
Research on the Remodeling of Translation Practice and Learning for English Majors by Generative Artificial Intelligence (AIGC)

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Abstract: Intelligent translation technologies represented by generative artificial intelligence (AIGC) are advancing at an unprecedented pace, with rapid technological iteration and application popularization. This technological wave has not only profoundly transformed the traditional translation practice model but also exerted significant and far-reaching impacts on the current ecological structure of the translation industry. AI-powered translation systems show distinct advantages over conventional manual methods in key aspects such as translation efficiency, content generation, and largescale output. Against this evolving backdrop, a critical question arises: How can English majors strategically integrate their core translation competencies with the proper use of AI tools in practical translation tasks? Furthermore, how can they leverage the interdisciplinary “AIGC + X” model, where X stands for domain expertise, pedagogical competence, or critical linguistic judgment, to promote professional innovation, improve translation capabilities, and ultimately strengthen their core competitiveness and irreplaceability in the AI era? Addressing these questions requires rigorous academic research and pedagogical exploration.

Keywords: AIGC; Intelligent translation; English majors; Translation practice

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1. Introduction

With the continuous advancement of algorithms and computing power, generative artificial intelligence (AIGC) has increasingly penetrated various social sectors and exerted profound trans-formative effects, especially in English language education, research, and application^[1]. Leveraging AIGC, users can quickly generate highquality translations by inputting source text, eliminating the need for stepbystep manual copying and translation, thus significantly improving efficiency. From the perspective of communication boundaries, the deep integration of AIGC with immersive technologies such as virtual reality (VR) and augmented reality (AR) has shifted cultural communication from the traditional oneway output model to a multidirectional interactive model. At the ecosystem level, AIGC drives the evolution of communication participants from single, centralized creators to a diversified and collaborative network, involving professional producers, end users, and wider social stakeholders. This transition enables a robust, self-sustaining cycle encompassing content

creation, production, audience feedback, and iterative re-creation.

2. Core Logical Architecture of AIGC - Enabled Language Processing Systems

The integration of Artificial Intelligence-Generated Content (AIGC) into language and cultural dissemination profoundly transforms every stage of the communication process. Its underlying mechanism unfolds progressively through three interrelated dimensions: enhanced operational efficiency, expanded communicative boundaries, and systemic ecological reconfiguration^[2]. Using AIGC technology, users can rapidly generate high-quality translations by inputting source text, eliminating the need for manual, sequential copying and pasting, and thereby significantly enhancing translation efficiency. From a communicative boundary perspective, the deep integration of AIGC with immersive technologies such as virtual reality (VR) and augmented reality (AR) shifts cultural dissemination from a traditional unidirectional output model to a multi-directional, interactive one. At the ecosystem level, AIGC fosters the evolution of communication actors from isolated, centralized entities toward a diversified, collaborative network, expanding participation from professional creators to audiences and broader societal stakeholders, thus enabling a robust, self-sustaining cycle of creation, production, feedback, and iterative recreation.

3. Challenges Encountered by Students Majoring in English

Against the backdrop of the rapid development of AIGC and its wide application in the translation industry, English majors face multiple challenges in professional development, competence cultivation, and career preparation. First, many students lack interdisciplinary knowledge and comprehensive abilities, which are increasingly valued in modern translation practice. Second, structural changes in industry demand driven by automation, specialization, and changing client expectations have intensified competition and narrowed traditional employment channels. In addition, excessive reliance on AIGC tools in translation training hinders the development of core linguistic abilities, including accuracy in sourcetarget language conversion, handling of stylistic nuances, intercultural communication competence, and critical thinking skills.

3.1. Limited Structural Competency Framework Diversity & Insufficient Integration of Interdisciplinary Competencies

The widespread application of AI-generated content (AIGC) has substantially reduced the market value of basic language conversion skills. Nevertheless, most English majors still follow traditional language learning models and pay insufficient attention to mastering AI-powered tools and developing crosscultural communication competence. Students often lack clear professional positioning: they are neither proficient in humanAI collaborative translation nor have developed domain expertise such as legal or business translation to gain competitive advantages. As a result, their competence structure remains narrow and cannot meet the industry's demand for versatile, application-oriented, and interdisciplinary translation professionals.

