

# The Multidimensional Logic of AI-Driven Reform in Foreign Language Education and Teaching Reform in Local Universities

Nawei Ma<sup>1,a,\*</sup>, Junfeng Zhang<sup>2,b</sup>

<sup>1</sup>Department of English Education, Changchun Humanities and Sciences College, Changchun, Jilin, China

<sup>2</sup>Jilin Sport University, Changchun, Jilin, China

<sup>a</sup>manawei@126.com, <sup>b</sup>1343508697@qq.com

\*Corresponding author

**Abstract:** Artificial intelligence (AI) is deeply driving the systematic reform of foreign language education and teaching in local universities in China. This process is propelled by the synergistic logic of policy, technology, demand, and practice. The top-level design of national strategies provides direction for the reform, while local universities engage in localized innovative practices by closely integrating regional development needs with school-based resources. Technologies represented by generative AI not only enable personalized supply of language input and immersive training of communication skills, but also force a shift in teaching objectives from language skills to higher-order competencies such as critical thinking, creative expression, and human-machine collaboration. Meanwhile, the new demands of students, teachers, and the industrial market in the intelligent era converge and resonate, jointly constituting the endogenous driving force of the reform. At the practical level, the exploration from benchmarking to widespread diffusion is promoting a systematic evolution of the teaching ecosystem. In short, AI-driven reform is fundamentally a paradigm reconstruction, and the key to its success is to build a new holistic educational ecosystem that supports the cultivation of talents with core competencies in the digital and intelligent era.

**Keywords:** Artificial Intelligence (AI), Local Universities, Foreign Language Education and Teaching, Policy Logic, Technological Logic, Demand Logic, Practical Logic, Teaching Ecology

## 1. Introduction

We are living in an era defined by artificial intelligence, particularly generative artificial intelligence (AIGC). The big language model represented by ChatGPT, ERNIE Bot, iFLYTEK Spark, etc., with its strong natural language understanding, generation and reasoning ability, has rapidly penetrated into all walks of life from the laboratory, and education is no exception. In its report "The Future of Generative Artificial Intelligence and Education", UNESCO prospectively pointed out that this technology is not only a new tool, but also a "disruptive force" that may trigger profound changes in educational concepts, models, and evaluation systems[1]. It brings large-scale personalized learning, intelligent teaching assistance, and immersive language environment creation from ideal to reality. In this context, major countries around the world have placed "artificial intelligence+education" at the national strategic level. The "Outline of the Plan for Building an Education Strong Country (2024-2035)" in China clearly proposes to promote the digital and intelligent transformation of education. The Ministry of Education has also continuously issued documents requiring the comprehensive improvement of digital literacy and human-machine collaboration capabilities of teachers and students[2]. Owing to its inherent disciplinary features, foreign language education and teaching is highly compatible with the linguistic processing capabilities of artificial intelligence, making it a natural frontier and experimental arena for such transformative practices.

As a pillar of China's higher education system, local universities are charged with cultivating high-caliber, application-oriented foreign language talents to underpin the economic and social development of their respective regions. However, the constraints of multiple realities pose serious challenges to its development: firstly, there is a shortage of high-quality teaching resources, a lack of up-to-date multimodal real corpora, virtual simulation training platforms, and industry docking courses; Secondly, the teaching staff is facing a "dual capability deficit", with some teachers having

shortcomings in interdisciplinary teaching ability and intelligent technology integration application ability in "foreign language+major", and generally experiencing "technology anxiety" and "identity crisis"[3]; Thirdly, there is a disconnect between the talent cultivation model and the rapidly changing demands of the market, and the phenomenon of "separation of learning and application" has led to insufficient practical ability, innovation ability, and composite ability of graduates to apply technology to solve complex problems[4]. The gradual reform under the traditional path is no longer able to solve these structural contradictions. As AI technology continues to mature and gain wider application, local universities are presented with a transformative opportunity to harness technological empowerment, overcome resource constraints, innovate teaching models, and reshape their talent development systems. How to seize this opportunity and transform challenges into opportunities has become an urgent task for foreign language educators in local universities.

