Article

Multidisciplinary Professional Talent Cultivation in the Internationalization of China's Agri-Sci-Tech Industry

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Multidisciplinary Professional Talent Cultivation in the Internationalization of China's Agri-Sci-Tech Industry

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Abstract: The advancement of agricultural technology is intrinsically linked to the evolution of the agricultural industry, with the latter being contingent upon technological progress for its sustained enhancement. In the context of China, a nation of significant agricultural stature, the globalization of agricultural science and technology (Agri-Sci-Tech) has emerged as a pivotal narrative within the country's agricultural growth trajectory. The strategic alignment of China's Agri-Sci-Tech industry with its global counterparts is driven by the ambition to assimilate sophisticated agricultural production techniques and managerial acumen from its Western counterparts, thereby catalyzing the international expansion of the nation's Agri-Sci-Tech endeavors. This scholarly discourse delves into the imperative of interdisciplinary convergence, underscoring the paradigm and intrinsic attributes associated with the cultivation of agricultural expertise. It scrutinizes the prevailing state of foreign language instruction within the academic curriculum, positing strategic interventions and recommendations for the development of a robust agricultural foreign language talent cultivation framework. The treatise accentuates the criticality of cultivating a multifaceted agricultural talent pool proficient in foreign languages, advocating for a "professional+foreign language" model that facilitates international dialog within China's Agri-Sci-Tech industry and bolsters the creation of globally recognized brands. Moreover, the cultivation of a "foreign language+professional" composite talent model is posited as a transformative solution to the existing impasse in foreign language education in China, offering a novel pathway for educational innovation and global competitiveness within the agricultural domain.

Keywords: foreign language education; the internalization of China's Agri-Sci-Tech industry; professional + foreign language; foreign language + professional

Background of the Study

Agriculture stands as the cornerstone of human sustenance, furnishing essential raw materials and financial underpinnings for the national economy and its production activities (Chen Yantong, 2023: 198). In the contemporary landscape, the field of Agri-Sci-Tech is experiencing rapid growth, with academic research progressing at an unprecedented pace and theoretical and practical knowledge undergoing continuous renewal. As a leading agricultural nation with a deep historical legacy in agricultural production and development, China's agricultural industry is a vital component of its national economic system, bearing significant implications for the national economy and the well-being of its population, which numbers over 1.4 billion. The evolution of China's Agri-Sci-Tech industry is also instrumental in the construction of a harmonious and stable international social ecosystem.

Within the framework of economic globalization, China's agricultural production and international trade have undergone remarkable expansion, with the industry's technological sophistication advancing steadily. The exchange of technological knowledge and communication among agricultural economic industries across the globe are becoming increasingly prevalent. However, compared with the large-scale, intensive, and information industrialization observed in agricultural production, storage, transportation, and sales in Western developed countries, there

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remains a notable disparity in the levels of production technology and industrialization development within China's Agri-Sci-Tech industry. To augment the international discourse power of China's science and technology industry, it is imperative to broaden international exchanges, keep abreast of the latest developments in global agricultural science and technology, and assimilate and adopt advanced production technologies and equipment from Western Agri-Sci-Tech fields, thereby striving to increase agricultural yields.

Nevertheless, the increasing trend of colleges and universities abolishing foreign language majors has sparked a debate regarding the decision-making level of talent cultivation in Chinese higher education. There is a growing chorus advocating for a reevaluation of the necessity of foreign language departments for talent cultivation, questioning whether the current foreign language proficiency levels among Chinese people warrant the continued establishment of relevant departments. This raises the critical question: Has the time truly come to discontinue foreign language majors and even foreign language learning in the context of China's current linguistic capabilities?

Despite achievements in cultivating talent within China's Agri-Sci-Tech industry, several pressing issues demand attention. The cultivation of talent appears to be decoupled from the evolving demands of socioeconomic development. The education of agricultural professionals is often confined to the domain of specialized agricultural knowledge, with limited capacity to adapt to the latest trends in foreign trade, legal affairs, and agricultural technology. The foreign language education provided by Chinese universities has focused predominantly on equipping students to pass the College English Test Band 4 or Band 6, with an emphasis on explaining language knowledge points rather than fostering interdisciplinary competencies.

