

ISBN: 978-81-982137-1-6

ICT in EFL

ICT in EFL

Muthmainnah - Nurmadinah Waris - Mangnguluang P.
Rumpa - Juandi Pronelo - Muh. Gazali - Dahlianti Endang
Rahayu - Harlina – Hasnawati - Nirmala M. – Nurhaedah -
Ahmad Al Yakin - Eka Apriani - Husain Younis - Luis Cardoso
- Ali Said Al Matari – Dadan Supardan

Editors:

Subathra Chelladurai
Hamed Barjesteh
Hengki Kris Sanjaya

ICT IN EFL

TITLE:**ICT in EFL**

Muthmainnah - Nurmadinah Waris - Mangnguluang P.
Rumpa - Juandi Pronelo - Muh. Gazali - Dahlianti Endang
Rahayu - Harlina - Hasnawati - Nirmala M. - Nurhaedah -
Ahmad Al Yakin - Eka Apriani - Husain Younis - Luis Cardoso
- Ali Said Al Matari - Dadan Supardan

EDITORS:

Subathra Chelladurai
Hamed Barjesteh
Hengki Kris Sanjaya

PUBLISHED BY**CAPE FORUM OF BY AND FOR YOUR TRUST
PUBLICATIONS**

Kaniyakumari | Tamilnadu | India

Email: capeforumyoutrust@gmail.com

Website: <https://www.Capeforumyoutrust.org>

Copyright © 2025 by CAPE FORUM – YOU TRUST, All rights Reserved.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any other information storage and retrieval without the publisher's prior written permission. The concerned author is solely responsible for his views, opinions, policies, copyright infringement, legal action, penalty, or loss of any kind regarding their content. The publisher will not be responsible for any penalty or loss if claimed in the future.

Contributing authors have no right to demand any royalty amount for their content.

FOREWORD

This book explores the use of AI and ICT tools in the EFL classroom, with each chapter focusing on a different application. In the first chapter, we look at how Cici and Canva AI apps can enhance classroom instruction. The first section provides a synopsis of recent developments in Indonesian educational technology, focusing on how AI-powered tools, online collaboration, adaptive learning, and interactive media have changed the face of language instruction.

An account of the positive benefits of Canva and Cici on student motivation and comprehension is followed by practical examples that demonstrate how these tools enhance creativity, engagement, and collaboration in the EFL classroom. Chapter 2 moves on to discuss how Duolingo and Quizizz, two popular AI-powered language learning platforms, facilitate accessible, personalized, and fun language learning. By reviewing research on adaptive learning and natural language processing (NLP), the chapter shows how these technologies level the playing field in the language classroom by creating personalized and engaging lessons for all students. The third chapter discusses ELSA Speak, a program that provides live feedback on a person's pronunciation and spoken language skills. Among other things, the book explains how teachers can use the ELSA pronunciation test and other features to give students more control over their language learning. To help teachers use these technologies effectively, we have included references, real-world examples, and supporting documentation at the end of each chapter.

The book excels in that it covers AI and ICT tools extensively, provides examples that connect theory and practice, and includes practical applications. For educators looking to incorporate digital resources into their English as

a Foreign Language (EFL) lessons, this book is an invaluable resource because of its emphasis on practical applications. One of the many ways the book enhances student learning is through collaborative learning activities, which enhance their digital literacy, critical thinking, and creativity.

The book emphasizes diversity and inclusion by meeting the needs of students from all walks of life, focusing on those from underserved areas, and showing how readily available technology can help close the achievement gap. The book promotes self-directed learning, particularly through self-paced technologies such as ELSA Speak and Duolingo, which extend English language practice beyond the classroom and make a significant contribution to global EFL education. The use of digital devices enhances students' digital literacy and connects them to the global learning environment.

The book's focus on making materials accessible and scalable can be easily adapted to different educational settings around the world. The activities encourage active participation, thereby increasing English learners' engagement, involvement, and motivation. Therefore, this book is an excellent resource for English as a foreign language teacher, especially in developing countries where technology-based solutions can increase the reach, participation, and quality of language classes.

Kanyakumari, India, 30th October 2024

TABLE OF CONTENTS

ICT IN EFL	i
CONTENTS.....	v
THE USE OF CANVA AND CICI APPLICATIONS AS AI (ARTIFICIAL INTELLIGENCE) POWERED TOOLS IN THE TEACHING AND LEARNING PROCESS.....	1
INTRODUCTION	1
DISCUSSION	11
APPLICATION	30
CONCLUSION.....	37
REFERENCES.....	40
DOCUMENTATION ATTACHMENT.....	42
ARTIFIAL INTELLIGENCE (AI): DUOLINGO, QUIZIZZ	45
INTRODUCTION	45
REVIEW OF LITERATURE	47
CONCLUSION.....	90
REFERENCES.....	93
ATTACHMENT	94
ICT IN LANGUAGE TEACHING	96
HOW TO USE TECHNOLOGY IN THE CLASSROOM TO ENHANCE STUDENT ENGAGEMENT.....	96
TIPS TO USE TECHNOLOGY IN THE CLASSROOM TO ENHANCE STUDENT ENGAGEMENT	97
HOW TO USE TECHNOLOGY IN YOUR CLASSROOM RIGHT NOW FOR EDUCATION	98
HOW TO USE TECHNOLOGY IN THE CLASSROOM: BENEFITS & EFFECTS.....	98
CONCLUSION.....	108
REFERENCES.....	113
ICT IN LANGUAGE TEACHING: ELSA SPEAK	115
BACKGROUND.....	115
INTRODUCTION	117
DISCUSSION	119

CONCLUSION	146
REFERENCES.....	148
BIOGRAPHY.....	115

THE USE OF CANVA AND CICI APPLICATIONS AS AI (ARTIFICIAL INTELLIGENCE) POWERED TOOLS IN THE TEACHING AND LEARNING PROCESS

INTRODUCTION

A. Background

The development of communication technology, educational technology, and educational media for educational activities in Indonesia has gone through several stages. Initially, educational technology was introduced as a study that focused on the use of media as a learning resource. The development of this research began in the 1960s and was officially supported by the Association for Educational Communication Technology (AECT) in 1977. The development of educational technology has had an impact on the way education is delivered, allowing teachers and students to utilize technology to improve the quality of education. Educational technology also improves curriculum development, both in design development, and implementation. In terms of learning, educational technology enhances the development of various methods and techniques, from the design, development, and use of various learning resources to the implementation and evaluation of programs and learning outcomes.

The use of educational technology as a communication medium in the learning process is also becoming increasingly important. Educational technology allows students to learn more holistically, comprehensively, and more diversely in the form of videos, audiovisual

content, text, and others. This system allows you to study anytime and anywhere without being limited by distance or time. The use of technology as a communication medium in the learning process is considered very necessary and has a very strategic position because it is the first step in introducing and preparing the millennial generation for a strong 5.0 society.

The use of information and communication technology (ICT) in the world of education has brought various significant benefits to students, teachers, and educational institutions. ICT has helped improve the quality of education to become more effective, efficient, and productive. Below are some examples of how ICT is used in education.

1. Improve accessibility: ICT enables wider and easier accessibility of educational materials. By utilizing ICT, students can access teaching materials anytime and anywhere, thereby increasing their ability to learn independently.
2. Increased interaction: ICT allows more effective interaction between teachers and students. By utilizing ICT, teachers can create teaching materials that are more interactive and dynamic, so that they can increase students' interest in learning.
3. Increased efficiency: ICT increases the efficiency of the educational process. By utilizing ICT, teachers can create more effective and efficient teaching materials, so they have more time to do other activities.
4. Improve critical thinking skills: ICT enables students to think critically and communicate effectively. The use of ICT gives students access to a wider and more varied range of resources, enhancing their ability to think critically and communicate effectively.

5. Increased adaptability: ICT allows students to better adapt to the educational process. The use of ICT gives students access to more comprehensive and varied teaching materials and increases their ability to adapt to changes in the educational process.

The development of technology-based teaching methods has brought significant benefits to students, teachers, and educational institutions. Below are several examples of developing teaching methods that utilize technology.

1. Use of interactive media: Technology has made it possible to use interactive media such as video, animation, and gamification in the learning process. These media help increase students' interest in learning and strengthen their understanding of the material.
2. Use of Adaptive Learning Systems: Technology has made it possible to use adaptive learning systems that allow learning materials to be adjusted to the student's learning pace, style, and preferences. This system helps students learn more effectively and efficiently.
3. Use of Online Collaboration: Technology has made it possible to use online collaboration where students can collaborate online. This collaboration helps students learn from each other and strengthens their understanding of the material.
4. Use automated grading: Technology allows the use of automated grading, thereby reducing the time required to grade assignments and exams. These evaluations allow teachers to spend more time providing feedback and improving the quality of their teaching.

5. Utilization of Distance Education: Technology has enabled students to use distance education, where they can learn from anywhere and at any time. This learning allows students to learn and develop more flexibly.

B. The Development of Artificial Intelligence (AI)

The development of artificial intelligence (AI) in Indonesia has become the main focus in efforts to increase innovation and competitiveness. AI has changed many aspects of life, from business to the public sector. In Indonesia, there is an increasing movement towards the use of AI as technology develops. Many companies and organizations in Indonesia are implementing AI in their operations to improve efficiency, productivity, and service quality. AI revolution can bring new opportunities (and challenges) that can be best leveraged for pedagogical practices and learning (The International Learning Sciences Forum, Vol. 11, 2020).

The Indonesian government is also working to encourage the development and application of AI in the country. A prominent program is the National Strategy for Artificial Intelligence (Stranas KA) published by the Ministry of Communication and Information. KA's National Strategy aims to accelerate AI development in Indonesia through various initiatives, including data security and privacy. Siti Marisa and friends (2024) said that AI technology can provide a more objective and comprehensive assessment of student progress, helping teachers provide more timely feedback and support better decision-making in learning planning. While the potential for the use of AI in sustainable global education is promising, there are challenges and consequences to bear in mind.

