

Research on the Innovative Cultivation Mechanism of Translation Competence for English Majors from the Perspective of Human-Artificial Intelligence Collaboration

Xiaojuan Zeng^{1*}, Jiayi He¹

¹ College of Foreign Studies, Guangdong University of Science and Technology, Dongguan, China

Email Address

julia_zeng2025@163.com (Xiaojuan Zeng)

*Correspondence: julia_zeng2025@163.com

Received: 26 October 2025; Accepted: 13 November 2025; Published: 12 December 2025

Abstract:

With the rapid development of Neural Machine Translation (NMT) and Large Language Models (LLMs) in artificial intelligence technology, the ecology of the translation industry has undergone fundamental changes, and human-machine collaboration has become the mainstream model, which puts forward new requirements for translation education. Currently, the translation teaching system for English majors is seriously out of touch with industry needs, making it imminent to construct an innovative cultivation mechanism adapted to the human-AI collaborative ecology. Through literature analysis, case studies, and teaching action research, this study systematically constructs a collaborative operation mechanism encompassing core elements such as goal setting, content reconstruction, methodological innovation, environmental support, evaluation feedback, and faculty support. Guided by the core philosophy of “goal-oriented leadership, element synergy, dynamic adaptation, and innovation-driven development,” the mechanism forms a dynamic closed loop through the interaction of various elements, aiming to provide a new path for the practical development of translation education.

Keywords:

Human-Artificial Intelligence Collaboration, Translation Competence, Cultivation Mechanism, English Major

1. Introduction

In recent years, artificial intelligence (AI) technology has permeated the translation industry chain across the board. The widespread application of Neural Machine Translation (NMT) and Large Language Models (LLMs) has made human-AI collaboration the norm in translation practices. Artificial intelligence (AI)-driven translation has significantly enhanced translation efficiency, with its algorithms capable of rapidly processing vast volumes of text within seconds, thereby drastically reducing turnaround times [1]. Consequently, the conceptual understanding of

translation competence is undergoing a dynamic evolution. Beyond traditional linguistic transfer skills, technological literacy, human-AI collaborative skills, and critical and innovative thinking are increasingly becoming the core competencies for translators.

However, current translation instruction within English major programs faces several critical challenges: existing training systems inadequately reflect the new competency requirements of the AI era in their objectives; technological knowledge within the curriculum is fragmented and outdated, with a lack of integration of human-AI collaboration concepts; teaching methodologies remain predominantly traditional and lecture-based, lacking practical training grounded in authentic human-AI collaborative workflows; assessment systems prioritize final products over the learning process, failing to effectively evaluate students' technological application and innovative abilities; and faculty generally possess insufficient technological proficiency and lack experience in human-AI collaborative teaching.

Within this context, researching underlying "mechanisms" becomes essential. Compared to singular models, a training mechanism emphasizes the dynamic synergy and sustainable operation of various elements, enabling better adaptation to the evolving demands of the translation industry.

On a theoretical level, this study contributes to deepening the theory of human-AI collaborative translation pedagogy, addresses a research gap in the construction of systematic training mechanisms, and enriches the theoretical system of translation education. In practical terms, the research aims to provide higher education English major programs with an actionable and replicable comprehensive solution for innovating translation competence development, thereby facilitating the alignment of translation instruction with industry needs and enhancing the quality of translation talent cultivation within English majors.

2. Reconceptualizing Translation Competence and Training Mechanisms for Human-AI Collaboration

2.1. Reconstruction of Translation Competence under Human-AI Collaboration

Within the broader context of human-AI collaboration, English major students should focus on enhancing their capacity for competence reconstruction. Beyond the comprehensive abilities traditionally required of translators—such as linguistic transfer, cultural adaptation, and subject matter knowledge—there is a growing need for students to optimize translation strategies and adapt to new technologies (e.g., AI-assisted tools) to meet evolving market demands. Human-AI collaboration emphasizes “synergistic enhancement” between humans and artificial intelligence. Humans hold advantages in translation tasks such as strategy formulation, cultural understanding, creative expression, and ethical judgment, while AI excels at efficiently processing massive datasets, accurately matching terminology, and rapidly generating initial drafts. The integration of both can not only improve translation efficiency but also enhance translation quality. Humans are responsible for overseeing overall logic, emotional nuance, and cultural adaptation, while AI assists in completing repetitive tasks and providing real-time reference, ultimately realizing a new intelligent translation model embodying a “1+1>2” effect, which helps English major students break down disciplinary barriers. AI translation is dismantling

obstacles to cross-linguistic communication, facilitating the smoother global flow of information[2].

