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FULL PAPER

"Digital Transformation in English Language Teaching: The Impact of Artificial Intelligence on the Future of Humanities"

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Abstract

Pushed by the Artificial Intelligence (AI), the rapid digital transformation has significantly affected English language teaching by loading a pressure on teaching methods manipulating the role of both, teacher and student. The present paper investigates the role of AI driven language application and platforms, digital classrooms, and personalized learning systems in changing learning approaches and the future of education. By reviewing recent researches, this paper emphasizes the opportunities and challenges offered by digital transformation in language teaching. Discussing basic issues like ethical consideration, teacher preparing, and equitable access. The final results indicate that the adopting of AI through a human-centered approach, can improve learner autonomy, culture awareness, and essential digital literacy, using this transformation a means to amuse innovation in language teaching.

Keywords: English Language Teaching (ELT), Digital Transformation, Artificial Intelligence (AI), Pedagogical Innovation, Humanities Education, Technology Integration.

1.1. Introduction

The overview of education has been driven mainly by the force of digital transformation in the 21st century. However, certain factors like the progress in artificial intelligence, data analytics, and automation have sped up changes in the way knowledge is generated, accessed, and spread across various fields. One of the fields that affected deeply is English Language Teaching (ELT), because of the AI-based tools that progressively used to help in instructional design, assessment, personalized learning, language practice, and the way of interaction between teachers and students. As systems around the world change toward digitally enhanced learning. These new approaches, like the ones in "Education 5.0" aim to use technology to break down barriers, in education. The goal is to improve teaching methods and support the physical well-being of students. This new model puts the learner at the center. Since it has been known to everyone that according to the latest learning approaches, the teacher is no longer the source or the centre of the educational process, instead he is more like an orchestral leader. The digital modern tools emphasis that fact. Make it all about learner and since it's available and accessible especially to those who live in remote areas or faces educational problems or can't engage in regular schools.

According to Ahmed et al. (2023) a combination of technology usage with modern teaching methods that has been used by AI and that made a revolution about how we teach. That big usage of different intelligence in ELT raises a great question about the future of humanities and civilization that once built on creativity and deep thinking. What is left to human to do since machines now can write texts, grade examinations, simulate conversations, and design lessons to each student? Despite the help of AI to learners or teachers, it generates new problems about independency and fairness, about the declining of a human thinking or the existence of human values. (Crompton et al., 2024; World Bank Group).

With the increasing independency of AI tools in schools and the shift that it makes with education, it has become a crucial duty to look at that change in both, ELT methods and their aims in education. The present study gives a look at this shifting put on the spotlight on the effect of AI in education and the future of humanities. by using papers and reviews of literature with comparison studies, the present study gathering information about cons and pros of using AI in English learning and classrooms. It especially focuses on how AI-powered tools affect the steps of learning and the role of both teacher and students, the way of testing or securing, and student's engagement. wrapping up the study with checking the far that AI can raise or lower human skills.

1.2. Research questions:

- 1- How far is the effect of AI or digital tools usage in education?
- 2- What are the positives and negatives that AI brings to education?
- 3- What is the potential impact of AI on humanities, education, and values?

1.3. research limitation

Since this study is descriptive, no new information was gathered; the analysis only uses information from written sources. The findings are meant to show how important it is to keep human-focused ideas in learning places that use technology. It also aims to help the discussions, about using AI in education in a responsible way.

2. Theoretical Background

2.1 Digital Transformation in Education

The careful addition of technologies, such as AI that compute big data and immersive platforms into teaching, learning and how schools are run is called "digital transformation" in education. This change has led to active, flexible and student-centered ways of learning. Global frameworks, including those from groups like the World Bank (Cobo et al.) show how digital transformation changes the way education is delivered, how students get involved in learning, and how schools come up with new ideas to meet the needs of society and the economy.

