

## English Teachers' Perspective on the Impact of Artificial Intelligence in High-Education Level Language Courses

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### ABSTRACT

The present study explores the impact of artificial intelligence (AI) on language learning in high-education level courses from the perspective of English teachers. The researchers used a Likert scale questionnaire survey to collect data on teachers' perspectives on integrating AI in English courses. The survey results revealed that while many educators display optimism regarding AI's potential for personalized feedback, concerns about its ethical implications and job displacement are also evident. The literature review identified several research gaps, including comprehensive insights into English teachers' perceptions, limited exploration of ethical considerations, and the need for contextual comparative analyses. The study's research design and methodology drew upon a quantitative research approach, which allowed for an overview of the impact of AI in language courses. The researchers collected data on prevalent trends and patterns in teachers' viewpoints regarding the integration of AI in language courses. This study highlights the complexity of teachers' perceptions and their multifaceted considerations when embracing AI tools in language education. Further research is needed to explore English teachers' perceptions in the Ecuadorian educational field context, delve into ethical considerations, investigate behavioral intention, conduct comparative studies, and examine the impact of specific AI applications in language teaching and learning.

**Keywords:** *AI integration; learning machine tools; AI ethical considerations; learning impacts.*

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# **Perspectiva de Profesores de Inglés Acerca del Impacto de la Inteligencia Artificial en los Cursos de Idiomas**

## **RESUMEN**

Este estudio aborda el impacto de la inteligencia artificial (IA) en la instrucción de idiomas en educación superior, desde la perspectiva de profesores de inglés. Se llevó a cabo una encuesta utilizando un cuestionario en escala Likert para recopilar datos sobre las percepciones docentes acerca de la integración de la IA en los cursos de inglés. Los resultados revelan que, si bien muchos educadores son optimistas acerca del potencial de la IA, también surgen inquietudes éticas. La revisión bibliográfica señala brechas de investigación, incluyendo la necesidad de comprender a fondo las percepciones de profesores de inglés y de realizar análisis contextuales comparativos. La metodología adoptada es cuantitativa, proporcionando una visión general del impacto de la IA en los cursos de idiomas. Se recopilaron datos acerca de los patrones predominantes en las perspectivas de docentes sobre la integración de la IA en la instrucción de idiomas. Tanto la revisión bibliográfica como los resultados resaltan la necesidad de investigar las percepciones de profesores de inglés en el contexto educativo ecuatoriano, profundizar en dilemas éticos, explorar intenciones de comportamiento, llevar a cabo análisis comparativos y evaluar el efecto de aplicaciones específicas de IA en la enseñanza y aprendizaje de idiomas.

**Palabras clave:** *integración de la IA; herramientas de aprendizaje; consideraciones éticas de IA; impacto en el aprendizaje.*

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## **INTRODUCTION**

Education is one of the fields that has seen a remarkable increment in the application of artificial intelligence (AI). Chat GPT was only the first layer. Today, almost daily, new and powerful AI tools are launched on the web, providing users with attractive and astonishing possibilities to do everything from a simple question to the most complex tasks imagined. AI's inherece in education becomes a crucial and vast area to research. Some investigators say AI can personalize learning environments and increase learning effectiveness (Fitria, 2021; Yin et al., 2022).

The usefulness of AI and its effects on the teaching and learning process is questioned by teachers when it is used in areas such as English language classes. AI-powered language learning apps that use artificial intelligence offer interactive exercises, real-time feedback, and personalized recommendations (Nykon, 2023). AI technology can analyze spoken language to provide pronunciation, fluency, and natural voice feedback and can also assist in practicing pronunciation (Gupta & Gupta, 2023). Fitria, 2021; Yin et al., 2022; Jiang, 2022; Wang, 2023 have been examining the potential of AI in English language teaching and learning; nevertheless, it is crucial to look into the opinions of English teachers regarding the application of AI in English language classes.