Under this collaborative model, translation competence has formed a new framework. This framework integrates traditional capabilities like linguistic transfer, cross-cultural communication, and translation strategies, while also highlighting Technology Application Ability (TAA) , Post-Editing Machine Translation (PEMT) ability, Human-Computer Interaction for Translation (HCI-T) ability, critical evaluation ability, and AI-empowered innovative ability. For English major students, it is crucial to strengthen inherent human advantages such as cultural sensitivity, critical thinking, and creative expression, while simultaneously enhancing technological mastery and collaborative workflow management skills to meet the demands of the intelligent translation era.

2.2. Core Elements and Objectives

This involves promoting the reform of talent training models through industry-education integration[3]. A “training mechanism” refers to a dynamic system whereby various interrelated elements—such as objectives, content, methods, environment, assessment, faculty, and management—interact, cooperate, and function in a coordinated manner to achieve specific training goals. Informed by perspectives from systems theory and synergy theory, this study emphasizes the training mechanism's holistic nature, requiring all elements to function synergistically; its interconnectedness, where elements mutually influence and constrain each other; and its dynamic nature, enabling timely adjustments and optimizations in response to industry and technological advancements. This ensures the efficient operation of the training mechanism and the quality of talent cultivation. The concurrent objective is to cultivate a diverse cohort of English majors equipped with digital literacy, innovative capacity, human-AI collaborative skills, and critical faculties.

3. Challenges and Deficiencies in Current Translation Training for English Majors

3.1. Multidimensional Challenges in Existing Translation Training Approaches

At the level of training objectives, most institutions have not adequately incorporated new competence requirements for the AI era. Objectives are often ambiguously formulated, lacking clear definition of essential human-AI collaborative and innovative capabilities. Regarding curricular content, technological components are taught in a fragmented and outdated manner. Instruction on fundamental principles of machine translation and post-editing (PEMT) techniques remains superficial, with limited integration of human-AI collaboration concepts. Training in higher-order cognitive skills is insufficient to meet industry demands for innovative problem-solving in translation. In pedagogical approaches, traditional lecture-based instruction and textual exercises still dominate. There is a notable absence of practical training models—such as project-based learning (PBL) and workshops—that simulate genuine human-AI collaborative workflows, limiting opportunities for students to develop operational competence.

The teaching environment is characterized by underdeveloped intelligent teaching platforms, outdated laboratory facilities, and insufficient corpus resources. Existing resources are often underutilized, failing to provide a supportive infrastructure for

experiential learning. The assessment system overemphasizes product-oriented outcomes while neglecting the learning process. It lacks robust metrics to evaluate technological application, collaborative competence, and critical innovation, thereby failing to provide a comprehensive measure of holistic translation ability. Faculty readiness constitutes another significant constraint: many instructors lack sufficient technological literacy, practical experience with human-AI collaboration, and exposure to contemporary industry practices, which adversely impacts teaching quality.

In an increasingly globalized landscape, English majors represent a crucial cohort in higher education, for whom the cultivation of national consciousness is essential to fostering a sense of national identity and responsibility [4]. Consequently, identifying viable pathways for enhancing translation competence amid these multidimensional challenges is imperative.

3.2. Systemic Deficiencies in the Training Mechanism

As AI-driven translation relies heavily on algorithmic processing, it is susceptible to algorithmic biases that may propagate errors, and its output quality is contingent upon the quality of pre-training data [5]. The current training mechanism for translation competence suffers from fragmented components—teaching, learning, assessment, and environmental supports operate in isolation rather than as an integrated system, undermining synergistic effectiveness. The mechanism exhibits insufficient dynamism, constraining its ability to adapt promptly to evolving technological and industrial demands, resulting in obsolete content and methods. Moreover, a lack of coherent top-level design exacerbates these issues, with misaligned resource allocation and inadequate support systems further impeding the enhancement of translation talent cultivation for English majors.