Education 5.0 is the recent phase of education where re-humanised learning combines smart technology. This phase of education goes beyond just putting lessons online, but also it creates environment where the student is the centre of learning (Ahmed et al. 2023). By using teaching methods, the 5.0 phase can help students being creative, building a preferable set of learning, working together, and solve problems. These modern methods use technology like AI and smart system. All of this creates new changes in learning shows that digital innovations which makes things faster should also improve the quality of learning. Another part of transformation is making education easier to reach through mobile devices, virtual spaces and open learning materials. Teachers now take on roles as guides to help understand data and designers of learning environments that use technology. This shift makes it possible to use AI tools in areas, like ELT where being able to change and offer learning is very important.

2.2 Artificial Intelligence in Education

AI is changing education by allowing machines to do tasks that used to need thinking like understanding language, spotting patterns, making choices, and giving feedback. AI can help make tasks tailor learning to each person and bring new ideas into both teaching and learning, and conducting many learning settings that suit studies (Motlagh et al. 2023; Al Matari, 2023). AI in education can be sorted into:

- 1- Intelligent Tutoring Systems (ITS) give analysis of how learners do and offer feedback that changes with each learner.
- 2- Natural Language Processing (NLP) tools that aid writing, summarizing, translating and talking practice include text generation models such as ChatGPT.
- 3- Learning analytics tools watch how students act and predict how well they will learn.
- 4- Automated grading tools check student work for ideas, correct grammar and proper pronunciation.
- 5- Smart assistants manage to support classroom control, lesson planning, Customised feedback for each student.
- 6- According to Inter-American Development Bank, AI is not just a tool, it is a start to change the education system; it lets universities build learning that adapts to each person and initiates ways to decide based on data (Arias Ortiz et al. 2025).

Based on these advances, the rejection to AI in education is no longer good decision, nevertheless, scholars caution that AI must be used right; taking care of ethics, privacy, with keeping human control (e.g., Al Matari, 2023).

2.3 AI in English Language Teaching (ELT)

By introducing technologies into education, AI has great effect on the process of learning; it enhances education, personalised learning, and give students chances to practice. Extensive review of recent studies (Crompton, Edmett & Ichaporia 2023; Syuhra et al. 2025) shows that AI improves language skills in a variety of ways:

a. Improving the Four Language Skills Instruction:

Listening: It helps students of better understanding the spoken language by platforms that specialised with Interactive listening and others with automated speech recognition (ASR) tools.

Speaking: students who use AI chatbots and pronunciation tools are allowed to practice speaking and get instant feedback on their fluency and accent.

Reading: based on students' level tools like text simplifications and systems with adaptive reading can adjust content to make reading more manageable.

Writing: tools and systems that can give feedback, analyze grammar, coherence and style manages to help students improve their writing step by step.

All of which, provide fulltime personalized assistance that traditional teaching methods often cannot compete.

b. Customization and Flexible Education:

Contrasted to typical classroom learning AI present adaptive learning systems like AI tutoring models, where they change the difficulty of tasks by adjust the pace and give feedback based on the students' performance. According to the studies, students show that adoptive learning systems increasing engagement and accelerate learning outcomes (Bardia & Agrawal 2025).

C. Support for Teachers and Pedagogical Improvement:

The dominant fear about using AI in schools rises a resistant question: will AI replace teacher in school? according to Edmett et al. (2024) AI does not take over teachers' role, instead it supports it by helping them produce the burden; handling daily routine work such as planning lessons, creating tasks, and monitoring student progress, while teachers manage to focus more on humanistic part in education like encouraging, given support, giving creative instructions, and addressing deeper learning needs. In summary, AI strengthens teaching rather than replacing it.

d. Increasing Educational Possibilities Beyond the Classroom:

To study free of time and place is what AI apps and intelligent virtual tools with online learning environment offer to students. This flexibility and ongoing learning are inline with global trends like education 5.0 and the transformation towards digitalisation. By using that type of learning, students gain autonomy and develop skills outside classroom (Ahmad et al. 2023).

3. Reviewing Related Works

Based on the type and extent of the materials used, the review is divided into four thematic threads.

3.1 Systematic Reviews of AI in ELT

In order to map the terrain of AI integration in ELT and determine the range of tools used as well as the depth of their pedagogical consequences, systematic literature reviews have been essential. In a thorough analysis commissioned by the British Council, Crompton, Edmett, and Ichaporia (2023) looked at a variety of AI applications for teaching English. Their results demonstrate how AI tools

facilitate a range of tasks, such as content adaption, intelligent feedback, speech training, and grammatical correction. They stress that by allowing students to participate in self-paced, customized practice, AI greatly enhances learners' autonomy.