There are still problems in implementing AI in Indonesia, such as the lack of human resources specifically in the field of AI and the need for more specific regulations for each field. However, the opportunities for AI in Indonesia are huge, especially in addressing health service gaps and increasing efficiency in various sectors. In recent years, AI has emerged in Indonesia, creating innovations and improving the domestic AI ecosystem. Examples of AI applications in Indonesia include the use of chatbots in customer service, data analysis for smarter business decision making, and the use of voice and image recognition technology to improve security. So, the development of AI in Indonesia has brought various benefits, including increased efficiency, productivity, and service quality. However, there are still challenges that must be overcome, such as the lack of experts in the field of AI and the need for more specific regulations.

In the current technological era, the development of AI has become one of the fastest growing technology trends in Indonesia. AI is used in various fields, including education, to increase the effectiveness and efficiency of the teaching and learning process. In the field of education, AI is used to improve the quality of education, improve analytical skills, develop assessment programs, and increase personalization capabilities and flexibility in the teaching and learning process.

The development of AI in Indonesia began several years ago, but in recent years AI has become more widespread and used in various fields such as education. AI is used in various applications such as intelligent systems, learning models, simulation models, as well as training and practice models to improve the quality of education and improve students' skills. However, the use of AI in Indonesia still faces many challenges, including: Limited

access to talent with AI skills, technological infrastructure and AI resources. Therefore, efforts are needed to increase human resource capacity in the field of AI, improve technological infrastructure, and increase access to AI resources.

In recent years, AI has been used in various educational applications in Indonesia, including intelligent systems to help teachers teach, tutorial models to help students learn, and simulation models to help students understand complex concepts. AI is also being used in a variety of other applications, including machine learning-based predictive analysis systems for laboratory equipment maintenance to help teachers manage their laboratories.

The development of AI in Indonesia, especially in the education sector, has brought various benefits, including: B. Improving the quality of education, increasing analytical skills, developing assessment programs, and increasing the capacity for individualization and flexibility in the teaching and learning process. However, there are still many challenges in using AI in Indonesia, including Limited access to AI-skilled talent, technological infrastructure, and AI resources. Therefore, efforts are needed to increase human resource capacity in the field of AI, improve technological infrastructure, and increase access to AI resources.

C. The use of AI for learning to increase effectiveness and efficiency.

The use of AI for learning to increase effectiveness and efficiency is one of the fastest-growing technology trends in Indonesia. AI is used in various applications such as intelligent systems, learning models, simulation models, as well as training and practice models to increase the effectiveness and efficiency of the teaching and learning

process. In recent years, AI has emerged as a promising tool to improve the teaching and learning experience. Students are more accepting of using AI tools in the classroom because they think they are more effective and engaging (Cesilia Mambile and Agustino Mwogosi, 2024).

English education in particular faces many challenges in meeting the needs of diverse learners. Therefore, researching the effectiveness of AI in English education is essential to uncover new possibilities in language education. Research shows that AI can improve the effectiveness and efficiency of the teaching and learning process by speeding up and improving the efficient and effective delivery of teaching and the rapid management of student and other academic data. AI can also help teachers understand the learning process and increase student engagement in the learning process. AI models significantly enhance efficiency and sustainability by providing accurate predictions and automation recommendations. This research underscores AI's practical relevance, suggesting companies integrate these technologies to optimize energy use and achieve sustainability goals (Agus Kristian, dkk, 2024).

AI has huge potential to improve student mastery in STEM, increase learner motivation and autonomy, and allow teachers to become more personalized in their support (Mohammad Aniq bin Amdan, et al. 2024). However, there are several challenges to overcome when implementing AI in education, including data protection and data security issues, increasing technical capacity and data use, as well as ethical and social issues arising from the use of this technology. Therefore, the use of AI in education requires careful planning and strategy to ensure that this technology provides optimal benefits for students and institutions.

D. The use of artificial intelligence (AI) in learning can help improve analytical skills and develop assessment programs.

AI-fueled tools can be used effectively to improve learners' engagement and motivation (Rashmi Bhardwaj, 2024). The use of artificial intelligence (AI) in learning can help improve analytical skills and develop assessment programs in several ways.

1. Data Analysis: AI contributes to more effective and efficient data analysis, enabling teachers to work smarter and with more data. Encourages more accurate decision-making. AI not only helps you collect, manage, and analyze educational data effectively, but also helps you understand statistics, data analysis techniques, and the use of data analysis tools and platforms.
2. Assessment Program Development: AI can help develop more effective and efficient assessment programs. AI can help identify student weaknesses and strengths and provide more specific and effective feedback. AI can also help develop more personalized and flexible assessment programs, allowing teachers to provide more effective instruction.
3. Learning Assessment: AI can contribute to more effective and efficient learning assessment. AI can help identify student weaknesses and strengths and provide more specific and effective feedback. AI can also help develop more personalized and flexible learning assessments, allowing teachers to provide more effective teaching.
4. Use of chatbots: AI can contribute to more effective and efficient use of chatbots. Chatbots can help provide more specific and effective guidance and

- feedback, allowing students to interact with systems in a more interactive and dynamic way.
5. Using Machine Learning: AI can help you use machine learning more effectively and efficiently. Machine learning can help develop more accurate and effective models, so teachers can provide more effective instruction. Therefore, the use of AI in learning not only helps improve analytical skills and develop assessment programs, but also helps improve the overall quality of education.

E. Use of AI in learning to increase personalization and flexibility

The use of AI in learning has brought a variety of benefits, including increased personalization and flexibility. AI helps personalize the learning experience by analyzing each individual's learning patterns and adapting learning materials, difficulty levels, and teaching methods to each student's specific needs. In this way, AI can help all students learn in the way that best suits them. Apart from that, AI can also help increase flexibility in the learning process. AI enables students to learn online and allows teachers to provide help and feedback more quickly and effectively. AI can also help teachers improve their analytical skills and develop assessment programs so they can more easily assess student learning outcomes.

In recent years, AI has been used in various educational applications, such as intelligent systems, learning models, simulation models, training and practice models, to improve the effectiveness and efficiency of the teaching and learning process. AI is also being used in a variety of other applications, including machine learning-based predictive analysis systems for laboratory equipment maintenance to help teachers manage their laboratories.

However, there are several challenges to overcome when implementing AI in education, including data protection and data security issues, increasing technical capacity and data use, as well as ethical and social issues arising from the use of this technology. Therefore, the use of AI in education requires careful planning and strategy to ensure that this technology provides optimal benefits for students and institutions.

DISCUSSION

A. History Of Canva

The Canva adventure commenced in 2007 when Melanie Perkins was enrolled at the University of Western Australia. Melanie provided tutoring to fellow students on the use of conventional design tools, such as InDesign and Photoshop. However, these individuals encountered difficulties in acquiring proficiency and navigating the software. At that moment, she realized that the future of design would require an online platform that promotes collaboration and is user-friendly.

In May 2013, Canva CEO Melanie Perkins was floating on a kiteboard in the canal separating Richard Branson's exclusive Necker and Moskito islands. With her 30-foot sailboat rendered deflated and nonfunctional, the 26-year-old businesswoman patiently awaited rescue for several hours in the powerful eastern Caribbean current. While she swam, her left leg, marked by a previous encounter with a coral reef, served as a reminder that her risky new pastime was worthwhile. Ultimately, it was crucial to the fundraising plan for the design-software firm that she had established with her boyfriend six years prior.

Canva was founded in Australia, a considerable distance away from the influential tech hub of Silicon Valley. Securing a meeting, let alone obtaining finance, was proving to be challenging. Perkins received negative responses from over 100 investors. Upon seeing the organizer of a consortium of kitesurfing venture capitalists during a pitch competition in her hometown of Perth, Perkins promptly commenced her training. On the following occasion when the group gathered to listen to startup proposals and perhaps provide essential first money, she would be

included in the decision-making process, even if it required navigating through challenging circumstances

"According to Perkins, the situation can be summarized as follows: the risk involved serious damage, while the potential reward was the opportunity to start a company." "Once you manage to establish a small initial connection or opportunity, you must make a concerted effort to fully exploit and maximize it."

Enduring determination has always been essential at Canva, initially established as a little enterprise specializing in designing yearbooks in Perth, the capital city of Western Australia. Starting from its distant origins, Canva has expanded into a worldwide powerhouse. The company's "freemium" Web-based application is utilized by over twenty million users in 190 countries to create a wide range of designs, including eye-catching Pinterest images and sophisticated restaurant menus. In addition to its unbeatable price (with millions of users paying nothing), Canva's main edge over competing products from IT giants like Adobe is its user-friendly interface. Prior to the existence of Canva, individuals with less experience had to manually combine designs using Microsoft Word or incur exorbitant expenses for complex professional software. Today, Canva can be downloaded by anyone, regardless of their location, and they may start producing within a span of ten minutes. The company generates its revenue by upselling customers to a premium edition priced at \$10 per month, which offers enhanced functionality. Alternatively, the company also earns revenue via the sale of a simplified corporate account option. Canva offers millions of high-quality stock pictures for an additional fee of \$1. The sum is calculated. The company anticipates increasing its revenue to \$200 million this year, which is more than twice its current amount. Additionally, its last fundraising round of \$85 million has

valued the company at \$3.2 billion. Perkins, at 32 years old and a former member of the 2016 Forbes 30 Under 30 Asia list, possesses an approximate 15% ownership interest, which is valued at \$430 million. Including the 34-year-old cofounder, who is now engaged to her, Cliff Obrecht, the Australian power couple is estimated to be worth over \$800 million.

Amidst a time characterized by SoftBank's generous billion-dollar payments and We Work's extravagant spending, Perkins and Obrecht adopt a contrasting approach. They are individuals that engage in couch surfing and choose economical travel above luxury private aircraft. In the summer, Obrecht, who is the co-founder of Canva, a company that is currently valued at over \$2 billion, proposed to Perkins in the Cappadocia region of Turkey, which is popular among backpackers. He used a \$30 engagement ring for the proposal. Canva claims to have achieved profitability since 2017, as measured by adjusted EBITDA, a startup metric that excludes stock-option charges, financing, and tax costs. "We have been extremely diligent in avoiding excessive capital acquisition due to our profitability over the past two years," Perkins states.