This research endeavor aims to investigate the sentiments of English teachers towards integrating AI into their English language courses. The primary focus is on understanding English teachers' perspectives concerning artificial intelligence's effects on language courses. The study intends to comprehensively analyze the viewpoints of English language educators within specific higher education institutions in Ecuador. The analysis will specifically revolve around the implementation of Artificial Intelligence (AI) in the context of English language instruction. It will use a mixed method design to get data from high-education English teachers concerned about integrating AI into English language courses. This study aims to explore the possible outcomes, benefits, and drawbacks of integrating AI into teaching and learning English language courses. The results of this research are expected to hold significance for English language educators, policymakers, and researchers intrigued by AI's application within educational environments.

## **Literature Review**

The influence of artificial intelligence (AI) on language courses, particularly in the context of English language teaching, is becoming increasingly intriguing and relevant. In recent years, English teachers have observed the impact of artificial intelligence in language courses and how it has transformed how they teach and how students learn. With the rise of AI technology, there has been a shift in the way language courses are approached. Instead of relying solely on traditional teaching methods, AI-based tools have emerged to assist teachers and students in learning (Mijwil et al., 2023b). These tools, such as AI-powered language learning platforms and chatbots, have revolutionized language education by providing individualized learning experiences, real-time feedback, innovative solutions, empowerment, personalization, and Accessibility (Yang, 2020).

The search results indicate that artificial intelligence (AI) promises to generate positive effects on both language teaching and learning. AI-powered language learning apps and platforms can provide new ways for students to practice and improve their English language skills (Sumakul et al., 2022). AI is capable of enhancing the English language classroom by offering intelligent teaching systems, self-regulated learning, virtual reality experiences, immersive virtual environments, and tools utilizing natural language processing (Alhalangy & AbdAlgane, 2023). Language learning tools powered by AI employ machine learning algorithms to evaluate students' language learning data, subsequently providing tailored feedback. These tools can proficiently discern students' strengths and weaknesses, facilitating targeted practice exercises for language improvement (Vall & Araya, 2023).

Furthermore, AI-driven solutions can potentially bring language learning opportunities to students who might otherwise lack access to high-quality language instruction, particularly those residing in isolated rural areas (Munir et al., 2022). Moreover, AI technology brings efficiency by automating specific tasks and providing quick and easy ways to assess student progress (Alhalangy & AbdAlgane, 2023). AI-powered tools save time for teachers. Administrative processes such as grading and lesson planning can be streamlined through AI, allowing teachers to allocate more time focusing on individual student needs and providing quality instruction (Munir et al., 2022).

Using AI technology, language courses can offer customized learning materials tailored to individual learners' specific needs and abilities (Pikhart, 2020). Pikhart himself also stated that:

"AI-powered language learning software can adapt to the learner's proficiency level and provide appropriate exercises and materials to improve their language skills. This customization allows students to focus on areas where they need the most improvement, ultimately enhancing their language acquisition journey" (2020).

By automating specific tasks and providing quick and easy ways to assess student progress, AI-powered tools save time for teachers in administrative processes such as grading and lesson planning, "allowing them to allocate more time to focus on individual student needs and providing quality instruction" (Munir et al., 2022, p. 39). AI technology in language courses provides real-time feedback to students, helping them identify areas for improvement and track their progress. AI-powered tools analyze language proficiency and learning style, allowing lessons to be adjusted accordingly (Munir et al., 2022). Integrating AI in language courses comes with ethical responsibilities that teachers must consider. **Fairness and Unbiasedness:** The most critical ethical consideration is ensuring that the systems are fair and unbiased. Biased AI systems can perpetuate and amplify existing social inequalities, which can negatively impact students' learning experiences (Langer & Langer, 2023); **Awareness of Ethical Drawbacks:** Teachers and students need to understand the risks and ethical issues with using AI in education to benefit from it while minimizing the negative impact (Akgun & Greenhow, 2021); **Behavioral Intention:** Studies have examined how English teachers feel about using AI in classes. By understanding their perceptions and intentions, we can better understand how AI might be adopted and impact language courses (An et al., 2022).