Moreover, there is a lack of clarity among university administrators regarding the cultivation of composite talent from an international perspective, the construction of a system paradigm that integrates interdisciplinary approaches within the context of globalization, and the ability to anticipate and adapt to market changes. Some institutions with a focus on foreign languages have concentrated solely on training students to memorize industry-specific vocabulary or read texts without making corresponding adjustments to teaching methods in response to the international market or changing times. These institutions have yet to develop personalized talent training models that align with the regional economic development of the university's location. The disciplinary and professional settings remain entrenched in the single-subject academic research-oriented talent training models of the past century, neglecting the cultivation of composite abilities.

The proficiency of foreign language teachers in agricultural science in China is often inadequate, leading to diminished effectiveness in teaching foreign languages related to agriculture. Conversely, agricultural teachers frequently lack the necessary foreign language and cultural knowledge to teach professional foreign languages. Consequently, the talent cultivated at universities is ill equipped to meet the market demand for the internationalization of China's Agri-Sci-Tech industry. Furthermore, the rapid development of translation software applications and artificial intelligence technology has led many to question the necessity of foreign language education, given the considerable time investment required to learn a foreign language. This has gradually diminished the acceptance of foreign language learning by students, parents, and society at large, as it was initially embraced during the early stages of China's reform and opening-up period.

To enhance the internationalization of China's Agri-Sci-Tech industry, it is essential to leverage the new media platform of cross-border e-commerce, which, under internet technology, offers characteristics such as broad audience reach, low access thresholds, transparent transactions, convenient settlements, and low costs (Wang Xia, 2024: 155). This approach can expand the audience, promote brand culture, and continuously increase the international popularity of China's Agri-Sci-Tech industry, thereby increasing its competitiveness in the international market (Chen Yantong, 2023: 198). This strategic shift aims to transform China's Agri-Sci-Tech industry from a traditional "client-seeking" model to one that is "sought by clients" as it expands into international markets.

II. Definition of "Composite Talents"

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In the realm of higher education in China, there has been a prevalent misconception that the term "composite talent" is synonymous with individuals who possess both foreign language proficiency and expertise in a specific academic field. This narrow interpretation has regrettably skewed the educational paradigm, prioritizing the acquisition of disciplinary knowledge and the evaluation of students on the basis of their mastery of such knowledge. Foreign languages, in this context, are reduced to mere instruments facilitating the acquisition of professional subject matter rather than being integral to the holistic development of the individual. The notion of "foreign language skills plus other professional skills" as a composite construct is fundamentally flawed, as it fails to encapsulate the true essence of interdisciplinary integration (Qu Weiguo & Chen Liufang, 2019: 234).

The concept of "composite talent" transcends the boundaries of academia and is increasingly recognized across various industries. It denotes individuals who possess a diverse array of skills and knowledge, reflecting the growing interdependence of innovation, breakthroughs, and the advancement of S&T in interdisciplinary collaboration and convergence. The cultivation of such talent is no longer a luxury but rather a necessity in the face of evolving demands within the scientific community (Xi Guiquan, 2021--11--29). A composite talent is characterized by an in-depth understanding and proficiency in a particular domain, complemented by the ability to navigate across disciplines, adapt to dynamic work environments, and address complex challenges. In an era marked by rapid development and cutthroat competition, the value of composite talent is amplified, as it is equipped to thrive in the ever-shifting sands of market demands and workplace evolution.

The imperative to nurture composite talent with a blend of "professional+foreign language" and "foreign language+professional" skills is self-evident. These individuals are not only grounded in solid professional knowledge but also adept in at least one foreign language, thereby equipping them with meaningful contributions to the internationalization of China's Agri-Sci-Tech industry. The "professional+foreign language" model advocates a deep dive into the professional knowledge of agricultural science and technology, followed by a concerted effort to enhance foreign language proficiency, particularly in the realm of scientific and technical communication, to foster global exchange and collaboration (Xu Juan, 2024-06-21). Conversely, the "foreign language+major" model places initial emphasis on honing students' foreign language skills before immersing them in the professional knowledge of agricultural science and technology, catering to those with a strong linguistic foundation looking to specialize in this field.

In this discourse, agricultural composite talent is delineated as individuals who leverage foreign language subject knowledge as a foundation, view Agri-Sci-Tech through the lens of specialized language learning, and concentrate on mastering the intricate elements of agricultural knowledge communication, including discourse structure, rhetorical strategies, patterns of discourse, syntactic frameworks, and communicative impact. The development of such talent in the Agri-Sci-Tech industry is contingent upon seamless collaboration between academic institutions, industry players, and research organizations, ensuring that educational content is not only relevant but also aligned with practical needs.