The process begins with Perkins, who ensures that every new employee (now totaling 700) is thoroughly briefed on Canva's highly confidential financial data and previous presentations to investors. Other unicorn founders proudly assert. Perkins retains revenue. As Canva expands, its founder is striving to demonstrate that it is possible to establish a worldwide technology powerhouse from any location. Mary Meeker, an experienced online investor from Bond Capital, describes Melanie as an exceptional type of entrepreneur that is rarely encountered.

Perkins' family humorously claims that she possesses a comprehensive strategy consisting of 100 points

to bring about significant changes in the world. Firstly, Canva faces the significant task of persuading large corporations to adopt its platform. Similar to Atlassian, Slack, and Zoom, Canva encounters a common predicament: while a freemium business strategy can lead to widespread popularity, the majority of users will not make any monetary contributions. While Canva claims to have users within nearly every major organization, these users are usually independent people or small teams, rather than official corporate accounts. Transitioning to a higher-end market involves coming into closer contact with Adobe, the graphics industry leader with a market capitalization of \$149 billion. In the latest quarter, Adobe's design-focused division alone generated \$1.65 billion in revenue. Additionally, there are other ambitious startups such as Figma and Sketch that primarily serve professionals but have the potential to expand their offerings to the mass market. Furthermore, Canva's aspirations in emerging platforms such as video and presentations pose potential competition not only to smaller Instagram video-making applications but also to Microsoft, the renowned creator of the widely-used PowerPoint software.

Perkins, who has successfully convinced skeptical Silicon Valley players to become enthusiastic supporters and has achieved success in the Chinese market, has strategically executed his plan, resulting in a bank account over \$200 million. "Although we have accomplished a remarkable task, our achievements are relatively small in comparison to our aspirations." "We have only accomplished 1% of what I believe is achievable," Perkins states. The primary objective of our organization is to enable individuals worldwide to engage in the process of designing. And we truly encompass the entire globe.

Perkins commenced the establishment of what ultimately evolved into Canva in 2007, operating from her mother's residence in Perth. Perkins, the child of an educator born in Australia and an engineer from Malaysia with Filipino and Sri Lankan heritage, had ambitions of pursuing a career as a competitive figure skater. She experienced a teenage period characterized by waking up early in the morning at 4:30 a.m. before finally enrolling at the University of Western Australia. While instructing her classmates in the basics of computer design during her communications and business classes, she conceived an idea. The process of producing and distributing a poster or flyer include composing it using tools like Adobe Photoshop or Microsoft Word, adjusting its dimensions accordingly, and saving it as a PDF file. Afterwards, it would be necessary to go to a printing facility such as Staples in order to get it printed. Nevertheless, this method seemed cumbersome throughout the internet age. Wouldn't it be more effective to streamline all tasks by consolidating them onto a single platform using a unified online tool? "The initial idea," she asserts, "was to streamline the design process." Perkins was concerned that if she postponed, someone else might provide a solution for the problem, which seemed very apparent. In order to focus on a specific market segment that she found to be consistently overlooked, she decided to employ independent contractors to construct a Flash-based website dedicated to school yearbooks, which are usually handled by student volunteers. Fusion Books, the firm founded by Obrecht and Perkins, quickly identified a market. Perkins decided to temporarily suspend her studies after completing all but one semester of college. During the busiest time of the year, Perkins' mother would supply the printers with ink throughout the night. Obrecht engaged in telephone prospecting by making cold calls.

When schools requested to speak to a manager, Obrecht merely spoke in a quieter tone. The business ultimately expanded its reach to encompass 400 schools, with licensees extending as far as France. The beginning was initiated. However, Perkins faced limitations in advancing without securing venture finance, which was extremely difficult to obtain in Perth, a city primarily reliant on mining and petrochemical industries.

In 2011, Perkins noticed and took advantage of a very small chance when Bill Tai, a well-established venture financier from Silicon Valley, visited Perth to evaluate a startup competition. Tai, an experienced kitesurfer who had invested in TweetDeck and Zoom, was primarily in Perth to enjoy the challenging waves. Perkins and Obrecht discovered a dinner event organized by Tai and surprised the guests with a presentation about a product called Canvas Chef. This product is metaphorically compared to a pizza, where the design components represent the toppings and the document kinds, such as flyers, business cards, and restaurant menus, are compared to the dough. "The analogy wasn't particularly fashionable," remarks Rick Baker, an investor who witnessed the presentation that evening.

The founders departed without any initial investment, although with a renewed passion for adventurous aquatic activities. They regularly attended Tai's subsequent kitesurfing gatherings, when influential tech executives sought opportunities to invest in emerging firms. Following a suggestion from a mutual acquaintance of Peter Thiel, Perkins assumed the position of the sole CEO in Maui. Perkins and Obrecht were experiencing a series of unfortunate outcomes during their trips to the venture capital decision-makers at Silicon Valley's Sand Hill Road. Many companies rejected the relatively unknown cofounders who were romantically involved and came from

a startup area with few opportunities. One individual expressed their sincere and regrettable discomfort in engaging in a business transaction in Australia. "I am uncertain if it will be comprehensible at this moment," another person stated.

Ultimately, the efforts to pursue and follow the waves resulted in success. Within the group, they encountered Cameron Adams, a 40-year-old former Google employee who had established a firm headquartered in Sydney. Adams was scheduled to meet with them as an advisor in March 2012, and then officially became the third cofounder in June of the same year. With the addition of a technical leader, the founders of Canva achieved a significant breakthrough. They successfully secured \$3 million in seed funding through two separate installments in 2012 and early 2013. Notably, this money included a vital matching grant from the Australian government.

B. Canva is a Tech's new role model

Melanie Perkins, the CEO of Canva, is part of a select group of individuals who manage one of the most valuable firms created and run by a woman, spanning from California to China.

The firm was founded in August 2013 and garnered minimal appraisals on technology blogs, with a tiny number of users. The engineers from Adams and Canva, who worked late in Sydney (when the company relocated there in February 2012) to handle the expected surge in new registrations, went to sleep feeling discouraged. Unknown to anyone, Canva's timing was flawless. The advent of Instagram and Twitter has transformed how firms establish connections with their clientele. Various sectors, including educational institutions, law enforcement agencies, recreational facilities, and independent writers, experienced

a significant increase in the significance attributed to their digital footprint. Canva offered an economical method to improve one's visual presentation. During the first month, the number of registrations steadily rose to 50,000 people. By 2014, Canva had obtained an extra \$3 million in funding from Thiel's Founders Fund and Shasta Ventures. At that time, the number of Canva users had reached 600,000, and a total of 3.5 million designs had been created.

Canva stands out as an unusual success in China, a region that has traditionally been challenging for Western software companies. Obrecht, the Chief Operating Officer (COO), established Canva's first office in Manila in 2014 and subsequently recruited the former leader of LinkedIn's China division to establish an office in mainland China. Today, a team of engineers in the local area is managing the development of a version of Canva specifically designed for China. This version has been constructed from scratch and includes advanced features such as a seamless connection with popular Chinese messaging applications and the ability to easily produce QR codes, which are widely used in China. McDonald's China is a client, as well as a nationwide real-estate brokerage that provides the software to its 1,000 agents. Canva for education can increase the learning effectiveness of students to understand, develop graphic design skills, and strengthen collaboration, thereby increasing student motivation and learning outcomes, (M. Muhajir, 2024).

Canva is quite inexperienced when it comes to catering to large corporations. The introduction of Canva for Enterprise took place in October at an exclusive event in New York. Perkins spoke to employees from about 100 firms, including Equinox, JPMorgan, and HubSpot.

Canva's enterprise division experiencing a slow start will not have a detrimental impact on the company. In

December, the firm announced a video-editing tool and an apps suite, which added more functionality similar to Adobe's own offerings. Additionally, the company is currently focusing on enhancing its free alternative to Microsoft PowerPoint, which has already been utilized to create 80 million presentations. However, Canva's potential for sustained growth relies on the extent to which organizations can transition from having a small group of enthusiasts to having accounts that cater to thousands of employees. Perkins is now taking a different approach for corporate America by focusing on reducing capabilities in Canva's suite after years of adding more. Canva aims to increase executives' confidence in allowing staff to produce their own material by providing a restricted range of templates and alternatives. Realty Austin, a medium-sized real estate company in Texas, once had a marketing team consisting of six individuals who were responsible for producing all printed handouts and digital materials to help their agents promote events such as open houses. Using Canva, the company's 550-plus agents now efficiently produce content for their own listings at a quicker pace and according to their own schedule.

Adobe is actively engaged and not idle throughout this period. Adobe has provided its own freemium application, called Adobe Spark, which is driven by templates, since 2016. Canva asserts that its solutions are utilized by 50,000 universities and 25,000 organizations, whilst Adobe has distributed 23 million complimentary Spark accounts to students and teachers. In December 2017, Adobe reconnected with Scott Belsky, the entrepreneur whose social media firm Behance it purchased in 2012, in order to infuse a more determined and resourceful mindset into its product teams. "They perceive themselves as the underdog because they acknowledge that they are not the

most fashionable or trendy startup," states Belsky, who holds the position of chief product officer at Adobe's Creative Cloud division.

Additionally, there are the customary challenges that startups have during their growth phase. Prior to two years ago, Canva's tool for modifying its fundamental code was so inefficient that it could only accommodate a maximum of five engineers working on it simultaneously. The corporation primarily dedicated its attention last year to a comprehensive overhaul of the user interface of its application. "Due to our rapid growth, we are experiencing frequent instances of things breaking," Obrecht acknowledges. In May, Canva faced its most significant challenge in terms of client trust up until that point. Shortly after Canva disclosed that Meeker's investment had resulted in a firm valuation of \$2.5 billion, a hacker based in Europe successfully infiltrated its systems, managing to extract 139 million user names and email addresses before Canva could halt the attack.

Perkins and Obrecht, who were in California at the time, communicated with Atlassian's co-CEOs and cofounders, Mike Cannon-Brookes and Scott Farquhar, who are also investors in Canva. They managed to reach Farquhar while he was on a runway in Peru, on his way to Machu Picchu. Upon their insistence, Canva contacted the FBI and initiated a thorough examination; a fortnight later, Canva declared the implementation of two-factor authentication for all customers. Perkins acknowledges that Canva users showed support for the company, but this incident served as a cautionary reminder that increased prominence also attracts more attention and potential threats.