Based on the available search results, there are some gaps in the literature regarding English teachers' perspectives on the impact of artificial intelligence in language courses. These gaps include:

**Limited focus on English teachers' perceptions:** More research is needed to understand English teachers' perspectives on the use of AI in language courses, as existing studies have only focused on the teaching process (Sumakul et al., 2022).

Recent research endeavors could contribute significantly to comprehending how AI affects language teaching and learning (Alhalangy & AbdAlgane, 2023b).

**Insufficient exploration of ethical considerations:** While some studies briefly mention the ethical responsibility associated with AI use in language courses (Alhalangy & AbdAlgane, 2023b), there is a

lack of in-depth exploration of the ethical considerations that English teachers should consider when integrating AI into their teaching practices.

**The exploration into behavioral intention remains limited:** a singular study focused on English educators' intent to incorporate AI within middle school settings (An et al., 2022). However, there is a need for more research that explores English teachers' behavioral intentions and factors influencing their decision to adopt AI in language courses.

**Lack of comparative studies:** The search results did not yield any comparative studies examining English teachers' perspectives from different contexts or regions (Alghamdi, 2023); comparative studies could shed light on how cultural, institutional, or contextual factors influence English teachers' perspectives on the impact of AI in language courses.

**Limited exploration of specific AI applications:** The search findings highlight the implementation of intelligent instructional systems, self-directed learning approaches, virtual reality, immersive digital environments, and natural language processing tools in language courses (Alghamdi, 2023); there is a need for more research that specifically examines the impact of these AI applications on language teaching and learning.

In conclusion, the literature on English teachers' perspectives on the impact of AI in language courses has gaps in the Ecuadorian educational field context. Further research is needed to explore some high-education Ecuadorian institutions' English teachers' perceptions, delve into ethical considerations, investigate behavioral intention, conduct comparative studies, and examine the impact of specific AI applications in language teaching and learning.

## **METODOLOGY**

This study's research design and methodology drew upon a quantitative research approach, which involved using a Likert scale questionnaire survey to gather data on teachers' perspectives on the impact of AI in language courses. This approach was chosen because it provides a structured and standardized way to collect quantitative data on teachers' perspectives, allowing for an overview of the impact of AI in language courses. The researchers collected data on prevalent trends and patterns in teachers' viewpoints regarding the integration of AI in language courses. This information was achieved by having respondents assess their level of agreement or disagreement with a set of statements concerning

the role of AI in language courses.

This data can inform future research and policy decisions related to the use of AI in language courses and guide the development of teacher training and professional development programs focused on incorporating AI tools into language teaching practices.

### **Sample**

For this study, the sample will consist of English language teachers to analyze their perceptions about teaching language courses using AI. The researchers will use a purposive sampling technique to select participants for the study. This approach involves selecting participants based on specific traits or qualities pertinent to the study issue (Robinson, 2014).

In this case, the researchers will focus on a small sample size and gather in-depth data on particular subjects. Specifically, they will target teachers of high levels of education at some high-education Ecuadorian institutions who have expressed concerns or doubts about using AI in their teaching practices.

Using a purposive sampling technique, the researchers can ensure that they are selecting participants who are most relevant to the study issue and can provide rich and detailed insights into their perspectives on using AI in language courses. This approach ensures that the data collected is of high quality and can be used to inform future research and policy decisions related to using AI in language teaching practices.

### **Data Collection Methods**

The researchers will use a Likert scale questionnaire survey to collect data for this study. This approach involves asking participants to rate their level of agreement or disagreement with a series of statements about various aspects of AI integration in language courses.

The questionnaire will be designed to gather rich and detailed data on teachers' perspectives on using AI in language courses. It will include statements that cover a range of topics related to AI integration, such as its potential effectiveness in supporting language acquisition, its benefits and challenges, and any concerns or reservations teachers may have about using these tools in their teaching practices.

Using a Likert scale questionnaire survey, the researchers can collect quantitative data on teachers' perspectives on AI in language courses in a structured and standardized way. This approach can help to identify common trends and patterns in teachers' perspectives and provide a broad overview of the

impact of AI in language courses.

