Journal of Education and Educational Research
ISSN: 2957-9465 | Vol. 17, No. 2, 2026

Technology-Empowered Curriculum Reform and Practice in English Translation Courses

Jiayong Tang, Jing Wu, Rou Deng, Shuting Zhou *

College of Foreign Languages, Guangzhou Institute of Science and Technology, Guangzhou, Guangdong, China
*** Corresponding author:** Shuting Zhou

Abstract: The deep application of artificial intelligence technologies, particularly neural machine translation and generative AI, is fundamentally reshaping the global translation industry and compelling a paradigm shift in translator education. Applied higher education institutions in Guangdong Province, despite achieving preliminary outcomes in translation program reform, continue to face structural contradictions including curricular misalignment with industry standards, insufficient practical training components, and limited technological infrastructure. This study, grounded in Outcome-Based Education philosophy, systematically investigates the technology-empowered reform of English translation courses through literature analysis and case comparison. It proposes a comprehensive reform framework encompassing four interconnected dimensions: curriculum objectives, instructional content, practical teaching, and evaluation systems. The framework operationalizes graduate competencies into three observable and measurable indicators—technological application competence, project execution competence, and ethical judgment competence—and reverse-designs a "three-tiered progressive, modular curriculum system" that integrates AI-related courses, project-based and case-based pedagogies, deepened university–industry collaboration, and diversified outcome-oriented assessment mechanisms. A "ladder-type, three-stage" progressive practice system supported by functionally integrated intelligent translation laboratories is also formulated to enable a closed loop from skill training to competency validation. The study contributes theoretically by incorporating philosophy of technology perspectives into translation education discourse and practically by offering a replicable reform paradigm for peer institutions with comparable resource conditions. Limitations include constrained generalizability due to the regional scope of data and the need for longitudinal validation of reform effectiveness. Future reforms should strengthen technological ethics and critical thinking education, advance interdisciplinary knowledge integration, and establish regional teaching collaboration mechanisms to cultivate high-quality applied translation talents capable of effective human–machine synergy in the AI era.

Keywords: Technology Empowerment; English Translation Courses; Curriculum Reform; Outcome-Based Education; Applied Higher Education Institutions; Artificial Intelligence.

1. Introduction

The deep application of artificial intelligence technologies is profoundly reshaping the global translation industry. Technological breakthroughs centered on neural machine translation (NMT) and generative artificial intelligence (GenAI) have enabled machine translation systems to demonstrate significant advantages in efficiency and cost. In this context, the proportion of machine translation processing in the global professional translation market has increased annually, leading to a structural decline in demand for basic translation positions. This technological disruption is not limited to efficiency; it is equally evident in the powerful capacity for knowledge iteration. Through real-time updated multimodal corpora and adaptive learning algorithms, AI systems now surpass human translators in constructing specialized terminology systems in emerging fields such as quantum computing and biomedicine. This "technological gap" compels translation professionals to reposition their core value propositions, necessitating a reconstruction of cross-cultural cognition, deepening of vertical domain knowledge, and upgrading of human–computer collaboration capabilities to adapt to a new ecosystem of human–machine symbiosis.

Although applied higher education institutions in Guangdong Province have achieved preliminary results in translation education reform—such as the implementation of the "1+N+LS" (English + specialization + language services) training model—their talent cultivation systems still face structural contradictions. These are manifested in the limited alignment between translation curricula and language service industry standards, relatively weak practical teaching components, and insufficient coverage of intelligent translation laboratories and related infrastructure. Against this backdrop, this study focuses on the technology-driven reform of English translation courses, employing a combination of literature analysis, case comparison, and empirical research methods. It seeks to address three core contradictions: the asynchrony between traditional course content and technological development, the systemic inadequacy of training in technology application skills, and the insufficient effectiveness of university–industry collaborative education mechanisms. In response to these issues, this study explores and attempts to construct a curriculum reform and practice framework that is adaptable to the current technological environment and replicable for peer institutions.