Perkins' acquaintances are certain of her ability to cope with the stress. Guy Kawasaki commenced his

professional journey as a promoter for Steve Jobs, traversing the globe to enthusiastically promote all aspects of Apple during the 1980s. The ex-Forbes journalist expresses contentment in concluding his professional journey by continuing his role at Perkins, where he invests in Canva and assumed the position of "chief evangelist" in 2014. "The democratization of design is accessible to a larger number of individuals compared to the number of individuals who can use a Macintosh," he states. "Success is not limited to being in Silicon Valley or even being in America." Wow.

C. Features Of Canva

Canva for Education stands out, offering an array of visual assets, content, and templates for diverse design endeavors. This tool not only augments learning experiences but also enhances creativity by piquing students' engagement through its myriad features. Nonetheless, the efficacy of such a tool is augmented when intertwined with active learning methodologies in pedagogical settings, (Gulcan Erden Kocaarslan and Martina Riedler Eryaman, 2024).

Below are a few notable characteristics of Canva:

- *Generate several forms of content* – Canva is a versatile tool that can assist you in creating a wide range of designs, including engaging social media posts, informative infographics, and professional resumes. Additionally, it is possible to generate your creations starting from a blank canvas.
- *Canva's drag-and-drop capability enhances its user-friendliness*. You may include templates and images into your design with ease, with only a few simple clicks.
- *Canva offers a vast collection of more than 50,000 templates that you can select, modify, and personalize*

- according to your requirements.* In addition, the existing library is consistently updated with new templates.
- *Canva offers advanced photo editing features beyond simple cropping and texturing.* Utilizing its user-friendly capabilities, you can apply a blur effect to your photographs, including text, and generate collages and photo grids that will captivate viewers.
 - *Stock photos, icons, and typefaces are available.* Canva offers a collection of complimentary stock pictures, icons, and fonts that can be utilized to produce captivating graphic designs. In addition, you have the option to upload your photographs and include them in your design.

D. The Advantageous of Canva

The students are active when working in a group and motivated to learn English by using Canva, they enjoyed the activities during the learning process, (Meike Imelda Wachyu, 2023). Below are several significant advantages of utilizing Canva for fulfilling graphic design requirements and beyond:

1. The Canva platform is an easily accessible online graphics platform.
2. One benefit of this tool is that it streamlines the process of designing visuals with a polished aesthetic.
3. The platform offers a wide range of templates and tools to aid you in creating graphics.
4. Sharing your artwork with the world is an effortless endeavor.
5. This platform is cost-free, rendering it a superb option for producers with limited financial resources.

6. Canva offers a wide variety of instructive lessons and helpful advice to optimize your usage of its capabilities.
7. This option is highly recommended for creating graphics for both personal and commercial use.
8. Canva is a reliable platform that leverages a robust network of creators.
9. This platform is designed to be user-friendly and intuitive, making it an ideal option for individuals who are new to it.
10. Advantages of Canva Magic Write feature. Magic Write in Canva Docs is an AI-driven tool specifically created to assist you in efficiently producing an initial draft of a text. By starting with a prompt, you may automatically generate a wide range of material, including copy, blog summaries, listings, bio captions, concepts for content, brainstorms, and more.

E. The Disadvantageous of Canva

While Canva is indeed an excellent resource, it does have several restrictions. Now, let's get into the drawbacks.

1. *The Canva aesthetic:* While the template's emphasis on a specific topic can be advantageous, it can also impose restrictions. Consider it from the perspective of stock photographic platforms. What is the prevalence of photographs that have a stock-like appearance and share a similar style on stock photography websites? Canva possesses identical constraints. When numerous businesses utilize the same material, or content that adheres to Canva's brand and design, it can give the impression of being generic.

2. *Restriction on the number of templates:* While Canva's impact is increasing on a monthly basis, there is a constraint on the variety of template designs and stock images available.
3. *Alignment Concerns:* Canva is not suitable for professional designers. An important challenge that needs to be addressed is the issue of alignment. While products like Photoshop, Illustrator, and InDesign offer precise control over alignment, Canva lacks the same level of flexibility when it comes to design elements.
4. *Export settings are limited:* The visual representation of your design in Canva may vary from the final printed or saved version.
 - a. CMYK vs. RGB: The previous point is also related to color space. While Canva does have a print PDF option, it only exports files in the RGB color system, which is used for digital media, rather than the CMYK color space, which is used for print. When printing, there can be a substantial disparity in color compared to what you observed in Canva.
 - b. Unable to export to file formats such as PowerPoint
5. *To download the "raw" file to your computer:* If you are unable to retrieve the original file from your computer and cannot save it for future use, in case you switch from using Canva in the future.
6. *The free version has limitations:* The free edition has restrictions on stock images, themes, font options, your brand kit, team sharing, storage capacity, and support. That is anticipated, however.
7. *You are incapable of transferring one design to another design:* You lack the ability to transfer a design

element from one design to another. If you wish to get a consistent style, you will need to do it manually. Canva owns the intellectual property. The concept of intellectual property is inherently unclear and open to interpretation. You do not possess any ownership rights but rather have licensing for usage. Regarding logos on Canva, they do not offer a unique logo design, and the logos available are not original to you.

F. What is CiCi Application?

CiCi was conceptualized in 2019 and was jointly developed by career development specialist Dr. Deirdre Hughes OBE, Chris Percy, and a team of technological experts. CiCi is an advanced AI chatbot that utilizes AI technology and extensive language models to offer customized career assistance to both adults and young individuals. We collaborate with educators, careers, and employability specialist organizations to establish a formidable alliance that aids individuals in their career exploration. The purpose of this system is to engage in organic dialogues, furnish information, generate written material, translate text, offer emotional assistance, and aid in programming tasks.

During January 2023, the developers of CiCi, a chatbot utilizing artificial intelligence and machine learning, are providing complimentary access to this state-of-the-art technology. CiCi assists users in constructing a CV, finding the most recent job openings, as well as chances for apprenticeships and volunteering.

A recent study commissioned by Unum UK, a prominent employee benefits provider, has found that almost 20% of the UK workforce intends to seek new employment opportunities in the coming year. This decision

is mostly driven by the need for greater income and improved employee benefits, which is influenced by the ongoing cost-of-living crisis.

CiCi offers over 25,000 full-time job possibilities throughout the UK on its website, together with information on courses and higher education, as well as 1,500 motivating career journey films. Additionally, it has the capability to be translated into over 40 distinct languages and has a text-to-speech feature.

Users of CiCi will engage in conversation with the chatbot, allowing for the provision of personalized information and guidance at any time of the day or night. Additionally, if necessary, the user has the option to communicate with a human advisor.

CiCi is presently employed by City & Guilds, a skills and development organization, to assist the London Communities program. This program focuses on aiding disadvantaged individuals and university graduates who have finished their studies and are currently seeking jobs.

Arden University and Aspirations multi-academy trust in Hounslow are currently testing the curriculum. Additionally, CiCi is providing support to Ukrainian families in London through the social company FaceWork Group.

According to Dr. Deirdre Hughes, CiCi can assist individuals who are just beginning their career, those who wish to switch careers, and those who want to enhance their skills. Due to its 24/7 availability, individuals have the opportunity to examine various career paths and possibilities at any hour of the day or night.

Currently, the UK is experiencing significant social and economic instability. This includes widespread strikes in several industries and a large number of people leaving British employment due to the impact of the Covid-19

pandemic. As a result, the economy is at risk of seeing slower growth. However, CiCi can assist these individuals in starting over in the upcoming year. We are highly enthusiastic about the future of CiCi and the potential it holds.

The idea has already been praised as a success in Derby, where The Bemrose School has been testing it with its students, parents, and staff. The YMCA Derbyshire is also utilizing CiCi.

Claire Amos, the lead in careers delivery at The Bemrose School, expressed great pride in their job guidance. Recently, they hosted representatives from HMS Ambush, the RAF, and BBC as part of their careers program. "CiCi is an excellent and user-friendly tool that can be utilized by students of varying skill levels." The program is highly inclusive, and we have observed firsthand how CiCi's personalized and amicable career assistance aids our students in exploring their future career prospects, elevating their ambitions, and gaining knowledge about the labor market.

G. Features Of Cici Application

Notable characteristics of Cici AI encompass:

- **Conversational AI:** Cici possesses the ability to participate in intelligent dialogues on any subject matter using natural language processing.
- **Content Writing:** Cici possesses the ability to produce exceptional written stuff, such as articles, stories, and other forms of written material.
- **Translation:** Cici facilitates linguistic translation to overcome communication obstacles.
- **Emotional support:** Cici offers empathetic listening and emotional assistance to users seeking someone to confide in.

- **Programming assistance:** Cici provides help with coding and programming questions.

H. The Advantageous Of Cici Application

Chatbots or CICI AI have the potential to improve accessibility and provide individualized help in language instruction. There are several significant advantages of utilizing Cici AI:

- Accessible round the clock to promptly respond to user inquiries.
 - Engaging in a perpetual process of acquiring knowledge and enhancing skills through the utilization of machine learning techniques.
 - Capable of efficiently managing substantial amounts of communications or content.
 - Delivers reliable and top-notch answers consistently.
 - Assists in automating operations such as customer service and content creation.
- Provides multifunctional capabilities beyond those of a typical chatbot.

I. The Disadvantageous of Cici Application

Cici AI differentiates itself from other chatbots such as Alexa, Siri, and Google Assistant by offering a more sophisticated conversational experience that is specifically tailored for writing, emotional support, and programming aid, going beyond the provision of basic information.

Nevertheless, it continues to encounter fierce competition from well-established IT behemoths with huge resources. However, Cici AI does have certain constraints:

- May occasionally produce erroneous or untrustworthy information.
- Devoid of cognitive abilities and emotional understanding comparable to that of humans.

- Security and privacy issues arise from the fact that the AI system operates on the internet.
- Necessitates extensive datasets and substantial computational capabilities.
- Conversations may exhibit a mechanical or impersonal quality.

APPLICATION

A. The Use of Canva and Cici Application at SMP Negeri 4 Polewali

1. The use of Canva

Canva is a multifaceted graphic design platform that provides an extensive array of tools that might be advantageous for educational purposes in schools.