### **Data Analysis Techniques**

In this study, the Likert scale responses will provide an overview of teachers' perspectives on the impact of AI in language courses, identifying common trends and patterns. The frequencies of responses to each statement will be calculated to determine the most common perspectives among participants. The trends and patterns of these responses will also be calculated to provide a more detailed understanding of the distribution of opinions among participants.

## **RESULTS AND DISCUSSION**

### **Results**

A survey was conducted to gather insights from 38 high education institution teachers regarding their perspectives on the impact of artificial intelligence (AI) in language courses. The survey aimed to collect data on several key areas, including teachers' familiarity with AI, their beliefs about its effectiveness in language courses, their optimism about personalized feedback, and their concerns about ethical implications. The survey was designed to understand better how teachers perceive AI's role in language education and identify potential opportunities and challenges associated with its use.

#### **Familiarity with the context of AI and its efficacy in language learning.**

The report indicates that a significant percentage of the 38 respondents (62%) were either "not very familiar" or "not at all familiar" with AI in language learning. This result suggests that many educators may need more knowledge and skills to effectively incorporate AI tools into their teaching practices. Regardless of this lack of familiarity, the majority of teachers surveyed expressed some level of optimism about the potential of AI to provide personalized feedback and support to language learners. Specifically, 42% of teachers were moderately optimistic about AI's effectiveness in this area, while 28% were slightly optimistic.

A smaller percentage of teachers expressed higher levels of optimism about the potential of AI in language learning. Specifically, 22% were very optimistic, and 8% were highly confident about the effectiveness of these tools. These findings suggest that while many educators may lack familiarity with AI in language learning, there is still general optimism about its potential to support student learning and development. As technology continues to evolve, it will be necessary for educators to continue



learning about and exploring the potential benefits and limitations of incorporating AI tools into their teaching practices.

### **Optimism vs. ethical considerations about using AI in classes.**

The study found that 30% of the teachers surveyed expressed trust in using AI tools to provide personalized feedback and support language acquisition. However, a much more significant percentage (70%) had reservations or doubts about the effectiveness of these tools in this area. Notably, these outcomes are intricately linked to the conclusions drawn from inquiries into the ethical ramifications of AI implementation in educational settings. Specifically, the data reveals that 57% of teachers demonstrated confidence in utilizing these tools, while 43% expressed reservations about their application.

These findings suggest that while many educators recognize the potential benefits of incorporating AI into their teaching practices, there are still concerns about its ethical implications. Some worry that AI tools could be used to collect sensitive data about students or could perpetuate biases and inequalities in the classroom. Despite these concerns, it is clear that many teachers are open to exploring the potential benefits of using AI to support language acquisition and provide personalized feedback.

### **The potential of AI to replace teachers and teacher's confidence to integrate AI into classes.**

In the study, researchers sought to understand teachers' concerns about being replaced by AI tools. The results showed that 25% of the participants expressed worry about the accelerated advancement of this technology and how it might impact their profession. However, a more significant percentage (41%) perceived that being replaced by AI will never happen, while 33% preferred to remain neutral on the topic.

Regarding integrating AI into their classes, most teachers (89%) believe it is manageable. However, a small percentage (3%) feel confident in their ability to effectively use these tools, while another group (8%) perceives technology as a limitation. It is important to note that while many teachers express confidence in their ability to integrate AI into their teaching practices, there are still concerns about this technology's impact on the profession.

### **Teacher's perception of AI on the development of language skills and the adaptation of learning styles**

The study found that 59% of the teachers surveyed had a favorable view of using AI tools to support language skills development. This finding suggests that many educators recognize the potential benefits of incorporating technology into their teaching practices. However, the remaining 41% expressed doubts about the effectiveness of these tools in this area. When comparing these findings, it is notable that teachers must fully trust technology's adaptability to support the diverse levels of students' necessities. Specifically, 54% of the participants perceived poor adaptation when addressing their students' unique needs and abilities.