2. Literature Review

2.1. Current Research on Translation Education in China and Abroad

Scholars such as Mu Lei (2024), employing conceptual genealogical methods, systematically deconstructed the paradigmatic differences among pedagogical translation, translation pedagogy, translator training, and translation education. They established a three-dimensional objective system for translation education in the new era: cultivation of

technological literacy, construction of intercultural competence, and development of critical thinking [1]. The theoretical breakthrough of this framework lies in its formal inclusion of the technological dimension into the goal system of translation education. However, it has yet to formulate quantifiable evaluation indicators for the specific grading of technological competence—such as the distinction between basic operational skills and advanced human–computer collaboration capabilities—which may constrain its operability in teaching practice. Zhao Mi et al. (2020), using bibliometric methods, conducted a knowledge mapping analysis of translation teaching research published in CSSCI journals from 2000 to 2019. Their findings revealed a distinct shift in research focus from "pedagogical exploration" to "technological integration" [2]. Although this study highlights the technological turn in domestic scholarship, its data coverage ends in 2019 and does not encompass the disruptive impact of generative AI on translation education post-2020, thereby limiting the timeliness of its conclusions. In contrast, international scholarship tends to adopt a more explicit orientation, generally regarding technological competence as a core component of translator professionalism. However, it is worth noting that such studies often concentrate on operational proficiency with technological tools, while systematic exploration of the cultivation pathways for deeper competencies—such as ethical reasoning (e.g., algorithm bias identification)—remains insufficient, creating a research gap that prioritizes skills over ethics.

2.2. Research on Technology-Empowered Translation Education

Breakthroughs in NMT and GenAI have ushered translation education into an intelligent phase. The application of intelligent assistance systems can significantly enhance the efficiency of translation instruction, yet it is accompanied by technological risks such as increased semantic distortion rates. This phenomenon reveals the "double-edged sword" effect of technological empowerment: efficiency gains may come at the cost of implicit quality degradation, particularly in domains requiring deep cultural mediation (e.g., literary translation), where semantic distortion may lead to deep-seated misunderstandings in cross-cultural communication. In response to this challenge, Ding Daqin et al. (2022) proposed a "three-dimensional reform framework"—encompassing innovation in pedagogical philosophy (technology + humanities), curricular restructuring (modularization), and transformation of assessment mechanisms (process-oriented) [3]—offering theoretical support for addressing the impact of AI. However, the empirical basis of this framework is derived primarily from case studies of universities in developed eastern regions; its applicability to institutions in central and western China, which may have relatively limited technological resources, has yet to be fully verified, raising concerns about regional generalizability. Moreover, existing research tends to emphasize the integration of technology at the instrumental level, while studies on the adaptability of educational agents—such as teachers' technological anxiety and the cognitive characteristics of "digital native" students—remain markedly insufficient.

2.3. Regional Progress in Translation Education Research

Applied higher education institutions in Guangdong Province have made notable advances in industry–education integration. For instance, the English program at Dongguan University of Technology has implemented practical training courses and established internship bases, significantly enhancing graduate job matching rates. Guangdong University of Science and Technology's translation program has engaged in extensive university–industry collaboration with multiple translation companies, achieving substantive synergies in key areas such as program development, student internships, and employment. Nevertheless, universities in the province continue to face developmental bottlenecks, including insufficient proportions of technology-oriented courses and low coverage of intelligent translation laboratories.