4. Constructing an Innovative Training Mechanism for Translation Competence under Human-AI Collaboration

4.1. Core Philosophy of the Mechanism

This innovative training mechanism is guided by the core philosophy of “Objective-Oriented Guidance, Element Synergy, Dynamic Adaptation, and Innovation-Driven Development.” “Objective-Oriented Guidance” emphasizes directing the design and implementation of all elements through clearly defined training goals. “Element Synergy” focuses on the coordinated interaction of all components to form an organic whole. “Dynamic Adaptation” requires the mechanism to be promptly adjusted and optimized in response to industry and technological advancements. “Innovation-Driven Development” aims to stimulate students’ innovative thinking and practical abilities through innovative teaching content, methods, and evaluation systems.

At the “Objective Guidance” level, macro-level training objectives must be concretized into observable and measurable core competency indicators. For example, for English majors, the objective should be precisely positioned to cultivate interdisciplinary talents who “master the language, understand the rules, and command the tools,” specifically broken down into dimensions such as cross-cultural communication competence, domain-specific knowledge, digital tool application ability, and critical thinking. This objective system will serve as the ultimate basis for

curriculum design, teaching implementation, and outcome evaluation, ensuring all educational activities align toward a unified end goal.

At the “Element Synergy” level, the key lies in breaking down the barriers between core elements such as curriculum, faculty, practical platforms, and management evaluation. It is essential to establish an objective-oriented linkage design: deeply integrate course content with real-world enterprise projects; form joint teaching teams comprising academic supervisors from the university and industry mentors from the sector; alternate theoretical learning with on-the-job internships; and combine formative assessment and summative assessment to create a diversified evaluation system. Through systematic design, all elements resonate in harmony, generating a synergistic effect that supports talent cultivation.

At the “Dynamic Adaptation” level, the mechanism must incorporate feedback and optimization loops. Establish regular mechanisms for industry demand research, graduate tracking and feedback, and new technology development monitoring. Based on the information obtained, a professional teaching guidance committee composed of representatives from both the university and enterprises should regularly review and revise the talent cultivation plan, and update the teaching project bank and case library. This ensures the training content remains synchronized with industry development trends and possesses strong environmental adaptability.

At the “Innovation-Driven” level, the core is integrating innovation into the entire teaching process. This includes: introducing innovative teaching methods such as project-based learning and simulation; offering innovative course modules characterized by human-AI collaboration and cross-border integration; and reforming assessment methods by increasing the weight of open-ended, non-standard answer questions focused on solution design and process optimization. The purpose is not only to impart knowledge but also to foster a cultural atmosphere that encourages exploration and tolerates failure, thereby systematically shaping students’ innovative awareness and ability to solve complex problems.

4.2. Core Constituent Elements of the Mechanism and Their Synergistic Relationships

4.2.1. Objective-Oriented Mechanism

Set clear and stratified training objectives, including: foundational ability goals, such as a solid bilingual foundation and theoretical knowledge of translation; core human-AI collaborative ability goals, such as proficient use of translation technology tools and efficient human-AI collaborative translation; and higher-order innovation ability goals, such as AI-based creative translation and solving complex translation problems. These objectives serve a driving function, guiding the selection of teaching content, the design of teaching methods, and the construction of the evaluation system, ensuring that teaching activities are centered around talent development needs.