This lack of trust could be due to several factors. For example, some teachers may feel that AI tools must be more sophisticated to assess and address each student's needs accurately. Others may be concerned that technology could never fully replace the human touch regarding teaching and learning. Despite these concerns, many teachers are open to incorporating AI tools into their teaching practices. As technology advances, seeing how these perceptions evolve will be interesting.

### **Teacher's perception of AI contribution and the necessity of training in AI application to language courses**

When asked about the potential contribution of AI in students' engagement to learn a language, 56% of the teachers surveyed believed that these tools have a high capability of motivating learners to acquire the language. However, a significant percentage (44%) expressed concerns that technology could distract learners instead. These findings suggest that while many educators recognize the potential benefits of using AI to support student engagement, there are still concerns about the effectiveness of these tools in this area.

Without being affected by these concerns, it is clear that many teachers recognize the importance of having deep knowledge and training on how to integrate AI into their teaching practices effectively. In this regard, only 14% of teachers perceived this need for training as personal, while the vast majority (86%) asked for institutional support to cover this matter. These findings underscore the significance of furnishing teachers with the necessary resources and guidance to integrate AI tools into their teaching methodologies seamlessly.

## DISCUSSION

Integrating artificial intelligence (AI) into language education has garnered increasing attention, evidenced by scholarly discourse and empirical investigations. The review of existing literature emphasizes the profound transformative influence of AI on language courses, with a specific focus on its role within the domain of English language instruction. AI-powered tools, such as language learning platforms and chatbots, have ushered in a paradigm shift by offering tailored learning experiences, real-time feedback, and enhanced accessibility (Yang, 2020). As Mijwil et al. (2023b) highlighted, these tools' emergence has catalyzed a departure from conventional pedagogical methods towards a more dynamic and individualized instructional landscape.

The review accentuates the ethical imperatives that underlie the incorporation of AI in language education. Langer and Langer (2023) emphasize the necessity of ensuring fairness and unbiasedness, given the potential for AI systems to exacerbate existing inequalities. Akgun and Greenhow (2021) advocate for heightened awareness of the ethical drawbacks, urging educators to comprehend and mitigate the associated risks comprehensively. The survey results substantiate these ethical considerations, as teachers' concerns about the ethical implications of AI integration are prevalent (Munir et al., 2022).

Notably, the literature review identifies several research gaps, including the need for comprehensive insights into English teachers' perceptions, limited exploration of ethical considerations, and the need for contextual comparative analyses (Alhalangy & AbdAlgane, 2023b; Alghamdi, 2023). The survey results effectively illuminate these gaps by providing a tangible depiction of teachers' perspectives on the impact of AI in language courses. While many educators display optimism regarding AI's potential for personalized feedback (Munir et al., 2022), concerns about its ethical implications are also evident, echoing the ethical considerations highlighted in the literature (Langer & Langer, 2023; Akgun & Greenhow, 2021).

Additionally, the survey data align with the literature's discourse on teachers' apprehensions regarding job displacement by AI, as well as their skepticism concerning AI's adaptability to cater to diverse student needs (Munir et al., 2022). This correspondence between literature and empirical findings underscores the complexity of teachers' perceptions and their multifaceted considerations when

embracing AI tools in language education.