## **2. The Multidimensional Logic of AI-Driven Reform in foreign language education and teaching at Local Universities**

Against the backdrop of deepening digital transformation in education, artificial intelligence (AI) is permeating all dimensions of higher education with unprecedented scope and intensity, emerging as a core driver of pedagogical innovation. As an important part of China's higher education system, local universities undertake the critical mission of nurturing applied and interdisciplinary talents to support regional economic and social development. Nevertheless, foreign language education and teaching in local institutions is presently plagued by pervasive predicaments, encompassing rigid instructional paradigms, inadequate technological embedding, and a structural misalignment between talent development trajectories and market-oriented competency requirements. Endowed with core advantages in advanced data analysis, customized personalized services and intelligent interactive engagement, AI technology offers an innovative methodological framework for resolving these bottlenecks and driving the further deepening of teaching reform. A systematic exploration of the policy, technical, demand-driven, and practical rationales undergirding AI-enabled transformation in foreign language education and teaching at local universities bears profound theoretical value and practical implications for delineating reform orientations and augmenting the efficacy of reform initiatives.

### ***2.1 Policy Driven: The Transmission and Transformation Mechanism from Macro Vision to Micro Practice***

The integration of artificial intelligence and education has become a national strategy, and its policy drive presents a clear three-level transmission path of "top-level design, middle-level transmission, and grassroots innovation", and has completed the creative transformation from macro instructions to school-based practice at the local university level.

The strategic traction of top-level design has been unprecedentedly strengthened. The release of the "Outline of the Plan for Building an Education Strong Country (2024-2035)" marks the rise of education digitization from "path selection" to "national strategy". It explicitly requires "promoting the construction of smart campuses and exploring effective ways of digital empowerment for large-scale personalized teaching and innovative teaching". This statement precisely points to the dual task of building new educational infrastructure and transforming teaching models with AI technology as the core, providing the highest level of legitimacy endorsement and direction guidance for all subject reforms, including foreign language teaching. Subsequently, the Ministry of Education issued the "Teacher Digital Literacy" standard and the selection of "Artificial Intelligence+Higher Education" application scenarios, essentially transforming the strategic blueprint into standardized and concrete requirements for teacher competence and specific teaching scenarios[2]. For foreign language disciplines, the *College English Teaching Guidelines* (2020 Edition) has already laid the groundwork for this transformation, stressing that "modern information technology has become an important means for foreign language teaching" – and artificial intelligence represents its most advanced manifestation, and culmination of this "modern information technology" at present.

The localization transformation of local practices is the key to their vitality. Local universities are not passive recipients in policy implementation, but active "transformers" and "innovators". The transformation logic is reflected in two levels: one is demand responsive transformation, which closely integrates the practical needs of regional economic and social development for talent capacity structure. For example, a local university located in a cross-border e-commerce comprehensive pilot zone has concretized policy requirements into the college goal of "creating an AI empowered cross-border

business foreign language talent training highland", and has jointly built "AI cross-border live streaming training rooms" and "intelligent customer service corpus analysis centers" with local e-commerce leading enterprises, achieving precise alignment between national policies, local industrial needs, and school talent training. The second is adaptive innovation under resource constraints. Local universities generally face limitations in funding, faculty, and technical reserves, which forces them to explore integration paths that are "low-cost, high-efficiency, and easy to learn". For instance, many universities and colleges do not blindly pursue the deployment of costly dedicated AI systems; instead, they encourage faculty and students to fully leverage the open capabilities of general-purpose models such as ChatGPT, ERNIE Bot and DeepSeek, and integrate them with existing smart teaching platforms such as iSmart and Rainclass to conduct "lightweight" integration. This interactive model of "policy leading direction, local creating path" constitutes the real picture of policy driven implementation. It indicates that successful policy driving is not only a top-down pressure transmission, but also a creative process of finding solutions in specific contexts from the bottom up.

