

## **INTEGRATION OF ENGLISH LANGUAGE EDUCATION INTO THE FRAMEWORK OF INDUSTRY 5.0**

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In a world where technology evolves faster than ever, education navigates a new paradigm identified as Industry 5.0. The role of the English language has undergone a fundamental transformation in the context of technological development. No longer limited to a means of communication, English now constitutes a critical competency for navigating and interacting with advanced technological systems, including artificial intelligence (AI) and robotics. This paper examines the implications of industrial revolutions from Industry 1.0 to Industry 5.0 on foreign language acquisition, with particular emphasis on how educators and learners adapt to the evolving demands of the digital age.

The industrial timeline reveals a progressive integration of technology into education. Industry 1.0 marked the mechanization of labor and the establishment of formal education, relying on conventional language instruction methods. Industry 2.0 introduced telecommunication tools such as the telegraph and telephone, globalizing English as the lingua franca of science and commerce. The advent of Industry 3.0 brought computers and digital technologies into classrooms, introducing interactive learning. Industry 4.0 emphasized AI and internet-based tools, creating personalized, automated learning environments. Currently, the upcoming Industry 5.0 aims to harmonize technological efficiency with human-centered design, emphasizing collaboration between humans and intelligent machines.

This shift has necessitated significant changes in pedagogical approaches. Traditional didactic methods are being replaced by adaptive, AI-powered strategies that incorporate augmented reality (AR), virtual environments, and personalized digital platforms. Educators are now focusing not only on linguistic proficiency but also on critical thinking, emotional intelligence, and creativity as skills essential in a rapidly changing digital environment. Since Industry 5.0 presents exciting opportunities but also comes with challenges, educators must rethink their teaching strategies to ensure technology enhances, rather than dominates, the learning experience.

English has evolved into a foundational skill for engaging with cutting-edge technologies. Proficiency in English is indispensable not only for career advancement but also for navigating AI-based systems and accessing global digital content. However, this shift introduces challenges: balancing real-world communication with digital learning, developing high digital literacy, and ensuring that AI does not undermine human interaction or intercultural communication. Strategies such as virtual exchange programs, immersive simulations, and collaborative projects enhance both linguistic and cultural competencies. Furthermore, equipping students with AI collaboration skills can enrich the educational experience and foster lifelong learning.

In conclusion, while Industry 5.0 offers promising opportunities, it requires the redefinition of educational goals. English language education must maintain a balance between technological innovation and human connection. Combining innovative tools with a human-centered approach can prepare students for a world where AI is a helpful companion, not a replacement for human intelligence.