3. Current State and Challenges of Translation Education in the Age of AI

3.1. Current Applications of Artificial Intelligence Technologies

3.1.1. Development and Application of Machine Translation

The evolution of machine translation can be divided into three major stages: early rule-based methods, statistical machine translation, and neural machine translation, with the field currently advancing rapidly toward the generative AI translation stage. Rule-based approaches rely on manually encoded linguistic rules but suffer from limited coverage due to the complexity and diversity of language, making them inadequate for large-scale translation tasks. Statistical machine translation analyzes massive bilingual parallel corpora using probabilistic models to perform translation, yet its effectiveness heavily depends on the quality and quantity of bilingual data. Neural machine translation, leveraging deep learning techniques, captures deeper linguistic features more accurately. However, it similarly relies heavily on large-scale bilingual corpora, resulting in limited performance for low-resource language pairs and ongoing challenges in discourse-level comprehension and deep contextual modeling. In recent years, the application domains of machine translation have expanded and deepened substantially, permeating key scenarios such as international communication, cultural dissemination, and multimodal translation. In international communication, machine translation systems rapidly and accurately process complex business documents, contracts, and emails, facilitating efficient business negotiations and international conferences. In cultural dissemination, the swift translation of literary works, film subtitles, and news reports helps dismantle language barriers and accelerates the global circulation of cultural products. In multimodal translation, the integration of textual, speech, and visual modalities is enabling more comprehensive and precise translation outcomes.

3.1.2. Use of AI-Assisted Translation Tools

AI-assisted translation tools integrate artificial intelligence technologies with translation memory to help translators enhance efficiency and quality. Their core functionalities include translation memory, terminology management, machine translation integration, quality assurance, and

collaboration features. Trados, a widely used tool in the field, exemplifies these capabilities through its integrated management of translation memories and term bases. Users begin by creating a translation project, importing files to be translated, and configuring relevant translation memories and term bases. During the translation process, Trados automatically matches existing content in the translation memory to reduce repetitive labor, while the term base ensures consistency in specialized terminology.

3.2. Impact of Artificial Intelligence on the Translation Industry

In terms of translation technology competence, the widespread application of AI and machine translation technologies has raised industry expectations regarding translators' comprehensive technological proficiency. Translators must not only master advanced functions of computer-assisted translation (CAT), quality assurance (QA), and localization software (e.g., regular expressions, filters) at the application level but also possess post-editing capabilities for machine translation—including the tuning and evaluation of different NMT engines (e.g., Google Translate, DeepL, domestic large language models) and even foundational knowledge for customized engine training. Furthermore, senior-level positions increasingly require workflow automation skills, such as API integration and basic scripting, to automate translation processes.

In terms of interdisciplinary competence, domain-specific knowledge has become a core competitive advantage in the translation industry. Translation work is no longer confined to linguistic conversion; it increasingly penetrates vertical domains such as law, medicine, finance, and technology, requiring translators to possess relevant professional knowledge and mastery of specialized terminology systems. In the AI era, the core value of translators increasingly lies in their ability to rapidly construct knowledge systems in unfamiliar domains. Faced with emerging topics such as "carbon neutrality," translators must accomplish a role transition from "language converter" to "active learner and knowledge constructor" within a short timeframe. This process relies heavily on advanced information literacy and self-directed learning capabilities: first, by retrieving authoritative framework documents (e.g., IPCC reports, national action plans) to quickly anchor core terminology and macro-level structures; then, by systematically mining parallel texts and leveraging corpus tools to autonomously construct domain-specific corpora, validating terminology accuracy through multi-source comparison; and finally, by internalizing knowledge through understanding the logical relationships among concepts. In this process, AI serves as a collaborative tool for information retrieval and validation. This capacity for "translation-oriented immersive learning" is the fundamental guarantee that translators can harness rather than depend on technology and constitutes the cornerstone for achieving high-quality, specialized translation. Consequently, the focus of translation education should shift from knowledge transmission to the systematic cultivation of this "meta-competence."

3.3. Challenges Confronting Translation Education

3.3.1. Disconnect between Traditional Translation Curricula and Industry Needs

Current university translation curricula remain predominantly centered on language competence development, typically comprising modules such as written translation, interpreting, and translation theory. However, several notable issues persist: instruction is primarily lecture-based, lacking interactivity and practical application; students struggle to transfer theoretical knowledge to authentic translation scenarios; curricula are partially misaligned with actual industry requirements; and university–industry collaboration remains superficial, leaving students without effective channels to understand industry trends and career development pathways. These problems result in a significant gap between the knowledge students acquire and the competencies required for professional roles.