To effectively cultivate composite talent, it is imperative to adopt a multifaceted educational approach that transcends traditional disciplinary silos. This involves the integration of language learning with professional training in a manner that facilitates the seamless application of linguistic skills in professional contexts. Educational curricula must be reimagined to encompass interdisciplinary modules that challenge students to apply their knowledge across domains, fostering a synergistic learning experience.

The pedagogical strategies employed in cultivating composite talent should be underpinned by research-informed practices that emphasize the importance of critical thinking, problem solving, and creativity. This includes the use of case studies, project-based learning, and collaborative tasks that simulate real-world scenarios, thereby preparing students for the complexities of the modern workplace.

Assessment mechanisms must also evolve to reflect the multidimensional nature of composite talent. The evaluation criteria should encompass not only the mastery of subject-specific knowledge

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but also the ability to communicate effectively in a foreign language, navigate interdisciplinary challenges, and demonstrate cultural competence.

In the context of agricultural science and technology, the cultivation of composite talent is particularly crucial. As China's agricultural industry increasingly engages with global markets and technological advancements, the need for professionals who can bridge the gap between language and specialized knowledge becomes more pronounced. These individuals play pivotal roles in facilitating international research collaboration, promoting technological transfer, and enhancing the global competitiveness of China's agricultural industry.

The development of composite talent in this field is a multifaceted endeavor that requires the concerted efforts of educators, industry experts, policymakers, and researchers. By aligning educational objectives with industry needs, fostering a culture of innovation and collaboration, and promoting the value of interdisciplinary learning, China can effectively prepare its future workforce to meet the challenges of the global agricultural landscape.

In conclusion, the cultivation of composite talent with a combination of "professional+foreign language" and "foreign language+professional" skills is not merely a response to the evolving demands of the job market but also a strategic investment in the future of China's agricultural S&T industry. It is through the cultivation of such talent that the country can hopefully achieve sustainable growth, enhance its global standing, and contribute to the improvement of agricultural practices worldwide.

III. Challenges in Cultivating International Talents for China's Agri-Sci-Tech Industry

The cultivation of talent for the internationalization of China's Agri-Sci-Tech industry is pivotal to the advancement of global agriculture. The Ministry of Education, the Ministry of Agriculture and Rural Affairs, the China Association for Science and Technology, and other entities are diligently fostering a cadre of Agri-Sci-Tech professionals. Through policy guidance and project execution, we have cultivated a batch of high-level, applied composite talents who not only understand and cherish agriculture but also actively promote it, aligning with the demands of industrial progress. However, several challenges persist in this talent cultivation endeavor:

3.1. Insufficient International Perspective

Professionals in China's agricultural technology industry, including production managers, technical experts, and sales staff, often lack a broad international outlook and the necessary language proficiency training. This deficiency hinders their ability to directly access foreign literature and grasp the latest developments, technological advancements in production equipment, and market standards in the Western agricultural technology industry. Consequently, China's efforts to align its agricultural production standards with international standards may fall short.

3.2. Deficiencies in International Cooperation Experience

As a relatively newcomer to the global agricultural stage, China lacks adequate experience in international agricultural collaboration and robust support mechanisms. This is particularly evident in resolving conflicts related to law, language, religion, ethics, and customs. Moreover, while China's agricultural globalization efforts have focused on production, the neglect of cultivating versatile talent has placed China at a disadvantage in agricultural product pricing and channel control, given that the global agricultural trade is largely dominated by multinational corporations.

3.3. Obstacles in the International Public Opinion Environment and Communication Platforms

China's role in global food security governance has garnered international attention, albeit amid unfounded allegations of "neo-colonialism" and "land-grabbing." There is an urgent need for China to enhance its ability to guide public opinion and rule-making. Additionally, the development of new

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agricultural industries such as service trade, digital agriculture, and cross-border e-commerce in China is lagging behind, necessitating a stronger focus on talent cultivation in these emerging fields.