In a same vein, Syuhra, Sofyan, and Rosalina (2025) carried out a systematic review of AI systems created especially for ELT settings. According to their review, which divides AI-based solutions into administrative, instructional, and assessment-related tools, AI enhances learning outcomes when incorporated into a system that is pedagogically grounded. But they also highlight issues with teacher readiness, technology constraints, and moral dilemmas. When taken as a whole, these evaluations highlight how AI is now a fundamental element in the development of contemporary ELT techniques.

3.2 AI in International Education Contexts

/Future-focused evaluations of how AI is changing education systems around the world have been prepared by a number of international organizations and multilaterals. A global overview of AI use in education is provided in the World Bank Group Report (Cobo et al.), which highlights the opportunities it brings for enhancing access, efficiency, and personalization. The report argues that AI can change the state of education precisely in countries that seek to modernize their learning systems and bridge the digital gap. It also emphasizes the role of law in controlling the use of AI to be fair and responsible.

Similarly, AI in Education: "Building the Future Through Digital Transformation" (Arias Ortiz et al. 2025) A published paper from the Inter- American Development Bank gives an overview about the role of AI is re-shaping major facts in education like the educational relationships, student role and services, and teacher practices. The report points out the fact that institutions must be prepared and equipped with new technologies in order to make AI truly work in education. it calls for the investment in digital infrastructure, ongoing training for teachers, with emphasis on building strong ethical standards.

3.3 Comparative and Applied Studies on AI in Education

A comprehensive overview made by comparative studies clears the effect of AI tools in reshaping educational environment. One of which is the study by Motlagh et al. (2023) which made a comparison between well-known AI text generation apps like ChatGPT, Bing Chat, Bard and Ernie. Their findings shows that each tool has its strengths, in one way or another, but overall, they conclude that AI apps are getting better in creating coherent content, giving feedback, and supporting academic writing. This investigation provides clear insights about how AI assistance could support educators and learners in ELT Settings, precisely with developing content and writing assistance.

Another study by Bardia and Agrawal (2025) about using MindCraft, reveals that AI creates good learning experience, especially, with limited resources places (like Rural India). Their research shed the light about how AI powered mentoring apps can offer equal access to education, meet individual learning needs, and raise motivation. In special ELT context, where the students often need different levels of instructions, this kind of tailored support is an effective solution.

In Malaysia, Jalaluddin et al. (2025), made a practical study focusing on methods of teaching that depends on AI. Their study shows how national plans are made to include AI in infrastructure, curriculum designs, and assistant systems. they state that when AI is used with clear goals and powerful teaching philosophy, it can lead to a significant long-lasting improvement.

These studies combined together to show that the role of AI in education goes far beyond helping with language learning; it even affects the practical institutions and offers expanding ways to improve the excellence of education universally.

3.4 Studies on Preparing for Future ELT Practices

The fact that, in recent future, AI can transform English language teaching instructions and the needed skills to both students and educators. Crompton et al. (2024) examined the affordance and difficulties of applying AI in ELT. They list some advantages like better adoptability, higher engagement, and more accurate assessment. Nevertheless, they also warn about the problems that combined AI usage, including algorithmic bias, technology reliance and the requirement to overcome digital literacy among teachers.

The British Council's Artificial Intelligence and English Language Teaching: Preparing for the Future by Edmett and colleagues in 2024 offers advice on how teachers might adjust to new trends in a more practical setting. The paper emphasizes that rather than taking the place of teachers AI should be seen as a collaborator in the educational process. It also lists focused skills that are still essential in ELT despite the quick development of technology like creativity, teamwork and critical thinking.

Lastly, earlier studies like Zmyzgova, Polyakova and Karpov (2020) offer viewpoints on the role of AI as a catalyst for the digital revolution of education. By demonstrating how early conceptual frameworks influenced AI-enhanced learning systems, their analysis aids in placing current advancements in context.