3.3.2. Insufficient Development of Students' Technological Competence

The current inadequacy in cultivating students' technological competence stems from two primary sources. At the infrastructural level, many universities have yet to establish dedicated translation laboratories, depriving students of hands-on experience with CAT, machine translation, and related tools; even where laboratories exist, equipment updates often lag, with hardware configurations unable to support the operation of modern translation technologies. At the faculty level, some instructors possess limited familiarity with and proficiency in translation technologies, constraining their ability to provide effective guidance. Additionally, a considerable number of faculty members lack practical experience in the translation industry, impeding the deep integration of authentic industry needs into pedagogical practice.

3.3.3. Transformation Challenges Facing the Faculty

The era of artificial intelligence presents three core challenges to translation faculty. First, the crisis of obsolescing knowledge structures. Many faculty members completed their education and academic training prior to the AI era, and their own translation practice and scholarly development lacked systematic technology education. This results in inherent deficiencies when delivering content on machine translation principles, advanced CAT functionalities, or localization engineering, necessitating ongoing professional development opportunities to update their technological knowledge base. Second, difficulties in pedagogical paradigm shift. Instructors must transition from traditional roles as "providers of standard answers" and disseminators of theory to composite roles encompassing "project designers," "technological collaborators," and "ethical guides." This transformation requires not only mastery of new technologies but also fundamental reconfiguration of classroom organization and teacher–student relationships, encountering substantial resistance in practice. Third, lagging assessment capabilities. Faced with translation outputs co-produced by humans and machines, traditional quality evaluation frameworks centered on "faithfulness, expressiveness, and elegance" are no longer fully applicable. How to organically integrate process-oriented technical indicators (e.g., terminology consistency, post-editing efficiency gains) with conventional translation quality standards to construct a scientific, equitable new evaluation system has emerged as a critical challenge in teaching reform. Collectively, these challenges underscore the need for systematic innovation in faculty development systems and provide direct justification for constructing diversified course evaluation mechanisms.

4. Analysis of the Current State of English Translation Courses in Applied Higher Education Institutions

English translation curricula in applied higher education institutions typically comprise modules such as foundational translation, specialized translation (e.g., business, legal, scientific/technical translation), and translation theory. However, classroom instruction remains predominantly theory-oriented, with practical course components occupying a relatively low proportion. Currently, translation course instruction generally follows a traditional "teacher-centered" model. In this model, teachers lead the explanation of translation theories and the transmission of translation techniques, while students learn solely through mechanical exercises, teacher error correction, and revision by comparing their work with reference translations. This approach not only hinders students' genuine internalization of translation competencies but also fosters the misconception that the reference translation constitutes the "sole correct answer," resulting in rigid, uninspired target texts and severely constraining students' autonomy and creativity. This instructional model diminishes students' intrinsic motivation to engage in translation practice while reinforcing path dependency on reference translations, thereby failing to effectively enhance their practical translation abilities and comprehensive literacy.

Deng Xiaoling (2008), in "Reflections and Practice on the Teaching Model for English–Chinese Translation," observed: "Pure theoretical learning not only deprives students of practical opportunities but also dampens their learning enthusiasm. Therefore, teachers must adopt a teaching approach integrating theory and practice, organizing students' appreciation of translation excerpts and analysis of their own works under the guidance of translation theory" [4]. The present author considers this perspective of significant referential value. Deng further noted: "Enhancing teachers' professional competence is an important guarantee for implementing new translation teaching models." "Teachers should exercise control over the entire learning process, inspiring, motivating, and guiding students at critical junctures while promptly evaluating learning outcomes" [4]. These insights profoundly illuminate two core fulcra for reforming English translation courses in Guangdong's applied higher education institutions: first, innovation in pedagogical models must adhere to the pathway of "practice-oriented transformation under theoretical guidance"; second, the success or failure of reform hinges critically on whether teachers can successfully transition into roles as learning process designers and enablers. This provides crucial entry points for addressing structural contradictions such as weak practical teaching components and misalignment with industry needs, while specifying clear requirements for faculty capacity building.