## ***2.2 Technology Driven: The Triple Empowerment of foreign language education and teaching Paradigms through Deconstructing Large Language Models***

The technical characteristics of generative artificial intelligence, especially large language models (LLMs), are systematically reconstructing the traditional paradigm of foreign language education and teaching from three levels: resources, interaction, and cognition.

The first level of empowerment: the ultimate realization of the "language input hypothesis" - massive, hierarchical and dynamic corpus supply. According to Krashen's "language input hypothesis", ideal foreign language learning requires a lot of "intelligible input" (i 1). In traditional teaching, it is a great challenge for teachers to screen and edit suitable i-1 materials for students of different levels. AI has revolutionized this situation. It can not only instantly generate a massive real corpus with rich topics, but also "intelligently grade" the same text according to instructions. For example, teachers can ask AI to rewrite an Economist article on "quantum computing" into multiple versions suitable for English level 4, level 6, and professional level 8, or convert it into different genres such as dialogue and summary. This is equivalent to equipping each student with a tireless "personalized corpus editor", making "teaching according to aptitude" technically feasible for large-scale implementation at the input level for the first time [5]. Moreover, drawing upon an analysis of students' immediate learning responses, AI is capable of flexibly fine-tuning both the level of challenge and the thematic emphasis in subsequent learning resources, thus forging a genuinely flexible and responsive learning journey.

The second dimension of empowerment resides in reshaping the cultivation approach to communicative competence, representing a shift from simulated practice to immersive experience, and from outcome-centric assessment to process-oriented development. In traditional teaching contexts, the cultivation of real-time communicative competencies – including impromptu speaking, debating and negotiation – is often hindered by constraints of time, scenario authenticity and psychological pressure on learners. AI has created a low-risk, high-reproducibility "realistic communication laboratory". Intelligent virtual characters can simulate interlocutors with different identities, accents, and personalities, conduct unlimited rounds of conversation practice with students, and provide instant feedback on pronunciation, intonation, and appropriateness. This goes beyond simple "human-computer dialogue" and enters the level of "contextualized and strategic communication training". For example, students can practice how to decline a demanding request from a virtual client in English or how to articulate their point in a simulated international conference. This training not only improves language fluency but also cultivates communicative strategies and cross-cultural pragmatic skills [6]. In the field of writing and translation, the role of AI has been upgraded from a "correction tool" to a "collaborative partner". The process of multiple rounds of negotiation, revision, and demonstration of text between students and AI is an excellent scenario for cultivating "human-computer interaction negotiation ability" (HAINC)[7]. Therefore, the teaching focus shifts from focusing on "whether the final product is correct" to "whether the thinking and collaboration process that produces this product is optimized".

The third level of empowerment (and also the most profound one): the upgrading and traction of teaching objectives - from "language skills" to "core competencies of the digital age". As AI effortlessly performs tasks such as grammar correction, basic translation and information retrieval, the core value of foreign language education and teaching calls for reorientation. This compels educators to shift their teaching objectives from the basic pursuit of "mastering linguistic knowledge and applying language skills" to fostering advanced competencies that AI cannot replicate. These competencies include critical thinking literacy – the ability to evaluate the credibility of AI-generated information, identify potential

biases and conduct logical reasoning – and creative expression literacy – using AI as a source of inspiration and a partner for intellectual exchange to produce content with personal insights and a unique style; Complex interpersonal collaboration literacy (effective team communication and management in a complex environment of online and offline mixing, human-machine collaboration); And the ethical and practical wisdom of mastering technology. Technology has become a mirror, reflecting the fundamental mission of foreign language education and teaching in the era of intelligence: to cultivate communicators and creators who can master technology rather than be enslaved by it, possess profound humanistic heritage and strong critical thinking abilities [8]. This driving force is disruptive, as it requires revolutionary adjustments to the entire curriculum system and evaluation criteria.

