


Chapter 2


Transforming Language Acquisition: AI-Powered Approaches to English Language Teaching and Learning

Deepak Gupta

 <https://orcid.org/0000-0003-3929-1362>

*Institute of Technology and
Management, Gwalior, India*

Yogita Deepak Mane


 <https://orcid.org/0000-0002-7097-2193>

*Thakur College of Engineering and
Technology, University of Mumbai,
India*

Deepak Dharrao


*Symbiosis Institute of Technology,
Symbiosis international (Deemed
University), Pune, India*

Kuldipsinh Jadeja

 <https://orcid.org/0009-0004-4513-7825>


Marwadi University, Dhrol, India

SriSudha Garugu

 <https://orcid.org/0000-0002-6182-0155>


*ACE Engineering College, Hyderabad,
India*

Atul Kumar

 <https://orcid.org/0000-0003-3859-0686>

Dr. D. Y. Patil B-School, Pune, India

Neeta P. Patil

 <https://orcid.org/0009-0003-1532-3996>

*Thakur College of Engineering and
Technology, University of Mumbai,
India*

Manjiri Joshi

Dr. D. Y. Patil B-School, Pune, India

ABSTRACT

This chapter explores the transformative impact of artificial intelligence on English language teaching and learning, examining both theoretical frameworks and prac-

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tical applications. Beginning with an analysis of the historical progression from Computer-Assisted Language Learning (CALL) to AI-Enhanced Language Learning (AIELL), the chapter investigates how machine learning algorithms, natural language processing, and adaptive learning systems are reshaping traditional pedagogical approaches. Through examination of empirical studies and case implementations across various educational contexts, the research reveals significant improvements in personalized learning experiences, assessment precision, and learner engagement. Particular attention is given to intelligent tutoring systems, automated feedback mechanisms, and AI-driven content creation tools that support both independent study and classroom instruction.

1. INTRODUCTION

The integration of technology into language education has evolved dramatically over the past several decades, from simple audio recordings and language laboratories to sophisticated artificial intelligence applications that can analyze, adapt to, and interact with language learners in increasingly human-like ways. This technological progression has fundamentally altered how English language instruction is conceptualized, delivered, and experienced by both educators and learners.

The current educational landscape is characterized by a rapidly accelerating adoption of AI technologies across all domains, with language learning representing one of the most promising and complex areas for implementation. English, as a global lingua franca, has naturally become the focal point for many of these innovations, with substantial investments being directed toward developing AI solutions that can address the enormous worldwide demand for English language instruction.

This chapter examines the current state of AI integration in English language teaching and learning, analyzing both the theoretical frameworks that underpin these developments and the practical applications emerging in various educational contexts. By exploring specific case studies, empirical research, and technological capabilities, we aim to provide a comprehensive understanding of how AI is transforming language acquisition processes and what this transformation means for learners, educators, and educational institutions.

The analysis presented here acknowledges both the remarkable possibilities offered by AI technologies and the significant challenges that accompany them. Questions regarding accessibility, pedagogical effectiveness, ethical considerations, and the changing role of human instructors remain central to ongoing discussions about the appropriate integration of AI in language education. Throughout this examination, we maintain that while artificial intelligence offers powerful tools for enhancing language learning, these tools must ultimately serve to support, rather

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