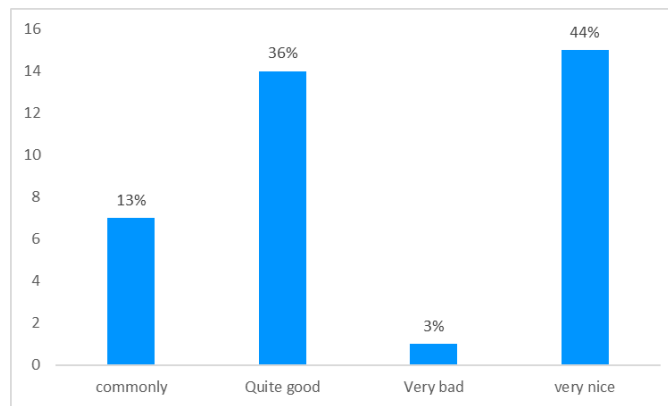


Figure 16: What do students think are the employment prospects of industry China

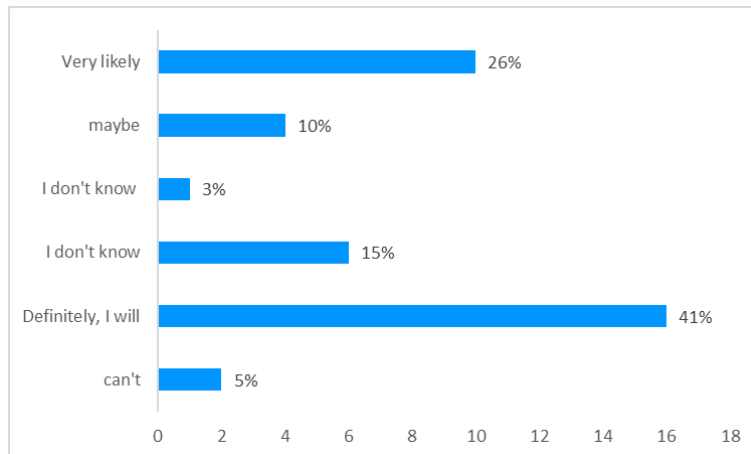


Figure 17: Whether students will engage in industry Chinese related jobs in the future

5. Existing Problems in Training Chinese Talents in Ecuador

5.1. There are Various Types of Talented Individuals, but the Supply of Chinese-speaking Professionals in Various Industries Falls Short of Demand

In the trade between China and Ecuador, there is growing demand for Chinese talent in various industries such as mining, agriculture, aquaculture, heavy industry, light industry, transportation and commerce. With the deepening of economic and trade exchanges between China and Ecuador, the

market has an increasing demand for Chinese talents in various industries. However, Ecuador's talent training system is not yet fully developed, resulting in a small number of Chinese talents with weak pertinence in the industry. As a result, there is a shortage of Chinese talent in the industry, which creates a supply-demand gap that needs to be addressed.

5.2. The Training Unit Does not Pay Enough Attention, and There is a Shortage of Teachers for Training Chinese Talents in the Industry

According to the research findings, the talent training system in Ecuador is still in its infancy and lacks a cohesive connection between the main bodies responsible for training. The government's attention to the training of Chinese talents in the industry is inadequate, and there are few connections between Chinese-funded enterprises and Chinese teaching institutions. Currently, Chinese-funded enterprises in Ecuador are facing a shortage of Chinese talents in the industry. The main unit responsible for talent training is the schools, and there is a severe shortage of qualified teachers who can train Chinese talents in the industry.

5.3. The school Curriculum is Single, and There are Few Chinese Courses in the Industry

Due to the lack of targeted courses related to Chinese talents in various industries, the talent training in Ecuador cannot meet the needs of the Chinese-funded enterprises. Moreover, the existing curriculum system of Chinese language teaching in Ecuador is not mature and needs to be further developed. Most institutions only offer basic courses related to Chinese language and culture, which are not closely related to the students' employment prospects. Additionally, there is a lack of professional skills courses that take into account the demand for Chinese talents in specific industries such as agriculture, fishery, and oil exploitation. As a result, the Chinese talents cultivated in Ecuador do not match the needs of the Chinese-funded enterprises.

5.4. The Local Chinese Teaching Resources are in Short Supply, and the Teaching Resources for Training Chinese Talents in the Industry are Scarce

At present, Ecuador lacks locally compiled and published Chinese teaching resources. Most paper-based teaching resources are published in China, and digital Chinese teaching resources are also scarce. In addition, there is a lack of Chinese textbooks that are tailored to the needs of specific industries such as agriculture, fishery, manufacturing, and energy exploitation. The insufficient availability of industry-related teaching resources is one of the reasons why there is a shortage of Chinese talent in Ecuador.

6. Suggestions on Training Chinese Talents in Ecuador

6.1. Define Talent Training Objectives and Cultivate Chinese Talents in Agriculture, Fishery, Mining and Manufacturing

The goal of training Chinese talents in the industry should be clarified, with a focus on filling the gap of Chinese talents in Ecuador's Chinese-funded enterprises. Talent training should be guided by the employment needs of Chinese-funded enterprises and target Chinese knowledge and skills courses in agriculture, fishery, manufacturing, energy industry, and other relevant industries. The training program should rely on Chinese language and communication ability as the core, aiming to cultivate interdisciplinary, cross-language, and cross-cultural talents that can accurately meet the needs of Chinese enterprises.