Since first introducing Canva to students, teachers have been confident that the application will be welcomed with enthusiasm. That belief was then proved when this app was used in class. It was a little difficult at first because I had to teach the features that Canva has to all the beginner students.

The strategy used by the teacher is to form a small team that is able to master more quickly than his friends. A team of some of these students then becomes a tutor of the same age for other friends, making it easier for the teacher to teach faster how to use this application.

Below are some benefits of uses of Canva that have been applied at school:

- a. Canva enables students and teachers to produce visually captivating presentations, posters, infographics, and other visual aids that boost learning and communication within the classroom.
- b. Creating Educational Materials: Educators can utilize Canva to create worksheets, handouts, lesson plans, and study materials with personalized formats, typography, and visuals to enhance the appeal and interactivity of the learning experience.
- c. Canva's collaborative capabilities facilitate group work, presentations, and design tasks, promoting teamwork and creativity among students.

- d. Canva facilitates creativity by offering an extensive selection of templates, graphics, and tools that inspire students to explore their imaginative potential and develop their design abilities. This platform enables students to express themselves in distinctive and original ways.
- e. Canva can be utilized by students to produce digital stories, comics, and visual narratives, thereby improving their storytelling abilities and enhancing the immersive and engaging nature of learning.
- f. Canva is a useful tool for students to construct digital portfolios that highlight their work, projects, and accomplishments. These portfolios can be advantageous for college applications and future professional prospects.
- g. Canva may be utilized by schools to produce promotional graphics for various school events, fundraisers, clubs, and activities, hence generating excitement and drawing in participation.
- h. Canva is a powerful application that may increase creativity, collaboration, and visual communication in educational settings, hence making learning more interactive and engaging for both students and teachers.

2. The use of Cici

Cici AI can be a valuable tool in educational settings, offering a range of benefits for both students and teachers. At first, introducing this application, the teacher was surprised that some of the students have used it. This fact made the teacher sure about introducing it to all students in the class. Here are some potential uses of Cici AI that have been applied at school:

- a. Cici AI enables personalized learning through the provision of customized recommendations, resources, and feedback that align with the unique needs and learning preferences of each learner. This can facilitate students' individualized progress and enable them to concentrate on areas requiring supplementary assistance.
- b. Language Support: Cici AI can assist students who are learning a new language by providing language translation services, vocabulary assistance, and language practice exercises. This can help to enhance language learning outcomes and improve communication skills.
- c. Homework Help: Cici AI can provide students with instant access to information, explanations, and resources to help them with their homework assignments. This can save time and improve understanding of complex concepts.
- d. Emotional Support: Cici AI can offer emotional support and guidance to students who may be experiencing stress, anxiety, or other emotional challenges. By providing a listening ear and offering coping strategies, Cici AI can help students manage their emotions and well-being.
- e. Teacher Assistance: Cici AI can support teachers by providing administrative assistance, creating lesson plans, generating quizzes and assessments, and offering insights into student performance and progress. This can facilitate time-saving for teachers and enable them to concentrate on teaching.

Overall, Cici AI can enhance the learning experience, support student well-being, streamline administrative tasks, and promote digital literacy in

schools, making it a valuable asset for education in the digital age.

B. The Use of Canva and Cici Application at UPT SMPN 4 Binamu Jeneponto

1. The use of Canva

Canva AI is a functionality implemented by Canva to simplify the process of creating graphic designs for its users. Canva's AI capabilities utilize Artificial Intelligence (AI) technology to facilitate users in accomplishing diverse activities, creating instructional materials, and generating questions that can be readily employed by educators. Nevertheless, the educators at UPT SMPN 4 Binamu Jeneponto Regency have not effectively utilized it. Teachers have only utilized conventional Canva in a variety of instructional methods. The author discovered that teachers lack a proper understanding of Canva AI as an educational tool. Additionally, teachers have not utilized Canva-Pro to fully exploit the capabilities of Canva. This also affects students who are unaware of the availability of Canva AI, which might assist them in completing homework or creating project tasks assigned by their teacher. Insufficient information provided to teachers will inevitably impede their ability to effectively communicate the progress of Canva.

The author attempted to familiarize students with Canva AI via several educational methodologies. Initially, students encountered significant challenges in accessing Canva AI as a result of the restricted availability of equipment and infrastructure. Nevertheless, our students exhibit great enthusiasm for utilizing Canva AI due to its ability to enhance the enjoyment of learning. Additionally, students perceive

Canva AI as a valuable tool that assists them in fulfilling their tasks from teachers. Utilizing Canva AI in the classroom consistently enhances its liveliness, while sometimes frustration arises from the unreliable internet connection.

The author also communicated to fellow educators and pupils that Canva AI possesses numerous benefits, such as:

- a. **Text to Image:** This functionality enables users to generate images using textual descriptions. Users simply need to give a textual description, and Canva will automatically generate four distinct photos. The quality of the findings is contingent upon the level of detail provided in the description.
- b. **Translate:** This functionality enables users to convert text into different languages. There is support for a total of 134 languages, and the connection is seamless, enabling users to easily switch text components from one language to another by simply clicking a button.
- c. **Magic Animation (Magic Animate):** This functionality enables users to swiftly and effortlessly apply animations and transitions to their projects.
- d. **Magic Edit:** This functionality enables users to modify photos by substituting items or altering colors with straightforward language commands. All Canva account users can utilize this function without any cost.
- e. **The Magic Grab** feature enables customers to generate films tailored to their own requirements through the utilization of AI technologies.
- f. **Beat Sync:** This function assists users in aligning visual components with the rhythm of songs to produce captivating videos.

- g. **Magic Write:** This functionality enables users to generate more captivating prose by utilizing AI technologies.
- h. **Magic Resize:** This functionality enables users to effortlessly and expeditiously alter the dimensions of photos.

Canva's artificial intelligence capabilities enable users to produce designs that are both more polished and impactful in a shorter amount of time. Gradually, educators and students at UPT SMPN 4 Binamu have begun to derive pleasure from utilizing Canva AI due to the advantages it offers, such as time-saving in creating instructional plans and modules.

2. The use of Cici Ai

Cici AI is an AI helper for web browsers that is driven by GPT. He possesses the ability to address all inquiries, condense intricate websites, execute rapid full-text translations, intelligently arrange and summarize search outcomes, swiftly summarize films and engage with them, and a multitude of other capabilities. Cici AI is accessible through the App Store as an application and may also be accessed through the Chrome browser. In previous interactions with students, the author utilized the Cici AI tool for educational purposes. The author encountered novel experiences and sensations as a result of their initial encounter with Cici Ai. Nevertheless, it is very remarkable that Cici AI exhibits a high level of user-friendliness and is capable of delivering precise information pertaining to our inquiries. Nevertheless, Canva AI and Cici AI are distinct from each other. It has come to our attention that our students have been familiar with Cici AI for quite some time. However, it is important to note that Cici AI

is not intended for educational purposes, but rather for the purpose of expressing and exchanging emotions. This information came to light when the author conducted an observation of long-term users of the Cici AI program.

The author consistently use the Cici AI application in every lecture, as it offers a refreshing and enjoyable classroom experience. The Cici AI application is gaining popularity among students at UPT SMPN 4 Binamu. Nevertheless, there exists a considerable number of students who remain unaware of the Cici AI application due to their lack of access to a cellphone capable of supporting their educational needs. Hence, the author frequently employs a collaborative approach to facilitate the dissemination and introduction of the Cici AI application to every learner.

CONCLUSION

The use of information and communication technology (ICT) in the world of education has brought various significant benefits to students, teachers and educational institutions. ICT has helped improve the quality of education to become more effective, efficient and productive

The development of artificial intelligence (AI) in Indonesia has become the main focus in efforts to increase innovation and competitiveness. AI has changed many aspects of life, from business to the public sector. In Indonesia, there is an increasing movement towards the use of AI as technology develops. Many companies and organizations in Indonesia are implementing AI in their operations to improve efficiency, productivity and service quality.

In recent years, AI has been used in various educational applications, such as intelligent systems, learning models, simulation models, training and practice models, to improve the effectiveness and efficiency of the teaching and learning process. AI is also being used in a variety of other applications, including machine learning-based predictive analysis systems for laboratory equipment maintenance to help teachers manage their laboratories. However, there are several challenges to overcome when implementing AI in education, including data protection and data security issues, increasing technical capacity and data use, as well as ethical and social issues arising from the use of this technology. Therefore, the use of AI in education requires careful planning and strategy to ensure that this technology provides optimal benefits for students and institutions.

Canva is a software application that streamlines the digital design process by providing a range of tools and features for visual design. Consequently, it is effortless to establish an account, and all functions are accessible through a web browser or the iOS and Android applications.

Canva facilitates image editing and project-based learning using an intuitive drag-and-drop interface that is accessible even to younger children. From engaging in collaborative brainstorming sessions to independently creating projects, it offers numerous possibilities for classroom application.

CiCi was conceptualized in 2019 and was jointly developed by career development specialist Dr. Deirdre Hughes OBE, Chris Percy, and a team of technological experts. CiCi is an advanced AI chatbot that utilizes AI technology and extensive language models to offer customized career assistance to both adults and young individuals. We collaborate with educators, careers, and employability specialist organizations to establish a formidable alliance that aids individuals in their career exploration. The purpose of this system is to engage in organic dialogues, furnish information, generate written material, translate text, offer emotional assistance, and aid in programming tasks.

After introducing the Canva and Cici both application to students it proved that the application was very useful to support the learning process in the classroom more enjoyable.

It's seen from the enthusiasm of the students when using both of these apps. Now all the students who have been taught about these two applications can apply in their daily lives primarily to support the learning process. They can use Canva to create interesting designs. On the other

hand, they can ask for Cici's help if there are things related to the lesson that they want to know.