5. Curriculum Reform Strategies Oriented Toward Cultivating Applied Translation Talents

5.1. Innovation in Translation Education Curriculum Objectives

Traditional translation instruction should not remain confined to the unidirectional transmission of knowledge. Instead, it should emphasize the integration of learning with application, focusing on cultivating students' abilities to solve practical problems—particularly their proficiency in using technological tools and engaging in hands-on practice. Accordingly, the core objective of curriculum reform lies in guiding students not only to acquire knowledge but also to effectively transfer it to authentic work scenarios, repeatedly refining their skills through practice environments and progressively maturing into translation professionals who meet market expectations.

Grounded in Outcome-Based Education (OBE) philosophy, this study repositions curriculum objectives around "capacity generation" and reverse-decomposes graduation requirements into the following three observable, measurable indicators: First, technological application competence: the ability to independently perform post-editing of machine translation output, substantially improving translation quality relative to the initial machine-generated draft. Second, project execution competence: the ability to lead and complete translation tasks at the ten-thousand-word scale, covering the entire workflow—terminology base construction, progress control, quality management, and client delivery. Third, ethical judgment competence: the ability to identify and critically assess potential copyright, privacy, and data security risks associated with AI-mediated translation processes, and to formulate corresponding written response plans.

5.2. Innovation in Course Content

At the level of course content, reform proceeds along two primary dimensions. First, the introduction of new courses aligned with contemporary developments. In light of the irreversible trajectory of the AI era, and to equip students with modern translation technologies and adaptability to industry transformation, the curriculum systematically incorporates AI-related instructional content—such as elucidating the fundamental principles of machine translation and providing hands-on training in various translation technology tools. This module directly addresses the training objective of "technological application competence," laying the foundation for students to independently undertake post-editing tasks. Second, innovation in teaching methodologies and models. The traditional unidirectional lecture format, in which students passively receive information, is being replaced by diversified approaches including project-based learning and case-based teaching. Project-based learning requires student teams to holistically implement a concrete translation project, autonomously managing the entire process from project initiation to final delivery—including terminology management, scheduling, quality monitoring, and client communication—thereby honing their "project execution competence." Case-based teaching, through the analysis of authentic translation instances—particularly those involving ethical controversies in AI translation—guides students to identify underlying copyright, privacy, and data security issues and to deliberate on corresponding countermeasures, thereby actualizing the cultivation of "ethical judgment competence."

5.3. Strengthening Practical Teaching

Reform of practical teaching components centers on deepening university–industry collaboration and consolidating translation practice bases. Through internships at practice bases, students apply the translation knowledge

and skills acquired in the classroom to authentic work environments—for instance, translating corporate documents, participating in real-world projects, and collaborating with professional translators.

Drawing on OBE principles, this study proposes a "three-tiered progressive, competency-articulated" modular curriculum system aimed at systematically cultivating students' technological application, project execution, and ethical judgment capabilities. At the Foundation Tier (Year 1): Focus on bilingual conversion core competencies and technological initiation. Courses include *Foundations of Translation* and *Introduction to Translation Technologies*. The latter emphasizes basic CAT tool operations, efficient information retrieval, and introductory terminology management, aiming to foster early awareness of human–computer collaboration. At the Core Tier (Years 2 and 3): Achieve integration of specialized knowledge, technological deepening, and project management. Students, while taking thematic courses such as *Business Translation* and *Scientific/ Technical Translation*, concurrently enroll in *Machine Translation and Post-Editing* and *Translation Project Management*. The former delves into principles of different MT engines, post-editing strategies, and quality assessment methods; the latter simulates authentic business workflows, encompassing project initiation, terminology base construction, quality control, and delivery—directly targeting "technological application" and "project execution" competency goals. At the Advanced Tier (Year 4): Orientation toward industry frontiers and complex scenarios. Courses include *Introduction to Localization Engineering* (covering fundamentals of software localization, multimedia processing) and *Translation Technology Ethics and Industry Practice*. Additionally, students are encouraged to take bilingual introductory courses in disciplines such as law or finance to construct a "translation+" interdisciplinary knowledge structure.