3.2. The Industry's Demands for Translators Has Declined Significantly

Using the advanced translation capabilities of AIGC tools, organizations now routinely automate basic text translation and standardized document transcription, tasks that previously required professional human translators. Consequently, corporate recruitment for entry-level translation positions has decreased markedly, and overall social demand for conventional translation posts continues to decline. This shift has a particularly strong impact on recent English majors, who often lack practical language experience and have not yet fully developed their bilingual proficiency and domain expertise. Therefore, weakened employability and limited direct employment opportunities in language-related fields have become major challenges for these graduates in job hunting and early career development.

3.3. Weakened Language Proficiency & Critical Thinking Abilities Caused by Over-reliance on AI

Some students rely excessively on generative AI to complete translation assignments and course-related tasks, which hinders the development of independent critical thinking and weakens basic abilities such as lexical accuracy, syntactic control, and coherent text construction. Longterm dependence on AI-generated outputs may lead to a “hollowing out” of translation competence: learners may show reduced linguistic sensitivity, weakened contextual interpretation, and less awareness of cultural nuances in translation. What is more, insufficient critical review, such as systematic verification, reflective revision, and rigorous evaluation of AI-produced translations, leads students to overlook errors in domain terminology, misrepresentation of cultural connotations, and logical inconsistencies. Such problems not only compromise academic learning outcomes but also raise the risk of unintentional academic misconduct and substandard translation practice, ultimately impeding the sustained cultivation of professional translation competence.

4. Strategies to Enhance Translation Competence of English Majors

4.1. A Paradigm Shift in English Major Education for the AIGC Era

With the rapid development of information technology and the evolution of educational theories, numerous universities in China have carried out systematic teaching model innovations and reforms. Approaches such as blended learning (integrating online and offline instruction), flipped classrooms, and projectbased learning have been widely adopted and rigorously evaluated in various institutions^[3]. Teachers can utilize augmented reality technology to present various real learning scenarios, enabling students to experience immersive learning and enhancing their interest in learning^[4]. Using AIGC, educators have developed diverse and educationally sound classroom teaching models. Specifically, AI tools are integrated into formative assessment practices, such as collaborative grading of student translation assignments, where standard reference translations, AI-generated translations, and student submissions are systematically compared and discussed in class. This tripartite comparative approach scaffolds students’ development of critical translation competencies, including self-assessment, lexical ambiguity resolution, and reflective revision. Furthermore, underpinned by natural language processing (NLP) techniques and large language models, AIGC enables the dynamic generation and real-time refinement of context-sensitive translation teaching resources^[5]. Currently, educators are increasingly leveraging AI-generated content (AIGC) tools to develop customized translation practice materials. These materials span diverse difficulty levels, subject domains, and modalities, such as textual, audio, and visual inputs, to support differentiated and student-centered learning. By analyzing patterns of errors and persistent knowledge gaps in students’ submitted work, AIGC systems can dynamically deliver targeted background information, bilingual parallel texts, and context-sensitive explanations of translation strategies, thereby enabling timely, precise, and scalable pedagogical support. This capability overcomes key limitations of conventional teaching resources, including infrequent updates and insufficient personalization. Furthermore, AIGC facilitates authentic professional simulation: it generates multi-modal translation tasks aligned with industry-specific formats, terminological conventions, and workflow requirements, allowing learners to internalize domain norms and strengthen their strategic competence in real-world translation contexts.