4. Methodology

4.1 Research Design

In order to examine current trends, practices, and effects of digital transformation and artificial intelligence (AI) in English language teaching (ELT), this study uses a descriptive research design. The descriptive approach offers a thorough framework for examining how AI technologies are affecting the future of humanities-oriented language pedagogy since the objective is to describe and synthesize insights from current scholarly sources rather than test hypotheses or change variables.

The present study is based on published works including, papers and reports from responsible organizations, contemporary journals and empirical researches about AI and digital learning. These sources provide reliable proof of how AI tools, digital platforms, and technology-enhanced pedagogies are changing ELT.

4.2 Data Collection

Since the study is grounded in literature, information was gathered using:

- 1- AI applications in EFL contexts are covered in peer-reviewed journal articles (e.g., Elgamal & Abu-Ayyash, 2024; Bjekić et al., 2019; Popenici & Kerr, 2017)
- 2- Reports and reviews of education from reputable organizations (e.g., Edmett et al., 2024; British Council, 2024)
- 3- Empirical research on the application of smart classrooms, mobile-assisted instruction, digital platforms, and intelligent tutoring systems in language learning. theories pertaining to AI ethics, automation, and cognition

Among the requirements for inclusion are :
Sources released in 2023–2025. Relevance to digital transformation, AI, or EFL instruction, academic or institutional legitimacy, full text accessibility for qualitative idea extraction

4.3 Data Analysis

A qualitative theme approach was used in the analysis. Every source was examined to extract

concepts pertaining to:

AI-powered ELT tools, Frameworks for digital transformation, Effects on students, Effects on educators, AI's drawbacks and restrictions in ELT.

After that themes were arranged into parts that served as the foundation, for Chapters 4 and 5. These themes were then combined according to recommendations.

By highlighting trends, convergences and contrasts within the literature this type of theme synthesis helps the research paint a picture. It shows how AI is changing ELT and what this implies for the humanities future.

4.4 Research Procedures

The study approach comprised the following steps:

- 1- Choosing the topic. Setting its limits: ELT, AI and digital transformation.
- 2- Gathering the required sources.
- 3- Grouping the sources into applied, empirical and conceptual categories.
- 4- Obtaining pertinent information and proof from every source.
grouping the books according to themes.
- 5- Combining the results into sections that are analytical and descriptive.
- 6- Utilizing patterns found in the literature to draft the discussion and conclusions.

4.5 Limitations of the Study

Descriptive literature-based research has limitations even though they offer wide insights:

- 1- The research reflects what has already been studied when it is dependent on previous investigations.
 - 2- Practical contextual interpretation may be limited by a lack of field data, such as teacher interviews and classroom observations
 - 3- Generalization may be impacted by the assessed sources' differences in study environments.
 - 4- Certain conclusions may alter soon due to the rapid evolution of AI technologies.
- Despite these drawbacks, the study upholds academic integrity by depending only on reliable, current, and validated sources

5. Findings (Literature-Based Results)

5.1 AI-Powered Tools Improving Language Acquisition

Through a variety of methods and technology, artificial intelligence (AI) emerges as a key catalyst for revolutionizing EFL learning throughout the studied sources:

5.1.1 Systems for Intelligent Tutoring (ITS)

Assembling the verified sources. The growing importance of systems that customize education is highlighted by sources, like Edmett et al. (2024) And other AI-based ELT studies like: examining the behavior of students, changing the difficulty of the work, giving feedback, automatic progress monitoring. In EFL settings these technologies have enhanced reading, writing and grammatical performance.

5.1.2 Automated Evaluation and Feedback

Research keeps proving that AI-driven writing assessment systems give quick scoring and helpful tips to make vocabulary and grammar better and look at how students organize and connect ideas. These AI-driven writing assessment systems help learners spot and fix their weaknesses and also give them

more freedom when they write. Meanwhile AI-based assessment also helps teachers by taking care of everyday grading and giving feedback (Crompton et al. 2024).