3.4. Inadequate Professional Knowledge among Translators

Translators in China's Agri-Sci-Tech industry often lack a solid foundation in terms of agricultural knowledge and production skills. This deficiency leads to mistranslations and omissions, preventing the full utilization of imported management systems, production technologies, and advanced equipment. The issue is particularly pronounced in areas related to agricultural product production, manufacturing, processing, packaging, advertising, sales, and legal affairs. The resulting translation errors, such as confused language expression, low accuracy in information conveyance, poor readability of translated texts, and inconsistent use of terminology, have significantly hampered the international communication of China's Agri-Sci-Tech industry. This, in turn, has impeded the industry's ability to assert its voice in the international Agri-Sci-Tech domain, thereby constraining its internationalization process.

IV. Comparative Analysis of the Agri-Sci-Tech Literature: China versus Western Countries

The Agri-Sci-Tech literature is inherently characterized by a specialized lexicon and a profound level of technical expertise. The current landscape of translation in this field is less than optimal, primarily because of the constraints faced by translators. These constraints include a deficiency in accumulated professional knowledge, a scarcity of professional technical equipment and skill sets, and a general lack of familiarity with foreign language terminology specific to the field. Additionally, the translation of common and conventional terms in agricultural technology often lacks standardization and consistency. The linguistic and cultural disparities between Chinese and foreign scientific texts not only impede the effective dissemination of China's Agri-Sci-Tech abroad but also limit the absorption of advanced Western agricultural technologies. These barriers hinder the transformation and upgrading of China's agricultural industry.

In the context of globalization, it is essential for China's Agri-Sci-Tech industry to understand the pragmatic features of both domestic and international texts. This understanding should inform the appropriate adaptation of vocabulary, phrases, and syntactic structures in the Agri-Sci-Tech literature. Special attention should be given to the translation of proper nouns and nonfinite verbs, as well as the grammatical structures that reflect the distinctive sentence characteristics of each language. Particular focus should be on the conversion between tenses and voices, especially the active and passive forms.

At the syntactic level, the challenge is to manage words that have inherent logical relationships and to adjust word order and sentence structure appropriately. This ensures that the internal logic of the original information is fully expressed in the translation, maintaining both dynamic equivalence and logical coherence between the original and translated texts (JIANG Mei, LI Qingrui, 2023: 121).

In terms of voice, English agricultural technology texts frequently employ passive constructions, which are more suited to describing physical phenomena and objective laws. This approach emphasizes the objectivity and concise interpretation of content, minimizing subjective judgments and aiding readers in grasping key information more directly (Yang Qin, 2023: 353). Conversely, when English is translated to Chinese, English sentences cannot always be omitted, as doing so may lead to logical confusion.

Diversification in word usage is also a hallmark of Agri-Sci-Tech texts, which are replete with proper nouns, acronyms, compound words, and derivative words. Translators must be well versed in these elements and continuously accumulate professional vocabulary. For example, the proper noun "Herbarium" translates to "植物标本" in Chinese, and acronyms such as AI for "人工授精," FFA for "游离脂肪酸," and IPM for "害虫综合管理" are crucial for precise translation.

Standardization of sentence structure is another key aspect. While there are differences between Chinese and foreign texts, English scientific and agricultural technology texts often feature hypotheses and use conjunctions to express logical relationships and create a compact syntactic

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structure. In contrast, Chinese texts emphasize parataxis, often omitting the logical subject and presenting a loose sentence structure with implicit logic subjects. Translators must be adept at navigating these differences, ensuring that the translated text adheres to the target audience's discourse norms.

In summary, as China's Agri-Sci-Tech industry engages in international communication and exchange, ensuring the professional accuracy of terminology and the standardized expression of discourse is imperative. This ensures that the language of translation aligns with the language specificity of industry professionals, achieving discourse standardization and maintaining the precision, objectivity, and indirectness of the translated discourse, thus avoiding semantic ambiguity.

V. Strategies for Cultivating Talent in the Globalization of China's Agri-Sci-Tech industry

In the era of economic globalization, market globalization, and technological standard globalization, China's Agri-Sci-Tech industry is confronted with the imperative of aligning with the domestic context while simultaneously facing the international market. This alignment is essential for constructing a scientific and rational industrial chain that can propel the modernization, specialization, and scaling of China's Agri-Sci-Tech production. Only through such a dual-focus approach can the industry achieve the rapid advancements necessary to compete on the global stage (Tang Qian, Li Nanzhe, 2019:9).