4.2. Strengthen Competitive Advantage & Strategic Irreplaceability Via Systematic Integration of AIGC with Domain-Specific Capabilities

The 2025 China Translation Industry Development Report indicates a steady increase in demand for highlevel translation professionals in China, especially in specialized fields such as medical treatment, legal services, and financial services^[6]. In an era of increasing global communication, translation professionals must have an international vision, solid professional knowledge, and high intercultural competence to ensure accurate, contextually appropriate, and functionally effective language transfer across different cultural contexts. Consequently, English majors are strongly encouraged to cultivate interdisciplinary awareness and systematically develop a composite competency framework, “English + X”, which integrates linguistic proficiency with complementary expertise in another domain. In current technological development

environment, scientific and technological translation is an area that artificial intelligence is unlikely to fully replace in the short term. Unlike general text translation, scitech translation, which appears to convey only objective information, actually involves a process of cultural encoding and decoding. The cultural limitations of AIGC make the role of the translator as a “cultural mediator” increasingly important^[7]. In professional content creation, AI-generated outputs, while often fluent and stylistically coherent, frequently fall short in domain-specific accuracy, conceptual rigor, and contextual appropriateness. Consequently, human expertise in scientific and technical translation remains indispensable. This principle extends beyond translation to broader academic and professional domains. For English majors, cultivating a robust foundation in linguistics, textual analysis, and translation theory is essential; concurrently, proactively integrating interdisciplinary knowledge, such as in digital humanities, computational linguistics, or subject-matter domains, enables the development of a distinctive, compound competency profile. Such integration is critical for establishing sustainable, irreplaceable core competitiveness in the digital era.

4.3. Role Transformation: From Language Converter to Professional Reviewer

In the AIGC environment, the manifestation of translators’ subjectivity relies on the integrated application of professional knowledge, technical ability, and crosscultural literacy. This requires students to master basic technical operation skills and also be capable of indepth critical analysis of machine translation outputs^[8]. English majors should use their knowledge and translation practice to improve their information identification and evaluation abilities, while actively learning the technical principles of AI, so as to transform their role from simple language converters to professional reviewers. Specifically, the role of a professional reviewer requires English major students to conduct comprehensive and meticulous quality control over the initial translation drafts generated by AIGC in translation practice. This not only includes basic checks on the accuracy of vocabulary and the standardization of grammar, but more importantly, a deep review of the overall semantic coherence, logical rigor, and cultural adaptability of the translation. In addition, facing the possible “hallucination” problem in AIGC, generating seemingly reasonable but factually incorrect content, professional reviewers need sharp insight to identify and correct such errors through crossvalidation, logical reasoning, and other methods to ensure the authenticity and reliability of translations. This role transformation from a simple language converter to being responsible for the quality of the entire translation process and value enhancement of the final result is a key path for English major students to maintain their competitiveness in the AIGC era.

4.4. “Dual-Qualified Teachers” Promote Students’ Holistic Development

It is teachers that are the direct implementer and main driving force for cultivating translation talents. In the era of rapid development of artificial intelligence technology, the educators of translation talents urgently need to grow into “dual-qualified” teachers who possess both teaching capabilities and industry practical experience^[9]. Therefore, it is necessary to follow the technological development trend, regularly organize teachers to participate in training on new translation technologies, and promote cross-disciplinary and cross-field exchanges and cooperation between teachers and experts in business, international law, technical engineering and other fields. This move aims to help teachers update their translation technology literacy and professional knowledge, and thereby more effectively instruct students to scientifically apply artificial intelligence technology to enhance their language conversion ability, strengthen their cross-cultural expression awareness, and at the same time, strengthen students’ critical thinking ability and comprehensive quality, enabling them to grow into indispensable translation professionals in the era of globalization.

5. Conclusion

The cultivation of translation professionals in the AIGC era constitutes a comprehensive, system-wide endeavor that necessitates coordinated advancement across policy frameworks, curriculum design, pedagogical practices, and faculty development^[10]. The efficiency revolution brought by AIGC, while challenging traditional language skills, also provides

new paths for the professional upgrading of English majors. Therefore, under the guidance of teachers, English major undergraduates need to reconstruct their competence system in translation practice, rationally utilize AIGC technology to promote the leap from language conversion to meaning symbiosis; exert cultural intuition and ethical judgment in real contexts, and establish the bottom line of “translator subjectivity” in human-machine collaboration. Only in this way can they take language competence as the foundation, interdisciplinary knowledge and technical ability as the support, develop advantages in proofreading, cultural adaptation, and other areas where AI is weak, while maintaining humanistic warmth, thus building irreplaceable professional competitiveness in the intelligent era.

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