5.1.3 Recognition of Speech and Pronunciation Training

One of the modern pronunciation tools are those based on AI. These tools are seen as useful means to aid people improving their pronunciation. These tools or apps check the way learners say words then they find mistakes in pronunciation immediately then give correct examples of the same word's pronunciation. Because of this immediate feedback, learners can fix their errors quickly. Furthermore, this way helps them improve their speaking smoothly over time. They also make learners feel more confident when they speak in situations where they usually feel nervous or hesitate (Syuhra et al. 2025).

5.2 ELT Learning in Digital Environments

According to the research sources, digitally enriched environments are replacing traditional classroom models rapidly, especially through below:

5.2.1 Learning Management Systems (LMS)

Learning management systems (LMS) are tools that equipped with AI in order to do many educational processes like, planning lessons, online discussions, and managing assessments. Due to the existence of all these features in one place, LMS make learning to be easier and capable to change and adopt. They also help student-center teaching methods to be applied by letting students get learning materials, finishing tasks, and take part in learning activities according to their actual needs. In short, LMS are important for making learning to be more personal and effective (Ahmad et al. 2023).

5.2.2 Mobile-Assistance Language Learning (MALL)

To be free of the commitment to time and place, unlike regular schools, MALL allows learners to study on their smartphones or tablets whenever and wherever they want. It also opens up chances for students to keep practicing a language outside formal classrooms. MALL tools usually use AI and games to make learning fun and interactive. Furthermore, it encourages learners to practice regularly. due to this MALL manage to keep students engaged with their studies with high motivation. (Syuhra et al. 2025).

5.2.3 Digital Infrastructure and Smart Classrooms

With accordance to recent resources, whiteboards are becoming widely spread and more common in educational settings. Also, there are automation to classrooms with AI powered multimedia. All of which help classrooms to be interactive and give multimedia content. Together they build new learning environments where they fit learning preferences and make learning to be more flexible and engaging (Cobo et al. 2024).

5.3 The Effect of AI on Teachers' Roles

As it is been said and emphasized ed that AI is changing teacher's roles rather than replacing them. This shift is clarified below :

5.3.1 Transition from Information Provider to Learning Facilitator

Traditionally, teacher's role was about giving information, but that fact has been changed. Teachers now facilitate learning and development. They guide students through learning processes to gain thinking skills, understanding how to use tools well, and teach them how to look at data and information from AI systems to decide what is real or important (Edmett et al. 2024)

5.3.2 New Competencies and Professional Development

As technology is rapidly moving and changing, teachers need to be updated and trained in order to adjust to technology. The recent resources emphasize that educators need to develop new skills like mastering technological ecological content knowledge; they need to improve their knowledge about AI in order to judge digital tools (Crompton et al. 2024).

5.4 The Effect of AI on Students

5.4.1 Enhanced Motivation and Involvement

Digital platforms and AI tools can help students stay motivated and involved with their studies. They also, allow the students to have control over their learning and move from materials in their preferred rhythm. Furthermore, students get instant feedback that keeps them active and focused. This instant feedback shows them where they stand and what they need to work on (Syuhra et al. 2025).

5.4.2 21st-Century Skill Development

AI-supported education can help students build and develop essential 21st century skills like, critical thinking and problem-solving skills. Multimedia learning activities, for example, can also help students to be more creative and motivate them to interact with information more efficiently. These abilities, nowadays, are the most important in an environment that is being shaped by artificial intelligence (Cobo et al. 2024).

5.5 Humanistic and Ethical Issues

5.5.1 Machine vs. Human Decision-Making

Using AI in education raises up worries about the extended dependency on automated grading which also questioning the fidelity or the bias that might be built into AI systems. There is a serious concern that human knowledge and judgement might lose their value when AI is excessively used (Crompton et al. 2024).

5.5.2 Maintaining Humanistic Principles

Humanities educators say that AI should help boost creativity not take it. They also believe AI should support empathy, understand cultures and make good moral choices. Therefore, teachers are still very important, in teaching these values and make sure that technology helps not takes over the human dimension of education (Cobo et al. 2024).

5.6 AI's Difficulties and Restrictions in ELT

The recent resources highlight some problems that accompanied using AI in ELT. One of which is lacking availability of up-to-date technology and some regions. Another problem concerns teacher training where there always insufficient training to update teachers; skills of using AI tools. Furthermore, there are serious worries about privacy and safety of information. Finally, there are concerns about the possibility of mistakes or bias in AI feedback (Crompton et al. 2024). Solving these problems is very important to get the maximum benefits of AI in ELT.