6.2. Diverse Training Subjects and Implement Talent Training at All Levels

The training of Chinese talents in the industry requires a collaborative effort from various stakeholders, including the Chinese and Ecuadorian governments, talent training institutions, employing enterprises, and talent training think tanks. These entities constitute the main elements of the talent organization plan. The government should provide guidance and support through policies, while universities and think tanks should play a role in training subjects. Employing enterprises should provide financial support and develop talent orders. By utilizing the strengths of different teaching institutions at home and abroad, talents should be trained in a mobile way that meets actual needs. Students should learn different knowledge in different campuses, earn professional skills certificates and degree certificates, and undergo talent training at all levels to meet Ecuador's demand for Chinese talents in the industry.[9]

6.3 Attach Importance to the Training of Teachers and Strengthen the Construction of Teaching Staff for Chinese Language Training in the Industry

To address the shortage of teachers for Chinese talent training in the industry, solutions can be pursued from following three aspects. First, existing teachers can be retrained to acquire relevant knowledge and skills in agriculture, petroleum, and energy industries. Second, schools and teachers can enhance internal cooperation, with language teachers and professional teachers learning from each other and updating their understanding of Chinese education. Third, training activities can be organized for teachers, such as hiring industry Chinese experts or utilizing online resources to provide professional training on industry Chinese. By strengthening the planning and construction of industry Chinese teaching faculty and optimizing the knowledge structure of teachers, the training can cultivate teachers who possess Chinese knowledge and teaching skills as well as related industry knowledge and teaching skills, ultimately alleviating the shortage of teachers.

6.4 Attach Importance to the Training of Teachers and Strengthen the Construction of Teaching Staff for Chinese Language Training in the Industry

The shortage of teachers for Chinese talent training in the industry can be solved from the following three aspects: First, the focus can be on the transformation of existing teachers by providing them with relevant training on the knowledge and skills required for industries such as agriculture, petroleum, and energy. This would enhance their ability to teach industry-specific Chinese language and culture. Second, teachers in different schools and departments can strengthen internal cooperation, where language teachers and professional teachers can learn from each other and update their understanding of Chinese education. This collaboration would promote a more comprehensive and well-rounded approach to talent training. The third is training activities for teachers can be set up. The main unit of talent cultivation can hire industry Chinese experts or use online resources to train teachers on professional knowledge of industry Chinese, strengthen the planning and construction of industry Chinese teaching faculty, optimize the knowledge structure of teachers, and cultivate teachers with Chinese knowledge and teaching skills and related industry knowledge and teaching skills, so as to improve the shortage of teachers.

7. Conclusion

With the deepening of China-Ecuador economic and trade cooperation, the demand for Chinese language talents in various industries in Ecuador is increasing day by day, and composite talents are increasingly popular. Chinese language teaching in Ecuador should not only be language knowledge

teaching, but also professional skills teaching. However, at present, Chinese language education in Ecuador is still in the initial stage, and the teaching system is not yet mature. There are many types of talent distribution, but there is a shortage of Chinese language talents in various industries. The attention given to talent cultivation by training institutions is insufficient, and there is a shortage of teachers for cultivating Chinese language talents in various industries. The school curriculum is monotonous, and there are few Chinese language courses offered in various industries. Local Chinese language teaching resources are scarce, and there is a lack of teaching resources for cultivating Chinese language talents in various industries. Therefore, Ecuador has set clear talent development goals to cultivate Chinese language talents in agriculture, fisheries, mining, and manufacturing industries; diversify the main body of talent cultivation and implement talent cultivation work at all levels; attach importance to teacher training and strengthen the construction of Chinese language teaching faculty for various industries; strengthen multi-party cooperation and provide research and development support for industry-specific Chinese language teaching resources tailored to Ecuador. This will further promote regional economic cooperation and development between China and Ecuador and lay a solid foundation for the construction of the Belt and Road Initiative.

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References

- [1] Gao Chao. *Ecuador: an important gateway to South America* [J]. *China's Foreign Trade*, 2008, (01): 76-78.
- [2] National Bureau of Statistics. *2017 National Occupational Classification (GB/T 4754-2017)* [EB/OL]. http://www.stats.gov.cn/tjsj/tjbz/hyflbz/201710/t20171012_1541679.html, 2017-09-29.
- [3] Tang Di. *Risk analysis of legal provisions of public works in Ecuador* [J]. *Construction & Design for Engineering*, 2018 (21): 253-254+257.
- [4] Ministry of Human Resources and Social Security of the People's Republic of China. *Outline of the National Medium and Long-term Talent Development Plan (2010-2020)*.http://www.mohrss.gov.cn/SYrlzyhshbzb/zwgk/ghcw/ghjh/201503/t20150313_153952.htm. 2015-03-13.
- [5] Ye Zhonghai. *China Talents Research Association. Xibian Rencaixue Tonglun* [M]. Beijing, Dangjian Reading Matter Publishing House, 2013:433.
- [6] China Council for the Promotion of International Trade. *Ecuador is expected to exceed its export target of mineral products in 2022*. <https://www.ccpit.org/costarica/a/20221224/202212243jtd.html>. 2022-12-24.
- [7] News. Youth. Cn. *The free trade agreement between China and Ecuador is progressing smoothly. President of Ecuador: This is good news for the beginning of 2023*. http://news.youth.cn/gj/202301/t20230105_14238645.htm. 2023-01-05.
- [8] China Fisheries & Seafood Expo. *The export volume of Ecuadorian shrimp in the first 10 months of this year has exceeded that of the whole year of 2021*. <http://www.seafare.com.cn/seafoodnews/7980-2022-12-31-5>. 2023-01-01.
- [9] Zheng Tongtao, Guo Xu. *Research on the Training Mode of International Chinese Talents under the the Belt and Road Initiative* [J]. *Journal of Xiamen University (Arts & Social Sciences)*, 2020 (01): 69-81.