During the Foundational Competency Stage, the curriculum will strengthen core courses in contrastive linguistics and translation theory, laying the cornerstone for competency development. Upon entering the Core Competency Stage, the focus shifts to introducing practical courses such as Computer-Assisted Translation and Post-Editing, cultivating students’ management skills in human-AI collaborative workflows through simulated real-world projects. Progressing to the Advanced Innovation Stage, the program will offer seminar-based courses like “Frontiers in

Translation and Technology,” guiding students to explore the boundaries of AI translation and engage in innovative practices centered around complex localization projects. Ultimately, the evaluation system will correspondingly shift from a singular focus on language quality assessment to a comprehensive consideration of dimensions such as efficiency in technology application, optimization of human-AI collaborative workflows, and innovative solutions, ensuring that the objectives at each level are substantively reflected in both teaching and assessment.

4.2.2. Cultivating Students’ Digital Literacy

Translators’ digital literacy is a particularly crucial component of translator competence in the digital age, encompassing the identification, acquisition, application, and evaluation of digital technologies under the premise of adhering to relevant ethical principles [6]. Against the backdrop of deep integration between artificial intelligence and translation technology, cultivating translation digital literacy among English majors has become an inevitable trend. Universities should undertake a curricular overhaul to integrate Computer-Assisted Translation (CAT) tool operation and the strategic use of AI translation systems into core courses. Utilizing practical platforms, such as industry-university cooperative projects and virtual simulation translation tasks, allows students to master human-AI collaborative workflows in authentic scenarios. Simultaneously, emphasizing ethical awareness guides students to prioritize data security and mitigate algorithmic bias when utilizing digital tools. Furthermore, establishing a dynamic evaluation system is essential to facilitate students’ transition from traditional language converters to interdisciplinary translation talents equipped with technical acumen and innovative capabilities.

First, curriculum innovation serves as the cornerstone. Universities must systematically integrate the operation of Computer-Assisted Translation (CAT) tools, corpus management and application, and the strategic use of AI translation systems—such as prompt engineering and post-editing—into the core curriculum. This goes beyond teaching software operation; it aims to cultivate students’ “technological thinking,” enabling them to understand the strengths and limitations of different tools and make optimal choices in specific tasks.

Second, the practical platform acts as a critical nexus for competency transformation. Theoretical knowledge must be internalized into core skills through highly simulated practical environments. Universities should actively establish industry-academia collaboration projects and introduce virtual simulation translation labs, allowing students to fully experience the entire workflow—from project creation, term extraction, and AI pre-translation to human-AI collaborative translation, quality control, and delivery—within simulated “localization projects” or “urgent translation tasks.” Such immersive experiences enable students to thoroughly master efficient human-AI collaboration processes and hone their project management and teamwork skills.

Furthermore, the cultivation of ethical awareness constitutes the essential soul of digital literacy. Ethics education must be embedded concurrently within technical instruction. Students should be guided to critically examine the logic behind technology, raising questions such as: How can one identify and mitigate social and gender biases in training data? How can client data security and privacy be ensured when using cloud-based tools? How should copyright of AI-assisted translations be defined? Through thematic discussions and case analyses of ethical dilemmas,

students will develop a sense of technological responsibility and critical thinking, becoming discerning users of technology.

Finally, a dynamic evaluation system serves as a reliable safeguard for achieving the educational objectives. To facilitate students' transition from traditional language converters to technically skilled and innovative professionals, the assessment framework must evolve from a singular focus on language quality to a multi-dimensional, dynamic, and comprehensive system. This system should incorporate quantitative and qualitative indicators such as technology application efficiency (e.g., improvement in translation memory match rates), standardization of human-AI collaboration workflows, innovative solutions to complex problems, and ethical decision-making abilities, thereby providing a holistic and equitable reflection of students' comprehensive digital literacy.

Through this integrated, four-pronged approach to cultivation, students' digital literacy will no longer remain superficial tool usage but will deepen into a comprehensive competency that integrates technical proficiency, practical wisdom, and ethical awareness, equipping them with a core competitive edge in the future translation workplace.

4.2.3. Synergistic Innovation Mechanism in Teaching Methods

Construct a diverse repository of teaching methods, gradually transitioning towards the Outcome-Based Education (OBE) philosophy. Outcome-Based Education aligns with the current nationally advocated direction of higher education teaching reform, guided by the principle of "focusing on combining learning with thinking, and promoting heuristic, inquiry-based, discussion-based, and participatory teaching," and is also congruent with the goal of cultivating innovative talent in China's higher education [7]. OBE can effectively shift classroom teaching from knowledge impartation to thinking inspiration and ability cultivation, promoting students' innovative practical abilities through independent inquiry, teamwork, and problem-solving.