Regarding ethics instruction, this framework incorporates controversial real-world cases for seminar discussion. For example, the case "Privacy and Compliance Risks in Using GPT to Translate Patient Medical Records." The classroom discussion outline may include: 1) identifying the types of sensitive personal information contained in medical records; 2) analyzing the data privacy policies of mainstream machine translation systems and their potential risks; 3) exploring the ethical guidelines translators should adhere to in medical translation scenarios and viable compliant workflow protocols. Such training aims to cultivate students' critical thinking, transforming abstract ethical principles into operational professional judgment.

5.4. Optimization of the Evaluation System

As an integral component of curriculum reform, this study restructures the evaluation system, establishing a diversified assessment framework that departs from previous models relying solely on final examinations. This framework directly aligns with the aforementioned three course objectives, focusing on assessing students' practical translation proficiency and technological application effectiveness. Specific measures may include, for the assessment of "technological application competence," a technology operation examination testing students' proficiency in utilizing AI translation tools. For "project execution competence," a translation project portfolio is introduced, requiring students to submit comprehensive project documentation to evaluate translation quality and project management performance in authentic tasks. For "ethical judgment competence," the written examination format is retained but converted to open-book, employing case analysis questions to assess students' ability to identify risks and render ethical judgments. Additionally, components such as translation practice exercises, group collaboration tasks, and project presentations are incorporated to holistically evaluate students' teamwork capabilities and capacity for integrated knowledge application.

To realize the goal of cultivating applied translation talents, practical teaching components require systematic restructuring. This study proposes constructing a "ladder-type, three-stage" progressive practice system: Stage 1 involves on-campus simulated training. Leveraging intelligent translation laboratories, students complete simulated translation projects—such as producing a product manual for a technology company—with emphasis on foundational tool operation and process familiarization. Stage 2 involves university–industry collaborative "micro-project" practice. Real, small-scale, modular tasks from partner enterprises (e.g., APP interface localization or excerpts from product specification translation) are introduced, with enterprise mentors providing online process guidance and feedback, enabling students to confront authentic business scenarios and quality standards. Stage 3 involves in-depth internships at practice bases. Students are placed at contracted translation companies or localization firms, participating fully in at least one complete project cycle—from client communication to final delivery—prior to graduation, thereby comprehensively honing their professional competencies and integrated execution capabilities.

The effective operation of this system depends on a functionally integrated "intelligent translation laboratory" serving as a core support platform. Its ideal configuration transcends mere hardware aggregation, aiming to create an integrated "teaching–training–research" environment. The laboratory should integrate mainstream general-purpose and vertical-domain machine translation systems, professional corpus retrieval and management systems, and enterprise-level translation project management and collaboration platforms. Crucially, the platform should possess the capability for instructional process datafication, enabling the recording and analysis of students' operational behaviors, decision-making pathways, and output quality during simulated and practical projects. This provides instructors with precise pedagogical feedback, facilitates precise evaluation and continuous improvement of practical instruction, and thereby forms a closed loop from skill training to competency validation.

6. Conclusion and Outlook

6.1. Research Conclusion

Guided by the philosophy of Outcome-Based Education and responding to industry development requirements in the era of artificial intelligence, this study systematically investigates the reform of English translation courses in applied higher education institutions in Guangdong Province, aiming to address the long-standing disconnect between "knowledge transmission" and "competency cultivation" in traditional translation pedagogy. The research finds that leading translation programs in China typically construct their curricula around the core concepts of "technology

empowerment" and "global competence," whereas some regional institutions place greater emphasis on bridging linguistic proficiency with local market demands. This comparison suggests that curriculum reform in regional universities should advance simultaneously along two trajectories: deepening technological application capabilities and expanding authentic professional scenarios.

Building upon this understanding, this study attempts to construct a comprehensive reform framework encompassing curriculum objectives, instructional content, practical components, and evaluation systems. This framework takes observable, measurable competency indicators (technological application, project execution, ethical judgment) as its point of departure and reverse-designs course content and pedagogical methods: by introducing AI-related courses and adopting project-based and case-based teaching methods, it drives the transformation of classrooms from knowledge dissemination to competency training; by deepening university–industry collaboration and constructing practice bases, it creates conditions for students to refine skills within authentic workflows; by establishing a diversified evaluation system centered on project outcomes, technical operations, and process reflection, it shifts the focus of learning assessment from static knowledge acquisition to dynamic competency demonstration. These reform measures, interlinked and mutually reinforcing, preliminarily form a closed-loop system guided by objectives, supported by the interplay of content and practice, and verified and fed back through assessment.