To maintain pace with the technological evolution of the international industry, it is imperative to increase the foreign language proficiency of professionals within the industry, thereby fostering the development of "professional + foreign language" composite talent. This enhancement is crucial for increasing the professional caliber of foreign language experts or "foreign language + professional" composite talent, which is vital for keeping abreast of international Agri-Sci-Techtrends. By persistently improving the level of international exchange and the ability to acquire information technology skills, China's Agri-Sci-Tech industry can sustain its growth and reinforce its competitive edge in the international arena.

5.1. Cultivating "Professional + Foreign Language" Composite Talent

The development of "professional+foreign language" composite talent is pivotal for equipping management, technical, business, and legal personnel in the agricultural technology industry with robust professional knowledge and foreign language mastery. This allows them to better comprehend the production status and utilization of professional equipment within the global Agri-Sci-Tech industry. It enables the timely acquisition of the latest research achievements and facilitates the introduction and absorption of advanced Western management experiences and agricultural technologies. This approach can significantly expand the professional knowledge base of China's Agri-Sci-Tech workforce, enhance management standards, and achieve breakthroughs in agricultural science and technology. This, in turn, can increase the quality of production, increase the overall level of agricultural economic development, and strengthen the international competitiveness of China's Agri-Sci-Tech industry (Gao Yanmei, 2019:130). It is through such composite talent that the rapid development and integration of China's Agri-Sci-Tech industry with the international community can be accelerated, fostering greater international exchange. The term "foreign language" in "professional+foreign language" should evolve into a medium that enhances the development of professional talent.

In the realm of international communication, professionals in the Agri-Sci-Tech industry who lack sufficient foreign language proficiency may struggle to swiftly translate specialized vocabulary, such as "antioxidants," "anticaking agents," "nonprotein nitrogen (NPNs)," and "deodorizing additives," through word derivations. This can significantly diminish communication effectiveness. Composite talents of "professional + foreign language" can also assist Chinese enterprises in becoming more familiar with and understanding international trade regulations, thereby mitigating potential legal risks and economic losses. Moreover, they can redesign, optimize, and improve production plans for China's agricultural industry, aligning with internationally recognized agricultural technology standards (Chi Shuyan & Tan Beiping, 2019:134).

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5.2. Cultivating "Foreign Language + Professional" Composite Talent

The cultivation of "foreign language+professional" composite talent aims to transcend the traditional model of language and literary service talent training in Chinese universities. It seeks to effectively integrate the development of foreign language skills with the mastery of professional knowledge, such as technical exchange, economic cooperation, marketing, and business contracts. The instrumental role of foreign languages is reflected primarily in the introduction of cutting-edge research and achievements in foreign agricultural technology development. It also involves bringing Western agricultural production technology standards, management systems, laws, and regulations into China for reference. This ensures that the training of foreign language talent can genuinely elevate the standards of China's Agri-Sci-Tech industry and provide intellectual support for China's international economic and technological cooperation and the expansion of overseas markets in agriculture. The "professional" requirement in "foreign language + professional" represents a breakthrough point for the current state of foreign language education in China.

"Foreign language+professional" composite talent must possess a solid foundation in foreign language listening, speaking, reading, and writing skills and be adept at navigating between two languages and cultures. They must also understand and be familiar with professional knowledge within the Agri-Sci-Tech industry. Continuously accumulating and enriching agricultural terminology through translation practices is crucial (Huo Yanjing, 2024: 336). This includes terms such as "waterworks," "fertilizer application," "shelf life or storage life/period," "crumb structure," "aging or maturation," "pest management or pest control," and the translation of English abbreviations such as "FSH (follicle stimulating hormone), "CAP (canopy apparent photosynthesis), "CT (canopy temperature)," etc.

Furthermore, amidst the intensifying competition for the employment of foreign language talent, the gradual abolition of foreign language majors in many Chinese universities does not indicate an oversupply of foreign language talent needed by society. Nor does it prove the obsolescence of foreign languages. Instead, it suggests that the current university training objectives for foreign language talent have deviated from the market's rigid demands. In the context of "globalization" and "the Belt and Road," the role of foreign languages is more critical than ever before. The integration of the Chinese economy into the international community necessitates a greater number of "foreign language + professional" or "professional + foreign language" composite talents. Foreign language higher education serves as the "bridge" and "link" for China's opening up to the outside world and holds significant responsibility and importance in the construction of new liberal arts. It should be fully integrated into the development of a strong higher education nation in China (Wu Yan, 2019). The breakthrough in foreign language education in contemporary Chinese universities lies in cultivating "foreign language + professional" composite talent, which aids in developing "professional+" composite talent with international perspectives in new engineering, new medicine, and new agriculture.