Additionally, simulate authentic human-AI collaborative translation projects to enhance students' translation and teamwork skills through practice; adopt a flipped classroom model where students learn technical operational knowledge pre-class, allowing classroom time to focus on translation strategy discussions and tackling difficult points; implement case-based teaching to deeply analyze human-AI collaborative translation cases, guiding students to learn from experiences and lessons; conduct workshops for intensive training on specialized skills like advanced post-editing and creative translation; organize role-playing activities to let students experience different roles in translation projects, enhancing vocational awareness. During the teaching process, flexibly combine and apply multiple teaching methods based on teaching objectives and content modules to achieve optimal instructional effectiveness.

4.2.4. Industry-University Collaboration and Resource Support

Compared to solely relying on internal university resources for knowledge updating and disciplinary expansion, industry-university cooperation can infuse new liberal arts disciplines with interdisciplinary practice, technological innovation, and industry application through the industrial advantages and market sensitivity of enterprises [8]. Taking a practical case from the author's university as an example: providing

translation services for Huichun Metal Products Co., Ltd in Dongguan. In this process, students not only need to apply professional language skills but also gain a deep understanding of specialized terminology in the metal processing industry. When encountering difficulties with professional terms, students are trained to utilize AI tools to complete tasks. This initiative can effectively overcome the dilemma of “emphasizing theory over application” in traditional English major education. Driven by real-world projects, it enables English majors to achieve cross-industry translation supported by AI tools, cultivating innovative talents with technical application abilities.

Furthermore, in terms of hardware environment development, the university has upgraded or newly built intelligent translation laboratories, integrating mainstream Computer-Assisted Translation (CAT) tools, Machine Translation Application Programming Interfaces (MT APIs), and online collaboration platforms to provide students with a superior practical operation environment. Regarding software resources, a dynamically updated digital resource repository has been constructed, including a multi-engine machine translation comparison platform, high-quality parallel and comparable corpora, termbases, post-editing case libraries, and industry standard databases, enriching teaching resources. Simultaneously, utilizing online collaboration tools like Tencent Docs and Yuque supports students' collaborative learning and translation practice both inside and outside the classroom, improving learning efficiency and teamwork skills.

4.2.5. Multidimensional Assessment and Student Practical Feedback

Establish a multidimensional assessment framework that not only focuses on the linguistic quality of translations but also values students' proficiency in technology application, including tool usage and terminology management; examines their performance in teamwork; evaluates critical thinking skills, evidenced through revision notes and evaluation reports; and measures innovative capabilities.

Through collaboration with external organizations, universities can better meet industry needs and cultivate job-market-ready talents[9]. In this process, students can not only be exposed to authentic industry scenarios but also enhance their comprehensive practical abilities by solving real-world problems.

For instance, when translating for Huichun Metal Products Co., Ltd., students utilized Deep Seek to solve challenges with a large volume of proprietary terms such as “foundry workshop, tool changer, CMM (Coordinate Measuring Machine), coating thickness gauge, etc.” Furthermore, as the translations were intended for the company's website, students needed to provide further instructions to Deep Seek, such as “for a metal products company website,” prompting the AI to autonomously extract keywords and provide the most suitable and precise answers. While using AI tools, students can also apply their professional knowledge to evaluate and filter results, thereby enhancing their independent judgment.

4.2.6. Continuous Faculty Development Mechanism

Currently, most university teachers move directly from one academic institution to another, transitioning from theoretical learning to theoretical teaching. They often lack practical experience and strong practical skills, consequently producing graduates who are more theoretically than practically trained. To change this status quo,

universities must strive to cultivate a teaching faculty with stronger practical abilities [10].