6. Discussion and Conclusion

6.1 Discussion

The outcomes of the literature study reveal that the digital revolution and AI are profoundly changing ELT and that these changes carry consequences for the humanities.

AI is a tool that helps with adaptive assessment, personalized learning and boosts teacher productivity according to several sources (Crompton et al., 2023; Edmett et al. 2024; Syuhra et al. 2025). In line, with the goals of Education 5.0 (Ahmad et al., 2023) and accepted digital education frameworks (Cobo et al., 2023; Arias Ortiz et al. 2025) AI innovations encourage student autonomy and involvement.

6.1.2. Impact on Pedagogy

Teachers can move from teaching facts to learner-centered approaches; helping students learn better by using systems, like Intelligent Tutoring Systems (ITS) and tools that processing language and AI assessment platforms. While AI takes care of routine jobs, teachers are becoming more like guides and helpers focusing on skills like being creative, thinking deeply and making good choices. This change does not mean that human teaching is gone. Instead, it shows how technology and human education can work together better (Edmett et al., 2024; Bardia & Agrawal 2025).

6.1.3. Opportunities for Learners

I see how AI helps students to learn in ways that fit each student's pace and style. AI gives students tools for pronunciation, writing and conversation practice that give personalized feedback. This feedback keeps students' skills growing. AI also shows students multimodal resources through AI-integrated platforms. These platforms build 21st-century abilities, like digital literacy, problem-solving and self-regulated learning (Motlagh et al., 2023; Jamaluddin et al. 2025).

6.1.4. Challenges and Ethical Considerations

Despite artificial intelligence brings benefits to ELT researches points out difficulties and ethical worries that come with its growing use. Relying much on technology could mean fewer chances for teachers to use their own judgment and connect with students in person. There are also concerns about how personal data is handled and whether AI systems carry hidden biases. These issues make it important to think carefully about how to use AI

Another problem is that not all schools have the access to digital tools. Some places lack internet connections or up-to-date devices. Teachers may also not be trained enough to use AI effectively. This can stop AI from being used, especially, in areas where resources are already limited.

These problems show that human-centered values must stay strong in education. Things like empathy, creativity and understanding of cultures should remain at the heart of teaching and learning. They shouldn't be pushed aside just because new technologies are available. Studies, by Crompton et al. (2024). Zmyzgova et al. (2020) Support this view.

That means using AI in English language teaching needs planning. We need guidelines that mix technology with thoughtful ethical choices. The goal should be to make AI a helpful tool—something that supports teachers and helps students learn better—not something that takes over the part of teaching.

6.1.5. Implications for the Humanities

Beyond language acquisition, AI has an impact on the humanities as a whole. AI tools can help with research, content creation, and textual analysis, but they also call into question the value of human interpretation and creativity. According to the literature, humanities instructors need to make sure that AI enhances humanistic inquiry rather than reduces it, maintaining abilities like cultural literacy, ethical reasoning, and critical thinking (Crompton et al., 2024; Edmett et al., 2024).

6.2. Conclusion

In summary, this descriptive study shows how AI and digital transformation will be crucial in

determining ELT's future while also having an impact on the humanities as a whole. Important lessons include:

By offering individualized, flexible, and multimodal educational experiences, AI improves learning outcomes.

With an emphasis on higher-order cognitive and creative skills, teachers' roles are changing to include mentorship and facilitation .

While using AI-driven technologies to supplement traditional training, learners acquire essential 21st-century abilities .

Humanistic and ethical issues continue to be crucial, including close consideration of prejudice, privacy, and the maintenance of human-centered ideals .

To optimize the benefits of AI, institutional and policy-level support—including infrastructure, teacher preparation, and alignment with educational objectives—is crucial.

This research needs to be carried out with care to protect the values of the humanities while showing how AI can change the way English is taught. The best way to do this is, by looking at what happens in classrooms over time comparing cultures and studying how AI affects thinking skills and the ability to understand human experiences. All of these things should be studied more in the future.

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