5.3. Cultivating Composite Talents with Translation Technology

In the Agri-Sci-Tech field, both "professional+foreign language" and "foreign language+professional" composite talent also need to master certain translation technologies, specifically the proficient use of relevant translation software. Translation software offers the advantages of convenience and speed, and its memory bank can significantly reduce the repetitive labor of translators. An increasing number of enterprises are establishing their own translation memory banks for international communication to decrease costs and enhance efficiency. For example, Trados' translation memory bank is a database that stores translation units and is compatible with TMX files. During the translation process with Trados, translators can add to, delete from, or query the database as needed, greatly reducing the translation challenges or repetitive labor involved in consulting certain specialized expressions. Therefore, mastering translation software such as Trados or Deepl is essential for both "professional + foreign language" and "foreign language + professional" composite talent.

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However, translation software has its limitations, such as a lack of professional nuance, especially with words that have multiple meanings. Owing to insufficient foreign language proficiency, some professionals in the agricultural technology industry may rely excessively on translation software (Meng Yanna, 2020: 123). This overreliance can lead to a decrease in the professionalism and logicality of the translation text because these professionals may not distinguish the semantic deviations that often occur during translation. With the aid of translation software such as Deepl, Trados, and CAT, composite talent needs to combine professional literacy with language and cultural literacy. They should refer to other rapidly updated and comprehensive network databases, such as CNKI, IEEE, and WOS, as well as some open access professional corpora, to identify and differentiate the quality of the translation text generated by translation software effectively. Only by continuously building and improving the translator's own professional corpus and translation memory bank can errors in translation text be effectively minimized, and cross-cultural and multilingual communication efficiency be optimized.

The demand for "professional+foreign language" and "foreign language+professional" composite talent in Chinese society is closely tied to the effective integration of the industry and education chains under school-enterprise cooperation. The order-based talent cultivation model can alleviate employment pressure on Chinese universities and achieve targeted talent cultivation. This approach truly addresses the dual demand for talent at the "professional level plus foreign language ability" in the internationalization process of China's Agri-Sci-Techindustry. In this talent cultivation process, the development of textbooks is particularly critical.

VI. Construction of Textbooks and Communication Platforms

As a pivotal agricultural nation, the advancement of China's Agri-Sci-Tech is inextricably linked to international exchange and cooperation. Such global engagement is contingent upon the development of foreign language proficiency among professionals in the agricultural industry, necessitating the creation of specialized foreign language textbooks. Since the turn of the 21st century, China has made significant strides in the compilation of English textbooks for agricultural science and technology, encompassing a broad spectrum of subjects. Notable examples include English Courses for Animal Science (Zhang Guixue, Guo Yifeng, 2007), Professional English for Animal Nutrition and Feed Manufacturing (Liu Laiting, 2011), Professional English for Aquaculture (Wang Zhiping, Wu Yiqun & Hu Qingling, 2016), and Professional English for Animal Husbandry and Veterinary Medicine (Liu Ning, 2021). Despite these advancements, feedback from educators and students engaged with these materials has highlighted several areas for improvement. These include disparities in the distribution of textbook content, a mismatch between the difficulty of the material and the capabilities of the students, an omission of comprehensive literacy enhancement for professional English talent in textbook design, and a general lack of effectiveness in textbook utilization.

The cultivation of composite talent, characterized by a combination of "professional + foreign language" or "foreign language + professional" skills, demands that the development of educational materials for the Agri-Sci-Tech industry be closely aligned with the practical evolution of the industry and the enhancement of students' foreign language competencies. The expression of professional discourse should aim for standardization, employing common vocabulary, syntactic structures, and discourse functions prevalent within the discipline. Content should be connected to the cutting edge of the field, moderately supplemented by the latest development trends, and enriched with up-to-date theoretical knowledge and authoritative foreign scientific and technological literature (Yue Xin, 2019: 93). This approach ensures targeted and gradual progression. Ideally, professional educators should take the lead in gathering and organizing relevant materials, as well as in analyzing and researching professional literature for the "professional content" section of textbooks. The difficulty level of textbook chapters should be systematically increased to challenge and develop students' understanding. Foreign language educators should be fully integrated into the textbook development process, assisting with the collection, organization, and translation of foreign literature and ensuring that the professional teaching content remains current and relevant. Concurrently, foreign language

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educators must ensure the rigor and scientific accuracy of the language structure, the precision and consistency of terminology, and the standardization and fluency of language expression in professional foreign language textbooks.