Empower teachers through training: regularly organize translation technology training sessions to help teachers master new tools and AI applications; conduct pedagogical training to enhance teachers' abilities in designing project-based learning and blended learning; encourage teachers to participate in industry practices to accumulate hands-on translation experience. Establish platforms for exchange between internal and external faculty, such as teaching research workshops and industry secondments, to promote the sharing of human-AI collaborative teaching experiences and cases, collectively elevating teaching standards. Improve incentive and evaluation mechanisms by incorporating teachers' explorations and achievements in human-AI collaborative teaching into the performance appraisal system, thereby stimulating enthusiasm for teaching innovation.

4.2.7. Establishing a Public Service Platform for Practice

A case in point is the establishment of the "Yiming" Public Service Translation Studio at Guangdong University of Science and Technology. The "Yiming" Studio is a public service language platform collaboratively promoted by the government, the university, and enterprises. It serves as a practical platform for the university to deepen the cultivation of application-oriented talents and serve regional development. Based in Dongguan and extending its influence throughout the Lingnan region, the studio focuses on three key areas: government and public affairs, cultural heritage and dissemination, and industrial and economic trade needs. It provides professional language services for international development, aiming to resolve language bottlenecks in external cultural communication.

Leveraging this existing platform, students participate in real translation projects, such as assisting Xiasha Village in Dongguan City with translating materials for its red culture heritage sites and providing scientific and practical design suggestions for the village's guide sign system. This initiative not only enhances the cultural quality and communication capacity of the village's external presentation but also allows students to apply classroom knowledge to practice, strengthening their translation skills and cross-cultural communication abilities.

4.3. Closed-loop System

All elements operate synergistically around the educational objectives, forming a dynamic closed loop of "Objective Setting > Content & Method Implementation > Environmental & Resource Support > Multi-faceted Evaluation & Feedback > Faculty Continuous Development > Objective Adjustment & Optimization." This closed loop is not a simple linear sequence but rather an ecosystem characterized by multi-directional interactions and cyclical progression. Its internal logic and operational mechanisms are as follows:

The Objective-Oriented Mechanism serves as the system's "brain," establishing the overarching direction for talent cultivation. It is not static but provides the initial benchmark and ultimate validation standard for the entire system.

Building upon this foundation, the Content Dynamic Update Mechanism and the Teaching Method Synergistic Innovation Mechanism act as the system's "dual wings," receiving and executing the objectives. The Content Mechanism ensures the knowledge system remains synchronized with technological developments. For

instance, when the industry widely adopts large language models for pre-translation processing, corresponding content such as “Prompt Engineering and AI Interaction” is promptly integrated into the curriculum. The Method Mechanism, in turn, matches this content with the most effective instructional formats, such as employing project-driven teaching to simulate real-world human-AI collaborative translation tasks.

The Intelligent Environment and Resource Support Mechanism constitutes the system’s “skeleton and lifeblood,” providing both physical and virtual support for the aforementioned teaching activities. This includes building smart laboratories integrated with mainstream CAT tools and AI translation platforms, as well as establishing a cloud-based resource center containing multi-domain termbases and high-quality parallel corpora. This ensures that theoretical instruction and technical practice unfold within a seamlessly connected environment.

The Multi-faceted Evaluation and Feedback Improvement Mechanism plays the role of the “nervous system.” It permeates the entire teaching process, continuously collecting data on student learning, project outcomes, and competency performance. This system evaluates not only students’ language conversion skills but, more critically, assesses their efficiency in technology application, the standardization of their human-AI collaboration workflows, and their innovative thinking in solving complex problems. This evaluation data is synthesized into multi-dimensional feedback reports.

This feedback information acts directly, enabling immediate fine-tuning of teaching content and methods. More importantly, it flows simultaneously to two key nodes: Firstly, it feeds into the Faculty Capacity Continuous Development Mechanism, prompting teachers to precisely address knowledge gaps in emerging technologies and industry trends through targeted training, corporate secondments, etc., ensuring that the capacity to “teach” evolves in lockstep with the needs of “learning.” Secondly, it ultimately cycles back to the system’s starting point—the objective setting phase. When feedback data consistently indicates (universal competency gaps) among students in certain emerging fields, or when external industries undergo technological leaps, it triggers a strategic review and adaptive optimization of the overarching educational objectives.