REFERENCES

- Siti Marisa, et al. *Global Education Development Plan to Build Sustainable Education Based on Artificial Intelligence.* Qubahan Academic Journal. Vol. 4 No. 2, 2024.
- The International Learning Sciences Forum. *Challenges and Future Directions of Big Data and Artificial Intelligence in Education.* Vol. 11, 2020
- Cesilia Mambile and Agustino Mwogosi. *Transforming Higher Education in Tanzania: unleashing the true potential of AI as a transformative learning tool.* 2024
- Agus Kristian, et al. *Application of AI in Optimizing Energy and Resource Management: Effectiveness of Deep Learning Models.* Vol. 2 No. 2, 2024.
- Mohammad Aniq bin Amdan. *Concept paper: Efficiency of Artificial Intelligence (AI) tools For STEM Education In Malaysia.* Vol. 13 Issue 1. 2024
- Rashmi Bhardwaj. *AI Integrated Model Design for Education System for Analytical Computation (Mathematics).* 2024.
- M. Muhajir, et al. *Utilization of Canva for education to improve learning effectiveness of vocational students.* Vol. 4, No. 1, 2024.
- Gulcan Erden Kocaarslan and Martina Riedler Eryaman. *Using “Canva For Education” Application With Collaborative Learning In Visual Arts Lesson: Sample Activities For Teachers.* Vol. 23, Issue 90, 2024.
- Meike Imelda Wachyu. *The Effectiveness of Using Canva as an Interactive Hypermedia In Learning English.* 2023.
- Nurul Harisha, et al. *The Power Of Chatbots In English Language Learning: A New Age Of Learning.* Vol. 20, No. 1, 2024.
- <https://medium.com/names-with-stories/names-with-stories-the-story-behind-canva-com-97e118b2426f>
- <https://letsmakethedifference.org/causes/technology-makes-the->

difference/?gad_source=1&gclid=CjwKCAjwm_SzBhAsEiwAXE2Cv7Vk3mMpg2Y-Tx7V1WyFKqCu5ooWzqDjf8KhWwthPOgkz1ZAN7eF7xoCqZQQAvD_BwE

<https://www.forbes.com/sites/alexkonrad/2019/12/11/inside-canva-profitable-3-billion-startup-phenom/>

https://www.unwomen.org/en/news-stories/explainer/2024/05/artificial-intelligence-and-gender-equality?gad_source=1&gclid=CjwKCAjwm_SzBhAsEiwAXE2Cv3PCpqwt0xOzBV8PSwoI6bwvhpYSnoXZzQy5SG1mgiBVTYSR8G1VmRoChp0QAvD_BwE

Rimata Deby Pratiwi, S.Pd. 2023. Dampak Perkembangan Teknologi dalam Dunia Pendidikan Formal di Indonesia. <https://librarynew.unja.ac.id/dampak-perkembangan-teknologi-dalam-dunia-pendidikan-formal-di-indonesia/>

<https://upy.ac.id/berita/dampak-kemajuan-teknologi-dalam-pendidikan-revolusi-belajar-di-era-modern/>

<https://pemerintahan.uma.ac.id/2024/02/peran-teknologi-dalam-pendidikan-di-indonesia/>

Ana Maritsa, et al. 2021. *Pengaruh Teknologi dalam Dunia Pendidikan.*
<https://www.neliti.com/id/publications/363413/pengaruh-teknologi-dalam-dunia-pendidikan>

<https://www.antaranews.com/berita/3224985/kemajuan-teknologi-pendidikan-indonesia>

https://eprints.ums.ac.id/11608/2/BAB_I.pdf

<http://eprints.umsida.ac.id/1865/1/TUGAS%20KELOMPOK%20TEKNOLOGI%20PEMBELAJARAN.pdf>

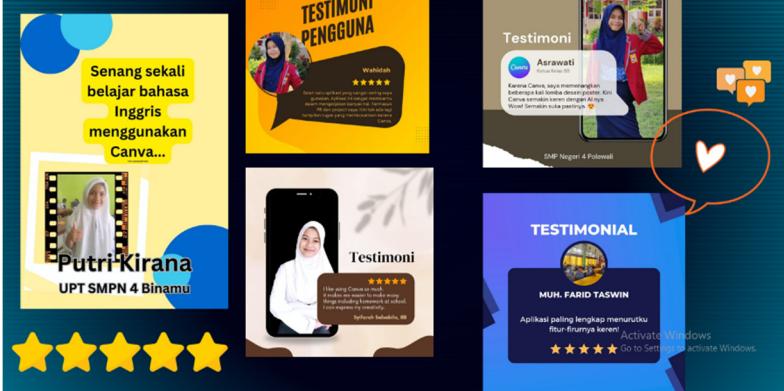
https://www.toolify.ai/review/cici_ai

DOCUMENTATION ATTACHMENT





Testimonies



ARTIFIAL INTELLIGENCE (AI): DUOLINGO, QUIZIZZ

INTRODUCTION

The field of artificial intelligence (AI) technology is rapidly advancing every year. Its presence and new features, functions, and appearances are affecting many facets of human existence, including education (Luger and Stubblefield, 1993). Mulianingsih et al. (2020) report that educational activities in colleges and universities are beginning to incorporate artificial intelligence. The advancement of instructional technology now heavily relies on artificial intelligence. Undoubtedly, there are clear implications for how people will work in the future.

It is crucial to recognize that the teaching and learning process has not yet fully integrated educational technology. Even in today's heightened competition, some educational institutions continue to teach and study without the use of technology. Schools nowadays could benefit from the development of technologies that make teaching and learning easier (Tjahyanti et al., 2022). Applications and other media can be used by schools to automate processes like selecting appropriate learning resources, providing feedback, and aligning the curriculum with student requirements.

This paper is going to discuss how AI can help students improve their English vocabulary knowledge. Learning a second language is crucial in this globalized world. Language is a tool for communication and knowledge-sharing. Gaining proficiency in a foreign language, particularly English, will increase your opportunities to communicate and obtain information from around the globe. Why is proficiency in English so crucial?

This is due to the fact that English is the official language in 53 countries worldwide. Learning English would allow you to fully enjoy a lot of things and make friends with people from these countries without difficulty. English is the global language of the media and entertainment sectors, in addition to being the language of all knowledge. Despite the fact that networks offer media and news in regional languages, they continue to widely use English.

Educators need to be able to identify the personalities of their pupils and stay up-to-date with the latest technology. We live in a digital world, which includes being proficient with Android devices. Teachers must carry out this teaching process efficiently and creatively, utilizing appropriate and cutting-edge media and learning models, to ensure that learning objectives and student learning outcomes are achieved as planned.

With the Android app Duolingo, children can improve their English language skills. Duolingo may help you get better at writing, reading, translating, and listening to English in addition to speaking the language. Because of the engaging nature of the material and the occasional humorous moment, pupils rarely become bored with this application's gameplay-like approach.

REVIEW OF LITERATURE

A. What is Artificial Intelligence (AI)

1. Definition of AI

Artificial intelligence (AI) is a technology that enables machines to mimic human intellect and problem-solving abilities. Whether working alone or in tandem with other technologies (such as sensors, geolocation, and robots), AI can accomplish jobs that typically necessitate human intelligence or help. Google Maps, voice-activated virtual assistants, autonomous vehicles, and generative AI tools like OpenAI's Chat GPT are just a few instances of AI that we see in the media and use every day. Both machine learning and deep learning are branches of computer science that are often mentioned while discussing artificial intelligence. The goal of research in these areas is to develop AI systems with the ability to "learn" from existing data in order to make better predictions or classifications over time. These algorithms are theoretically based on how the human brain makes decisions. Even AI naysayers seem to agree that the release of Chat GPT signifies a paradigm shift, despite the many hype cycles around the topic. While developments in computer vision spearheaded the last major wave of generative AI, the processing of natural languages (NLP) is now at the forefront. Generative AI can learn and synthesise a wide variety of data types, including human language, images, videos, computer code, as well as molecular structures.

2. How does AI work?

To enable artificial intelligence (AI) to detect features and patterns in the data it examines, large data sets are paired with intelligent, iterative processing

techniques. In this procedure, there are several important steps:

a. Input

AI begins with input, which is the collection of data from various sources like text, images, audio, and speech. We classify the data according to the algorithms' comprehension abilities and provide explicit definitions of the context and desired outcomes.

b. Processing

During this phase, AI evaluates the data and determines its intended use. In order to find patterns in the real-time data, AI applies the learned behaviours to the pre-programmed data while processing it. Here, AI software examines the data, applies machine learning and neural networks to make predictions.

c. Data outcomes

The AI system analyses the data, looks for patterns and correlations, and then makes a prediction about the outcome. At this point, we check the accuracy of the supplied data and predictions.

d. Adjustment

The AI system will figure out what went wrong and try again with different parameters if the data set doesn't work. Reevaluating the system's predictions in light of the new data may necessitate updating or modifying the algorithm rules to conform to the dataset.

e. Evaluating

Judgement is the last step in artificial intelligence. The AI system then uses the results to assess the data, make conclusions, and make predictions. In

addition, it is capable of giving comments on how well it is doing and suggesting changes to its algorithms or data processing methods.

Artificial intelligence (AI) is a powerful new tool that can improve many different industries. Machine learning, computer vision, and NLP are just a few of the many applications that heavily utilise it. Businesses and organisations can automate tasks, boost productivity, and make better decisions with the help of AI because of its capacity to learn from data and improve performance over time.

3. Classification of AI Systems

Various forms of artificial intelligence can be categorised according to their capabilities, functionalities, and underlying technology. The various forms of artificial intelligence are summarised below:

a. Based on Capabilities

- *Narrow AI (Weak AI)*: Specialised artificial intelligence is built to carry out specific tasks, such as recognition of faces, internet search, or autonomous driving. Such systems constitute the vast majority of AI systems in use today, and they are capable of playing sophisticated games such as Go and chess. They function in a specific, constrained environment.
- *General AI (Strong AI)*: A form of artificial intelligence that can learn and adapt to new environments and tasks on its own, much like a person. A powerful AI architecture like this can learn from experience, integrate new information, and apply its brainpower to

overcome any obstacle—all without human intervention.