6.2. Research Contributions and Limitations

At the theoretical level, this study integrates reflections from the philosophy of technology into the field of translation education, providing an initial framework for understanding and constructing the knowledge and competence structures of translation professionals in the era of "human–machine collaboration." It also opens new perspectives for subsequent in-depth explorations of translator roles, ethical responsibilities, and related issues within AI-mediated environments. At the practical level, the proposed reform pathways are closely aligned with the institutional positioning and resource conditions of local applied universities, striving for operability and replicability, and aiming to offer a possible reference paradigm for peer institutions.

This study also has several limitations. First, the materials informing this research are primarily derived from publicly available curriculum documents and a limited range of literature, failing to extensively cover the diverse practices of universities across different regions and institutional types, thereby constraining the generalizability of the research conclusions. Second, the actual effectiveness of the envisioned reform framework requires validation through longer-term teaching practice; longitudinal data tracking and feedback analysis regarding talent cultivation outcomes remain to be supplemented in subsequent research.

6.3. Future Outlook

In the face of the rapid evolution of generative artificial intelligence technologies, translation education must continuously reflect upon and actively explore how to cultivate future translators' irreplaceable core competencies. Future curriculum reform may be further deepened along three dimensions: First, strengthen education in "technological ethics and critical thinking," enabling students not only to become proficient technology users but also prudent evaluators and reflexive critics. Second, advance interdisciplinary knowledge integration by systematically embedding domain-specific expertise—such as law, medicine, and technology—into translation instruction, thereby enhancing students' vertical service capabilities. Third, advocate for the establishment of regional teaching collaboration mechanisms, sharing practical resources and co-constructing pedagogical case libraries to generate reform synergy and enhance overall reform effectiveness.

In summary, the ultimate goal of translation curriculum reform is to cultivate high-quality, application-oriented professionals capable of effectively harnessing technological tools, confidently navigating diverse scenarios, and consciously adhering to professional ethics—thereby achieving constructive complementarity and synergistic advancement of human and machine strengths in the era of artificial intelligence.

Acknowledgments

This work was supported by the Guangzhou Institute of Science and Technology 2024 University-level Innovation and Entrepreneurship Training Program for College Students (Project No. CX2024017, titled "Curriculum Reform and Practice in English Translation Courses under the Background of Innovation and Entrepreneurship") as well as the Guangzhou Institute of Science and Technology 2024 University-level General Research Program (Project No. 2024KY009, titled "A Study on Practical Teaching of College English in Application-Oriented Undergraduate Universities amid the Construction of the Greater Bay Area"). The authors gratefully acknowledge the funding and support provided by the programs.

References

[1] Mu, L., Liang, W. L., & Liu, X. Y. (2024). Translation Education in the New Era in China: Conceptual Connotation and Research Framework. Foreign Language World, Vol. 04, pp. 67-74. https://doi.org/10.26971/j.cnki.flw.1004-5112.2024.04.009.

[2] Zhao, M., & Wang, L. H. (2020). The Status Quo and Prospects of Translation Teaching Research in China—A Knowledge Graph Analysis Based on CNKI. Computer-Assisted Foreign Language Education, Vol. 01, pp. 59-64+9. https://doi.org/10.20139/j.issn.1001-5795.2020.01.007.

[3] Ding, D. Q., & Yang, S. Y. (2022). Challenges and Countermeasures of Artificial Intelligence to Translation Teaching. Journal of Yichun University, Vol. 04, pp. 89-93.

[4] Deng, X. L. (2008). Practice and Reflection on the Teaching Model of English-Chinese Translation. Crazy English (Teachers), Vol.04, pp. 24-26.