### ***2.3 Demand Driven: Aggregation and Resonance of Teacher-Student Entities and Industry Market Demands***

The endogenous driving force of reform comes from the urgent need for all stakeholders in teaching activities to be stimulated and amplified in the AI era, which are intertwined and form a powerful aggregation effect. The core shift in students' learning demands has evolved from mere "acquiring knowledge" to "being able to learn independently", and further to "learning to collaborate with AI in the learning process". Learners cannot rely solely on guidance from teachers or stronger peers, but need to unleash more initiative and autonomy in order to effectively utilize generative artificial intelligence[9]. As digital natives, contemporary students inherently hold high expectations for personalized, interactive learning experiences and a strong sense of academic accomplishment. A recent survey indicates that more than 85% of students regard the traditional teacher-centered lecture model as inefficient. Their expectations for AI are three-dimensional: firstly, as a "capability amplifier" to help them overcome learning bottlenecks (such as quickly improving pronunciation through AI oral practice); Secondly, as an "interest connector", it combines learning content with personal hobbies and career plans (such as allowing anime enthusiasts to learn through AI generated and translated English materials related to anime); Thirdly, as a 'growth navigator', it provides clear learning path planning and immediate feedback on effectiveness [5]. At a deeper level, students realize that the future workplace requires the ability of "human-machine collaboration", and they aspire to learn this skill from the campus stage to increase their bargaining chips for employment. Accordingly, students' learning needs have shifted from passive knowledge reception to the active pursuit of an intelligent learning ecosystem that empowers self-development, accommodates individual differences and fosters future readiness.

Dialectical unity of teacher needs: seeking professional freshmen in the context of "reducing burden and liberating" and "increasing pressure challenges". The needs of teachers present a seemingly contradictory but actually unified duality. On the one hand, there is a strong demand for "reducing workload" - AI can automate repetitive tasks such as homework grading, courseware generation, and regular Q&A, freeing teachers from heavy mechanical work, which directly affects their professional happiness and work efficiency. On the other hand, there is an accompanying 'developmental demand' - which constitutes a certain 'boost'. Mastering AI technology and achieving deep and innovative integration with subject teaching has become a "new compulsory course" for teachers' professional development. Teachers who are not proficient in using AI may gradually fall behind in terms of teaching attractiveness, efficiency, and even authority. This pressure is transformed into a powerful internal driving force for teachers to update their knowledge structure and innovate teaching methods (Bie Dunrong, 2024). Ultimately, these two demands are unified in the magnificent transformation of the teacher's role from "knowledge authority" to "learning designer", "thinking coach", and "emotional connector". The core values of teachers will be more reflected in designing challenging learning projects, guiding students to engage in deep thinking, providing emotional support and value guidance that machines cannot provide [10].

The direct driving force of industrial demand: from "foreign language talents" to "AI empowered international composite talents". The market is the ultimate yardstick for testing the quality of talent cultivation. In today's world of globalization and digitization, the expectations of enterprises for talent have undergone a qualitative change. Take a tech enterprise expanding into overseas markets as an example: it requires not only employees capable of translating technical documents, but also "composite talents" who can leverage AI tools to conduct multilingual market sentiment analysis and automatically generate localized marketing content, and manage online collaboration with overseas partners. Enterprises expect graduates to be able to use various AI tools to improve international work efficiency as soon as they enter the workforce. This direct and strong signal from the job market, through channels such as graduate feedback, school enterprise cooperation, and talent quality reports,

continues to force local universities to bundle "foreign language skills" with "AI application skills". The disconnect between talent training programs and social needs will directly affect the employment rate and reputation of schools, which constitutes the most realistic and urgent external driving force for reform.

#### ***2.4 Practice Driven: Diffusion and Evolution Mechanism from "Lighthouse Guidance" to "Stars Everywhere"***

Successful practice is the key to dispelling doubts, providing blueprints, and inspiring confidence. The practice driven reform of AI foreign language education and teaching is undergoing a healthy process from benchmark demonstration to universal exploration, from single point innovation to ecological evolution.