- *Superintelligent AI*: This is a glimpse into the future of artificial intelligence, when computers will be able to solve problems, generate ideas, and generalise knowledge better than humans. The existence of superintelligence is still a matter of conjecture.
- b. Based on Functionalities
 - *Reactive Machines*: Unlike traditional AI systems, these ones don't keep track of information for when the big moment comes. To various scenarios, they apply analysis and response. One such example is IBM's Deep Blue, the chess programme that beat Garry Kasparov.
 - *Limited Memory*: These AI systems are able to learn from their previous data and draw more informed conclusions. This encompasses the vast majority of current AI applications, including chatbots, virtual assistants, and self-driving automobiles.
 - *Theory of Mind*: This is a different kind of artificial intelligence that scientists are currently working to perfect. It necessitates being in tune with and remembering one's feelings, beliefs, and needs, as well as how we make decisions based on these factors. For this type of understanding, machines must be able to comprehend actual people.
 - *Self-aware AI*: Machines with feelings, self-awareness, and consciousness are the future of artificial intelligence, and here is a

representation of that future. Theoretically, an AI can comprehend and experience emotions, which can cause them to develop ideas and desires.

c. Based on Technologies

- *The field of machine learning:* Natural language processing systems can learn from their own mistakes and successes without human intervention. Their primary goal is to develop software that can learn on its own through data access and usage.
- *Deep Learning:* A subfield of machine learning that makes use of multi-layered neural networks. This technology powers voice commands in consumer gadgets, image identification, and a plethora of other uses by learning from massive volumes of data.
- *Data Science for Natural Language Processing:* Now, thanks to advancements in AI, computers can comprehend and decipher human speech. Applications such as chatbots, translation services, and sentiment analysis software utilize it extensively.
- *The field of robotics:* This topic covers sensor feedback, data processing, as well as the design, construction, operation, and use of computer systems to drive robots.
- *Machine Vision:* Used in fields as diverse as manufacturing, medical image analysis, and surveillance, this technology enables machines to visually comprehend the environment.
- *Professional Systems:* These AI systems are able to respond to inquiries and resolve

issues within their designated areas of concentration by applying rule-based procedures.

B. Importance of AI in The Field of Education

Education is only one of several areas that has benefited from the widespread development and application of artificial intelligence (AI). In order to apply AI effectively in the classroom, it is important to understand its potential advantages.

There are a growing number of AI programmes that can assist educators in their daily tasks. The use of AI programmes has the potential to greatly simplify several tasks within the educational sector, including learning. There is hope that incorporating AI into the classroom can benefit both instructors and students.

The following are a few instances where artificial intelligence has been useful in the classroom.

1. Adaptive Learning

The goal of adaptive learning is to personalise the educational process for each student by analysing their past performance and current circumstances. The usage of artificial intelligence allows for the collection of data regarding students' learning processes, which is then utilised to propose personalised learning strategies.

2. Automated Scoring

Historically, assignments and tests were evaluated manually, which was laborious, error-prone, and susceptible to bias. Teachers no longer have to manually grade students' work because of the rise of AI-powered automated grading systems. Instantaneous feedback and evaluation of student responses are both made possible by AI.

Natural language processing (NLP) is utilised by the AI scoring system. Natural Language Processing (NLP) enables machines to comprehend and decipher spoken English. Several criteria, including argument clarity, topic relevancy, grammar, punctuation, and spelling, can be used by the AI system to assess essays. For instance, GradeMe by Ingenta is an automated assessment tool that uses AI.

3. Accessibility and Inclusivity

Students with specific needs can also benefit from the presence of artificial intelligence. As an example, Parrotron can be useful for students who have speech difficulties. When Parrotron's hearing is impaired, he can analyse the speech and repeat it in a way that everyone can comprehend. Also, students who speak more than one language or who have physical impairments can take advantage of translation and machine transcribing services to better understand course materials.

4. Assistant for Learning

While some people may need to study alone, others learn best when they can engage in conversation and ask questions of others. Artificial intelligence (AI) offers a potential remedy for this. A helpful companion, AI can do a lot of things, including identify relevant information, summarise complex topics, and even provide practice questions. In addition, ELSA Speak is just one of several commercially available AI learning assistants. This software has an AI that can guide you as you learn English. It has speech recognition technology that can identify non-native speakers' voices with a precision of above 95%. ELSA critically examines

word stress, intonation, fluency, vocabulary, scripts, and non-scripted text pronunciation.

Apart from that, there are several roles of Ai, namely:

- a. Putting Together Tests and Questions Artificial intelligence (AI) can be a trustworthy ally when it comes to creating tests and quizzes. Using AI, educators can design questions whose difficulty level corresponds to each student's current skill set and future academic objectives.
- b. Gathering Educational Resources Machine learning may assist with more than just question generation; it can also lend a hand in developing engaging and interactive lesson plans tailored to individual students' needs.
- c. AI may assist with the development of a comprehensive learning plan that includes study time, study materials, methods, and objectives.
- d. Editing Services Teachers can use AI to enhance students' written work by correcting spelling, grammar, and punctuation mistakes.
- e. Providing advice on new approaches to education Artificial intelligence (AI) can learn from data collected from students by acting out their needs and preferences in their role.
- f. Assists look for Solutions Artificial intelligence can provide students with clear and succinct solutions to a range of issues.
- g. clear, step-by-step answers Artificial intelligence (AI) can do more than just provide pupils with answers; it can also show them how to solve problems by breaking them down into their component parts.

- h. Defining and Clarifying Advanced Ideas Asking AI to simplify difficult ideas into simpler ones can help students grasp them better.
- i. AI-Powered Foreign Language Learning Tools can be a game-changer for students looking to improve their command of a foreign language's syntax, vocabulary, and pronunciation.
- j. Write More with AI As a writing instructor, AI may be a helpful companion by guiding students through the process of composing different kinds of writing and offering exemplary works to study and emulate.

C. The advantages and disadvantages of working in the world of education

1. Advantages

When it comes to the field of education, artificial intelligence offers a number of advantages, some of which are listed below.

a. Saving time

Teachers and students both benefit from AI's ability to finish tasks in a matter of seconds.

b. Making decisions with objectivity

Because AI doesn't have feelings, it can make decisions independently of human biases and emotions, which can lead to more precise results.

c. High accuracy

When it comes to big data, AI can handle it with ease and precision. Contrast this with people, who have a natural tendency to become less efficient as they take in more data. Humans may forget about historical data, but AI can always make use of it.

- d. Works for a long time and can be used whenever needed

An artificial intelligence system can work around the clock, unlike humans, which have weak spots. When humans need a break, AI can take over and act accordingly.

- e. Capable of minimising the hazards and mistakes caused by humans

Mistakes are an inevitable part of being human; this fact tells us that people are fallible at times, whether it's while adding up numbers or making decisions. This isn't necessarily a bad thing, but it can lead to disastrous outcomes in some cases. Beyond that, studies using radiation are just one of many activities that people undertake that pose a significant threat. Therefore, AI can lessen the likelihood of negative outcomes.

- f. Experience learning through interaction

The rise of AI has opened up new possibilities for classroom engagement through the use of augmented reality and interactive simulations.

- g. Individualise education

The use of AI allows for the personalised analysis of student data, allowing for the mapping of learning styles.

2. Disadvantages

Before deciding to use AI as a work aid machine, we must weigh the benefits against its limitations. Issues that need fixing include:

- a. Making both teachers and learners feel lazy

It now takes the same amount of time to finish tasks as before. AI has made tasks much easier, faster, and even possible to complete automatically. When people have too much free time on their hands, it might make them feel lazy. However, this will change as time goes on; naturally, people will find ways to make better use of their extra time.

b. Elimination of human labour

Automating administrative tasks with AI would inevitably lead to the loss of many human jobs, including those at TU and perhaps even pose a threat to the status of teachers.

c. Clearly lacks common sense

While AI lacks human-level comprehension, humans do possess it. Self-learning AI can process data, but it lacks the cognitive capacity to comprehend its context.

d. Algorithms are directed by instruction

Assigning keywords to AI takes knowledge since it is a programme. When an input error occurs, the result will deviate from the intended objective. The need for human scrutiny of AI-provided material makes this a particularly worrying development in the field of education.

e. Lacks Feelings

The ability to serve as an example when it comes to ethical issues is one of the many benefits of having a teacher in your life. In terms of education, teachers have the power to inspire their students and reward good performance. Obviously, this wouldn't happen if the participants were robots instead of students.

f. Issues with data security and privacy

AI in the classroom gathers students' private information, which, if not controlled appropriately, might lead to data abuse and invasion of privacy.

g. Dependencies on technology

Students' ability to think critically and independently is diminished when they rely too heavily on technology in the classroom.

Among the benefits and drawbacks of AI are the following: It is important to weigh the pros and cons of potential new technologies before deciding to implement them in the classroom. In order to use this technology responsibly and in harmony with educators' crucial role as facilitators and leaders of student learning, we must be careful when selecting and using the data collected.

D. The Use of AI Duolingo

1. What is Duolingo?

Duolingo is an online language learning app that uses a game-style approach. Students of all ages and skill levels can learn multiple languages digitally with Duolingo. Its algorithmically intelligent features allow it to tailor its assistance to the unique needs of each student.

The Duolingo app is designed to complement your language learning experience in classes that focus on speaking, writing, and listening. As you progress through the game and attempt to answer the questions, Duolingo will throw you a variety of hurdles. It all starts with translating sentences, then building picture-matching sentences, and finally writing down sentences you hear. Along with that, you can respond to spoken sentences, paraphrase discussions, and search for terms that are similar or opposite to what you hear. Do not fret

if you have not yet mastered the translation of the course package's foundational words or if you have made mistakes in responding to its many questions.

The free Duolingo program has all the answers you need, that's why. It is here that you will find the Duolingo app's user-friendly features. This program makes it hard to answer questions since it has you repeat fundamental content when you climb higher. As a matter of fact, Duolingo is also prepared to serve as a daily study buddy and an encouragement to its customers. An additional appealing aspect of the free version of Duolingo is the ability to communicate with other users and share thoughts and views.

2. History and Development of Duolingo

Duolingo is an app that helps people all around the globe learn a variety of languages. Users get the opportunity to learn and practise vocabulary, grammar, and pronunciation in about 41 languages across the globe through the spaced repetition approach.

On June 19, 2012, Duolingo was released for the first time publicly. Notable developers of that application include Luis von Ahn and Severin Hacker. Hacker is Ahn's genetics major, while Ahn is a consultant professor at Carnegie Mellon University's Department of Computer Science in Pittsburgh, Pennsylvania.