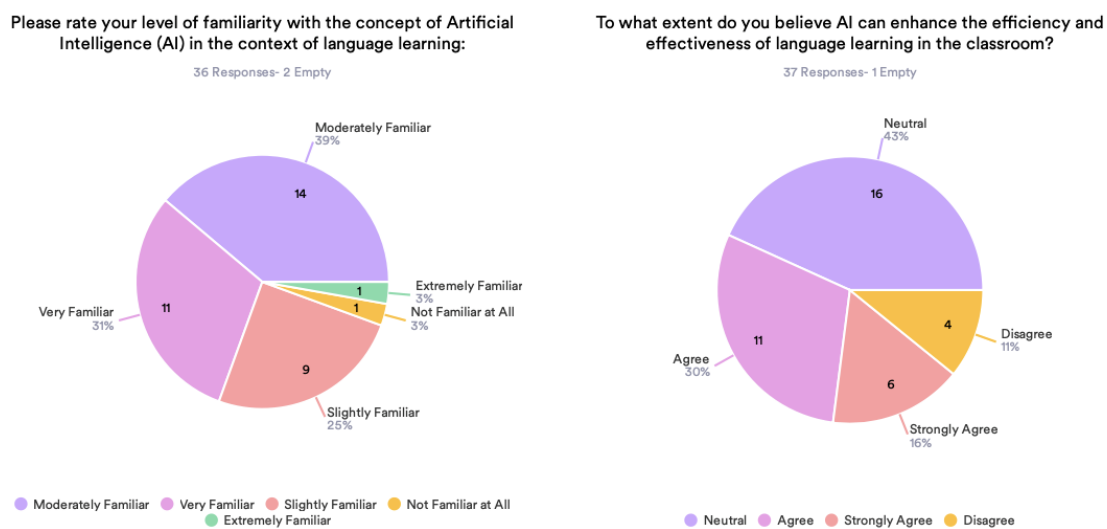
Moreover, the survey outcomes accentuate the crucial role of training and institutional support in effective AI integration (Munir et al., 2022). This finding resonates with the literature's recommendations, emphasizing the importance of addressing educators' professional development needs (Pikhart, 2020). The literature underscores that AI's potential benefits can only be harnessed when teachers are adequately equipped with the knowledge and skills to deal with the evolving educational landscape.

In essence, the dialogue between the literature review and survey results underscores the congruence between theoretical discussions and the lived experiences of educators. The survey data validate, extend, and provide nuance to the findings of the literature, bridging the gap between theoretical conjectures and practical implications. This interplay underscores the relevance of addressing educators' concerns, facilitating training, and further exploring AI's intricacies to ensure an informed and balanced integration of AI in language courses.