The Lighthouse Effect: Providing a theoretical framework and design paradigm for high-level research-based practices. Represented by the research of Professor Wen Qiufang's team at Beijing Foreign Studies University, the value of such practices lies in their "scientificity" and "transferability". The "AI Empowered POA Teaching Framework" proposed by them and their detailed classroom activity cases are not simply experience sharing, but a "Design Pattern" with solid theoretical support (output oriented method) verified through rigorous teaching experiments [6]. This provides frontline teachers with clear "how to do" scripts and theoretical basis for "why do this", greatly reducing the cognitive load and trial and error costs of teaching design, and playing a key leading and enlightening role.

Grassroots innovation ": The localization practice of local universities creates a "down-to-earth" solution. This is the most active and dynamic part of the practice driven approach. Many local university teachers have created numerous flexible and practical "micro innovations" based on practical conditions. For example, a teacher uses ChatGPT's "role-playing" feature to have students "interview" AI played "British historians" and "American sociologists" in the "Overview of English Speaking Countries" class, comparing the cultures of the two countries; In another writing course, the instructor asks students to first use AI tools to generate a preliminary draft of an argumentative essay, then conduct error identification and quality refinement on the draft—with the core assessment focus on students' capacity for critical analysis of and transcendence over AI-generated content. Although these teaching practices are not yet fully supported by sophisticated theories, their strong contextual relevance, operational simplicity, and remarkable effectiveness have enabled them to spread quickly among educators through teaching research activities and social media, forming a powerful demonstration effect where peer influence promotes peer learning. This kind of "grassroots wisdom" accumulation and sharing based on a community of practice is the capillary for technology to truly integrate into daily teaching.

Ecological Evolution : Point like practices converge into a systematic trend of change. As more and more "lighthouses" and "stars" appear, quantitative changes trigger qualitative changes, promoting a systematic evolution of the entire teaching ecosystem. This is reflected in the adaptability adjustment of the teaching management system (such as recognizing the rationality of AI assisted homework completion and developing corresponding academic standards); Professional upgrading of teaching support services (school information centers begin to provide technical training and support for AI teaching); The deepening of the school enterprise cooperation model (enterprises introducing real AI processing needs and tools for foreign language business into campuses, and jointly developing practical training projects). Teaching practice is no longer a solitary pursuit of individual educators, but has gradually evolved into a strategic initiative orchestrated and advanced by universities and academic departments alike. This, in turn, cultivates a systemic and cultural ecosystem that underpins the deep integration of AI into teaching practice. Such a holistic shift—from individual endeavors to organizational action, and from pedagogical practice to institutional governance—marks the entry of AI-enabled educational practice into a phase of sustainable virtuous cycle.

### **3. Conclusions**

The reform of foreign language education and teaching in local universities driven by AI is a systematic project shaped by the quadruple logic of policy, technology, demand, and practice. These four logics do not exist in isolation, but are intertwined and mutually reinforcing, together forming a dynamic network of reform.

The core of the reform lies in the fact that AI is not only a tool for empowerment but also a paradigm shift. Mastering AI technology and achieving deep and innovative integration with subject teaching has become a "new compulsory course" for teachers' professional development. Teachers who cannot utilize AI may gradually lag behind in terms of teaching attractiveness, efficiency, and even authority. This pressure translates into a strong internal motivation for teachers to update their knowledge structure and innovate teaching methods[11]. It compels educators to redefine the value of Foreign Language Teaching: given that AI can handle a multitude of basic language tasks, the focus of education must shift towards cultivating communicators and creators equipped with higher-order thinking, humanistic knowledge, creativity, and human-machine collaboration intelligence. The key to the success of local universities lies in fully leveraging grassroots initiative while actively responding to national strategies.

In the future, the deepening of reforms will depend on the construction of a systematic ecosystem. This requires continuous promotion of collaborative changes in the curriculum system, evaluation standards, teacher development, management systems, and school-enterprise cooperation models, thereby transforming AI technology from scattered teaching practices into a holistic and normalized new educational ecosystem that supports the cultivation of high-quality foreign language talents. Ultimately, this AI-driven reform, whose significance transcends the foreign language discipline itself, becomes an important opportunity for local universities to achieve overall transformation and upgrading of their talent cultivation models in the intelligent era.

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