5. Conclusions

In conclusion, the current cultivation of translation competence for English majors faces significant challenges, including outdated training objectives, fragmented technological content, traditional pedagogy, and a misalignment with the industry’s human-AI collaborative paradigm. These deficiencies result in a systemic mechanism ill-equipped to develop the digital literacy, critical thinking, and innovative capabilities now required. In response, this study proposes an innovative cultivation mechanism grounded in the philosophy of “objective-oriented guidance, element synergy, dynamic adaptation, and innovation-driven development.” This framework systematically reconstructs core elements—from curriculum and teaching methods to assessment and faculty development—forging them into a dynamic, closed-loop ecosystem. By simulating real-world collaborative workflows and integrating industry practices, the mechanism aims to transition training from a theory-heavy focus to a competency-based model. Future efforts should concentrate on the empirical implementation and iterative refinement of this mechanism, validating its effectiveness and adapting it to the relentless pace of technological advancement.

Ultimately, this structured approach provides a viable path for nurturing a new generation of translators who can leverage AI collaboration to excel in the evolving global landscape.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Funding

This study is funded by the Ministry of Education's Industry-Academia Cooperation Collaborative Education Program: Application Research on Improving Translation Quality in the Context of Human-Machine Collaborative Translation (April 2024, Project No.: 231100630093326) and 2023 Guangdong University of Science and Technology University-Level Quality Engineering Program: First-Class Major: English (Project No.: GKZLGC2023158).

References

- [1] Chen, J.R. On the Human-Computer Coordination Mechanism in AI-Driven Translation. *Journal of Hunan First Normal University*, 2025, 1-7. <http://kns.cnki.net/kcms/detail/43.1504.Z.20250512.1654.004.html>.
- [2] Liu, S. Artificial Intelligence Translation and International Communication: Status Quo, Issues, and Prospects. *Foreign Language Research*, 2025, 03, 20-25. DOI: 10.16263/j.cnki.23-1071/h.2025.03.003.
- [3] Li, Y.Q.; Chen, W.M. Economic Analysis and Governance Strategies for the Property Rights of Integrated Industry-Education Platforms. *Research in Higher Education of Engineering*, 2018, 06, 27-32.
- [4] Zhang, M.L.; Zeng, Y.Q.; Ding, J.Y. et al. Exploring the Importance and Implementation Pathways of National Consciousness Cultivation for English Majors. *Overseas English*, 2025, 02, 109-111.
- [5] Ouyang, J.Y.; Liu, M.; Dong, W.B. et al. International Experiences and Implications of Promoting Generative AI in Educational Applications. *Modern Distance Education Research*, 2025, 1-8.
- [6] Wang, H.S.; Liu, S.J. Research on Translators' Digital Literacy from the Perspective of Digital Humanities: Connotation, Issues, and Suggestions. *Foreign Language Learning Theory and Practice*, 2023, 02, 70-79.
- [7] Liu, K.; Sun, Y.F. Research on University Teacher Training Based on the OBE Education Concept. *Heilongjiang Researches on Higher Education*, 2017, 06, 59-61.
- [8] Liu, B.S.; Hong, S.B.; Zhao, Y.J. Research on the Innovation of University-Enterprise Cooperation Models in Local Universities under the Background of New Liberal Arts. *Journal of Higher Education*, 2025, 11(22), 42-48+53. DOI: 10.19980/j.CN23-1593/G4.2025.22.010.
- [9] Wang, J. Practice and Research on the Construction of Industry-Education Integrated Training Bases. *China Economist*, 2024, 09, 209-210.

- [10] Bao, Y.H. Practical Teaching Reform Strategies for Japanese Majors in Universities Aimed at Cultivating Cross-Cultural Communication Skills. *Modern Business Trade Industry*, 2024, 45(08), 39-41. DOI: 10.19311/j.cnki.1672-3198.2024.08.013.



© 2025 by the author(s); licensee International Technology and Science Publications (ITS), this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (<http://creativecommons.org/licenses/by/4.0/>)