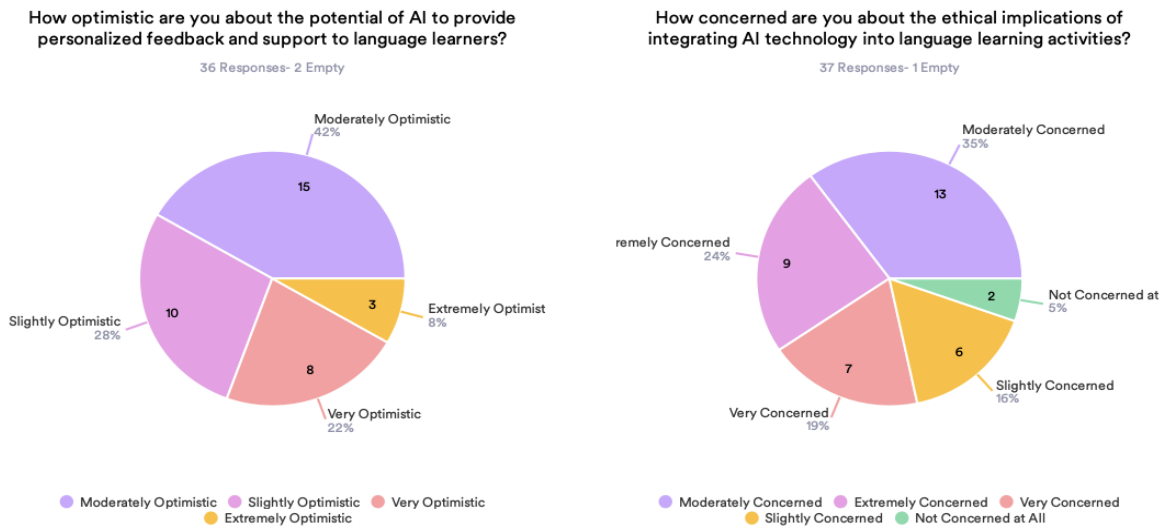
## ILLUSTRATIONS

**Figure 1.**

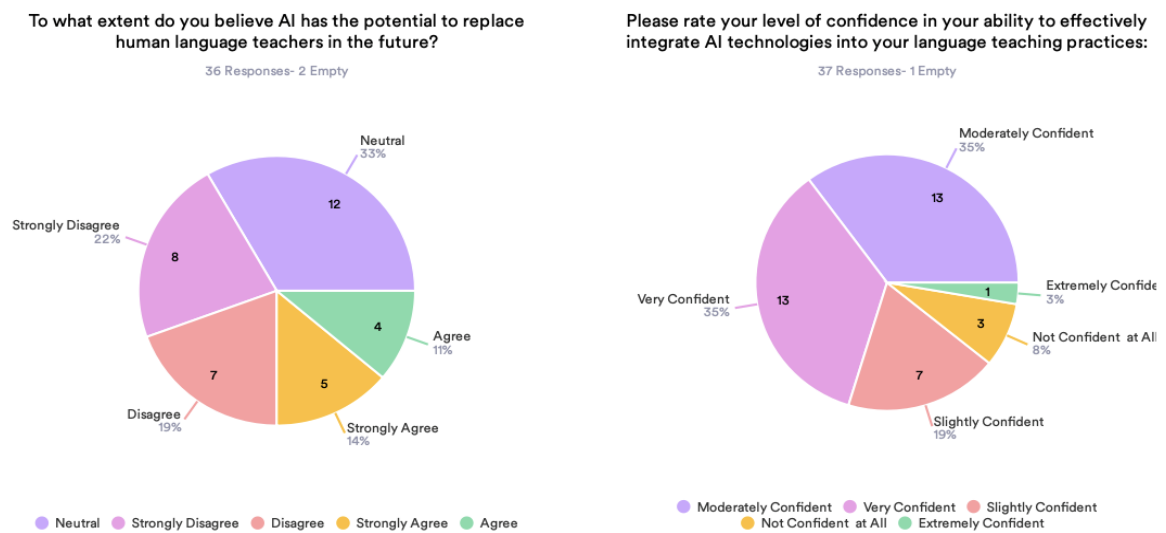
*Familiarity with the context of AI and its efficacy in language learning.*



**Figure 2.** *Optimism vs. ethical considerations about using AI in classes.*



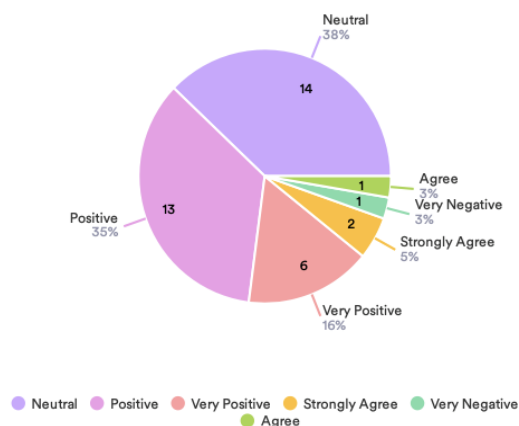
**Figure 3.** *The potential of AI to replace teachers and teacher's confidence to integrate AI into classes.*



**Figure 4.** *Teacher's perception of AI on the development of language skills and the adaptation of learning styles*

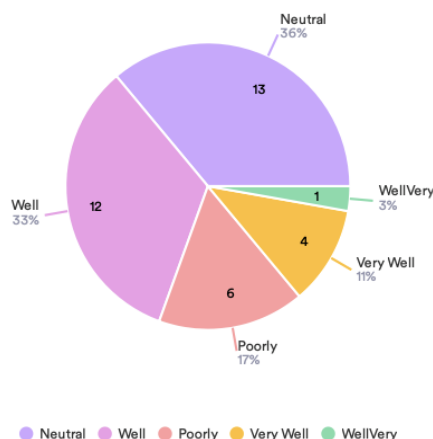
How positively do you perceive the impact of AI on the development of language skills such as listening, speaking, reading, and writing?

37 Responses- 1 Empty



How well do you think AI can adapt to individual learning styles and cater to the diverse needs of language learners?