In the compilation of Agri-Sci-Tech textbooks, it is essential to recognize that foreign languages serve as fundamental skills and tools for information dissemination and professional technical learning. Therefore, a mixed bilingual format is recommended for introducing relevant chapters from foreign original textbooks or the latest journals, accompanied by necessary Chinese explanations, rather than a wholesale direct translation. The incorporation of original English textbooks or the latest technological literature can enhance students' professional technical proficiency and keep them informed of the latest international trends. However, students with limited foreign language skills or those with a weaker grasp of professional subject matter may initially struggle with the comprehension and assimilation of English-language textbook content, potentially impacting their overall learning progress and quality (Chi Shuyan & Tan Beiping, 2019:134) and even dampening their motivation to learn. Hence, it is advisable to initially adopt a bilingual format in foreign language textbooks to facilitate students' rapid mastery of relevant professional English vocabulary and discourse expression methods, laying a solid foundation for their future advanced foreign language reading or professional foreign language application.

With respect to the construction of international communication platforms for the agricultural technology industry, encouraging student participation in the development and global interaction of platforms that significantly influence the dissemination of China's agricultural technology industry is imperative. With strategic policy guidance, support, and protection, these measures can prevent platforms from being prematurely terminated because of unchecked capital expansion. For domestic and international platforms or websites that traffic in counterfeits and substandard agricultural products, it is crucial to enhance consumers' ability to discern them. In appropriate circumstances, the government should take decisive action to combat such activities. Strengthening collaboration between academic institutions and agricultural enterprises fosters the cultivation of professional technical personnel with "professional +" or "foreign language +" skills, collaboratively developing and constructing international promotion platforms for local agriculture. This enhances the authenticity and authority of platform information, thereby promoting the internationalization of China's local agricultural products.

Ultimately, the international communication platform for Chinese agricultural products can stimulate the creativity of university-trained composite talent, encouraging them to enhance the quality of website design and discourse communication methods. This effort aims to broaden the platform's reach and increase audience favorability, realizing the social value of talent cultivation and allowing students to truly experience the joy of learning, thus transforming their learning approach from "passive" to "active".

VII. Conclusions

In conclusion, this study disrupts the traditional research mold regarding the internationalization trajectory of industries, offering a refreshed perspective on the pivotal role of composite talent in propelling the global reach of China's agricultural technology industry. The significance of technological innovation and equipment enhancement is undeniable; however, these advancements are merely the stepping stones to a more comprehensive goal: the development of a workforce that is not only technically proficient but also fluent in foreign languages. This study advocates for a synergistic approach where the industrial and educational chains are seamlessly integrated, thereby creating fertile ground for nurturing the multifaceted expertise required for international engagement.

The study highlights the indispensable nature of foreign language professionals, who possess a substantive understanding of agricultural science and technology. These individuals serve as the intellectual backbone of the industry's international endeavors, providing the necessary support to navigate the complex landscape of global regulations, market dynamics, and technological advancements. Their expertise is crucial for safeguarding industry interests and ensuring that

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China's agricultural innovations are not only recognized but also integrated into the global agricultural discourse.

In essence, the internationalization of China's Agri-Sci-Tech industry is contingent upon the cultivation of a new generation of experts who can seamlessly operate in both domestic and international spheres. China can enhance its global agricultural footprint and contribute to the international agricultural community through the fostering of such multidisciplinary expertise.

Ethical approval: The author certifies that this manuscript is original, has not been published and will not be submitted elsewhere for publication. The study is not split into several parts to increase the quantity of submissions and submissions to various journals or to one journal over time. No data have been fabricated or manipulated (including images) to support the conclusions. No data, text, or theories by others are presented as if they were my own. The author shares the responsibility and accountability for the results.

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