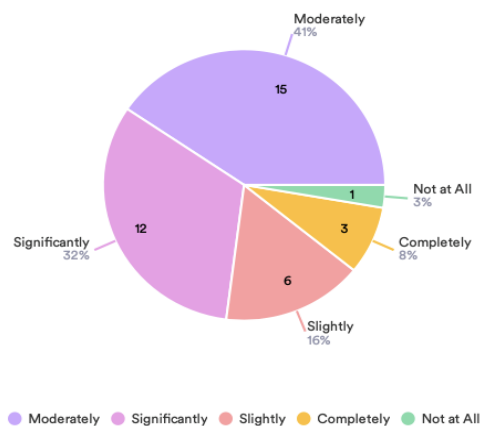
36 Responses- 2 Empty



**Figure 5.** *Teacher's perception of AI contribution and the necessity of training in AI application to language courses*

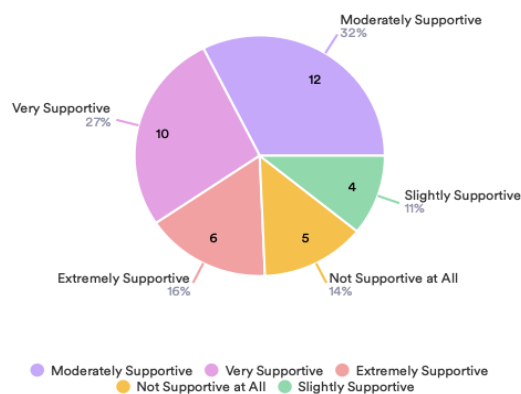
To what extent do you believe AI can contribute to enhancing student engagement and motivation in language learning?

37 Responses- 1 Empty



How supportive do you think educational institutions should be in providing training and resources for language teachers to effectively incorporate AI into their teaching practices?

37 Responses- 1 Empty



## CONCLUSIONS

From the perspective of English teachers, the impact of artificial intelligence in language courses is undoubtedly significant. English teachers have observed a significant effect of artificial intelligence in language courses. They have witnessed how AI-powered tools have revolutionized how language courses are conducted and students learn. AI-powered tools have delivered individualized learning

experiences to students by analyzing their language proficiency and preferred learning styles. This analysis allows the content and pace of lessons to be adjusted accordingly, resulting in a more tailored learning experience for students. Moreover, AI-driven tools employed in language courses have furnished students with real-time feedback, assisting them in identifying areas for enhancement and enabling more efficient progress tracking. English teachers have found this immediate feedback invaluable in promoting student engagement and motivation.

The report provides fascinating insights into teachers' perspectives on AI in language learning. One of the report's key findings is that most teachers surveyed needed to be more familiar with AI in the context of language learning. This finding suggests that there may be a need for more training and resources to help teachers understand the potential benefits and limitations of AI in language learning.

Despite this poor familiarity, most teachers surveyed were moderately or slightly optimistic about the potential of AI to provide personalized feedback and support to language learners. This result suggests that teachers recognize the potential benefits of AI in language learning, such as the ability to provide more targeted and individualized feedback to students. However, the report also highlights significant concerns among teachers about the ethical implications of integrating AI technology into language learning activities.

The report suggests that while teachers are open to the potential benefits of AI in language learning, they also recognize the need for caution and careful consideration of the ethical implications of its integration. This finding highlights the importance of ongoing dialogue and collaboration between educators, researchers, and developers to ensure that AI technologies are developed and implemented ethically, transparently, and effectively.

Regarding ethical concerns, most teachers were either moderately concerned (35%) or highly concerned (24%) about the implications of integrating AI technology into language learning activities. Teachers' top ethical concerns were

- data privacy,
- the potential for AI to replace human interaction and
- the need for transparency in AI decision-making.

Overall, the report suggests that while teachers are moderately optimistic about the potential of AI to

enhance language learning, they also have significant concerns about the ethical implications of its integration.

This information can inform future research and policy decisions related to the use of AI in language teaching practices and guide the development of teacher training and professional development programs focused on incorporating AI tools into language teaching practices.

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