When Von Ahn observed how costly it was for Guatemalans to take English classes, the idea for Duolingo came to him. Free education has the potential to revolutionise society, according to Hacker.

Early support for Duolingo came from the National Science Foundation and a MacArthur Fellowship. While Von Ahn saw merit in Duolingo's

mission, he disagreed with the founders' desire to turn the company into a nonprofit.

After that, Duolingo was able to reap the benefits of translations provided by crowds. Subscription payments, advertising, and the Duolingo English Test certification programme eventually supplanted advertising as Duolingo's primary revenue stream.

3. How Does Duolingo Work?

There are more than 30 languages available on this popular site, and it has 500 million registered members, so it's clearly doing something right. Yet, how exactly does Duolingo accomplish its goal of helping people become fluent in any language they choose?

a. "Gamification": A Fun Way to Learn

Optimal software for language acquisition Due to its innovative approach to language learning through gaming, Duolingo introduces a fresh ambiance. Just picture yourself learning a new language with the help of Duolingo's imaginative courses, while all your buddies are sulking in lifeless classrooms.

In Duolingo, learning a new language is like advancing through a video game: you get points, you gain levels, and you may compete with your friends. A thrilling and engrossing adventure unfolds throughout. Aside from making learning a language more fun, this kind of gamification also helps with remaining motivated, being competitive, and being consistent.

b. Personalised Education: Tailored to Your Skill Level

Duolingo is the greatest language learning tool for beginners because it doesn't randomly assign lessons. The first step is to determine your current standing by taking a placement test. Duolingo tailors your language learning experience by building individualised courses according on your performance.

Untidy a bit? Relax; they will provide you with targeted exercises to improve your weak areas. Make it? In this section, you will find more complex problems. Comparable to working with a private language coach who can point out your strengths and areas for improvement.

c. Spaced Repetition: Enhancing Memory

The spaced repetition feature of Duolingo has received a lot of attention. The essence of the matter is that the software intelligently plans modifications, so you review what you've learned precisely before you're going to forget it. The process helps to permanently imprint words and ideas in one's mind, much like a memory booster.

No more worrying about forgetting anything—Duolingo Spaced Repetition is here to help you maintain your language proficiency!

d. Real-Life Setting: Original Content

Courses on Duolingo aim to give users the greatest possible experience using the app for learning a new language. Articles, audio recordings, chats, and other unique materials are interspersed with real-world examples. You may prepare for real-life talks by learning the language in its natural, everyday context.

e. A Community and Duolingo Story: Social Practices and Everyday Life

The Duolingo community is one of Duolingo's services that allows users to connect with other language learners, share strategies, and locate conversation partners. In addition, there are Duolingo Stories, which are concise and educational materials that feature interactive dialogues that provide authentic opportunities to practise the language.

f. Experience Duolingo Plus without Ads!

Although there is a free version of Duolingo, a premium subscription is available for those who want to avoid ads and have a more polished experience. If you want to stay on top of your studies, subscription-based programmes are the way to go.

4. Which features does Duolingo offer?

Key aspects of Duolingo include:

- a. Duolingo's courses are interactive, meaning that users can participate in class through games and exercises. In this exercise, users will be asked to do things like spell words, translate sentences, answer multiple-choice questions, and so on.
- b. Languages Offered: Duolingo offers courses in a wide variety of languages, including popular languages such as English, Spanish, French, German and many more.
- c. The app is great for both newcomers and seasoned pros because to its extensive range of helpful levels. The user can select the difficult level that best matches their skills.

- d. Tracking Your Progress: Duolingo lets you keep tabs on how far you've come in learning a new language. The number of workouts done and the quality of each workout are both recorded.
- e. While Duolingo is free for users to download and use, Grasio does offer optional in-app purchases. But, if you'd want to remove adverts and unlock more features, Duolingo Plus is available for a subscription.

5. Instructions for Using Duolingo

One must be aware of the advantages of this function prior to learning how to utilize the Duolingo program. with the hope that you can naturally cultivate a love of learning in the future. Some of the benefits such as capable of expanding one's vocabulary in a second language, develop proficiency in a second language over time, much more realistic than outside coaching, when you have a plan that you can stick to, studying becomes a lot more manageable, much less expensive than private ones, can use Duolingo to locate practice partners.

Here are the instructions for using it if you're interested in learning more about it.

- a. Verify that your smartphone has the app correctly installed before continuing.
- b. If that isn't the case, you can find the app in the Google Play Store and download it.
- c. Fill out the many columns available to register.
- d. You will be able to select the language you wish to study right away after you have logged in. Depending on your requirements, you can choose from a number of different foreign

- languages. Languages such as Arabic, Turkish, English, and Japanese are available.
- e. Pick a motivation for learning the language.
 - f. Choose "Determine learning" after that. Casual, average, serious, and wild are just a few of the options available to you. In terms of time, the total goal is set at 10 minutes, which is the fastest possible.
 - g. When you're ready, choose the start path. Choose "Just Starting to Learn" if you're still at the beginner's level.
 - h. The simplest things, like introducing yourself to new people and items, will serve as the foundation for all future learning.
 - i. Not only can you learn a foreign language visually, but you can also hear and speak it. A built-in sound system enables this function.
 - j. In order to keep you motivated to study the language, there is going to be a daily reminder. For at least ten minutes.
6. Advantages and Disadvantages of Using Duolingo
- The benefits of mastering a new language much outweigh the difficulties and time commitments involved. With thousands of users all over the globe, Duolingo has risen to the top of the language learning app charts in recent years. It is the stated goal of this program to make learning a new language entertaining, easy, and free for all users. Nevertheless, there are benefits and drawbacks to using it, just as with any instrument.
- a. Advantages
 - The gamification approach helps Duolingo make language learning more entertaining

and interactive. Students can be motivated and kept engaged via the app's point and badge system, which is used to complete classes. Users can compete with their friends and fellow classmates on the app's leaderboards.

- Availability: Duolingo may be accessed for free on the web, iOS, and Android smartphones. Because of this, it may be accessed by anybody with a computer, smartphone, or internet connection.
- Duolingo lessons are brief and targeted, allowing users to learn a new language even when they're on the go. People who are constantly on the move and need a way to study a new language will find this software to be perfect, as each lesson only takes 5 to 10 minutes to finish.
- Courses in over 30 languages are available on Duolingo. These languages range from the most well-known, such Spanish, French, and German, to the most obscure, like Navajo and Hawaiian. Students interested in languages not taught in conventional language schools will find this an invaluable resource.
- Adaptive learning: Duolingo tailors its language-learning services to the unique needs of each user through the use of AI. Based on the user's performance, the app changes the degree of difficulty of the lessons. In this way, we can be confident that our users will never be bored or overwhelmed.

b. Disadvantages

- While Duolingo does provide some opportunities to practice speaking and listening, its primary goal is to help users improve their reading and writing skills. Because of this, users might not be able to improve their listening and speaking abilities through conventional language classes.
- Duolingo does not offer comprehensive explanations of grammatical ideas or rules. Even though this is plenty for some people, others can have trouble grasping the rules and how to apply them in various situations.
- Problems with Duolingo's Vocabulary-First Approach: The app's courses place too much emphasis on learning new words, which could be counterproductive. In addition to fluency, students should familiarize themselves with the culture, syntax, and grammar of the language that they are learning.
- Learn a new language with Duolingo, but don't expect any immersion because the app doesn't expose users to real-life scenarios or context. Because of this, students may find it challenging to apply their knowledge in practical settings.
- Only the words "true" or "false" will be accepted as input by Duolingo. Some students may be satisfied with this level of input, while others may do better with more specific suggestions for where they went wrong and how to fix it.

The language-learning app Duolingo has many fans and is easy for anybody to use, but it isn't

without its flaws. Important benefits of the program include gamification, accessibility, short lessons, several languages, and adaptive learning. Potential flaws include insufficient opportunities for practice speaking and listening, inadequate explanations of grammar, an excessive focus on vocabulary, poor comprehension, and insufficient feedback. The learner's objectives, preferred method of learning, and dedication to the program determine how effective Duolingo is as a foreign language learning tool. For students aiming for fluency, it might not be the ideal option, but it can be a helpful supplement to more conventional language classes.

7. Parental participation and involvement in application use for children

Efendi (2018) cites a number of reasons why parents can benefit greatly from using mobile app technology to get more involved in their children's schooling. One of these reasons is the ease and accessibility of using these apps. To name only a few of the primary causes:

- a. Benefit is that parents may quickly and easily acquire information on their child's schooling through the use of mobile app technology. Mobile apps designed for education make it easy for parents to track their child's class schedule, assignments, curriculum, and overall academic performance. This convenient and up-to-the-minute access allows parents to continue receiving immediate updates regarding the activities of their kid and development.
- b. Parents are able to have fruitful one-on-one conversations with their children's instructors

and school personnel through the usage of mobile app technology. By utilising the in-app communication tool, parents have the ability to communicate with teachers in regards to their child's progress. They can send messages asking questions, providing feedback, or seeking guidance. The result is an improved ability for parents and educators to stay in the loop and work together to help kids succeed in school (Rusmiyantodkk, 2023).

- c. Parents can keep tabs on their child's academic performance with the use of digital applications for mobile devices. Keeping track of attendance, grades, and progress is a common function in educational mobile apps. If a parent wants to know where their child is struggling, they can simply look at this data. So, parents can have a bigger say in shaping and bolstering their child's education.
- d. Working together with schools: Parents can take part in school events and activities through the application of mobile app technology. Frequently, educational apps may remind users of upcoming events, such as parent-teacher conferences or school festivities. Participation in school events, such as parent-teacher conferences, extracurriculars, and volunteer work, and the acquisition of this information are all possible for parents. Involvement of parents in the education of their kids life is enhanced by this.
- e. Adaptability to Different Locations and Times: Technology in the form of mobile apps allows parents to be active in their children's schooling

regardless of their location or the time of day. It can be difficult for parents to make it to school functions and meetings because of their hectic schedules or the distance involved. Now more than ever, parents may stay connected with their children's schooling through the use of smartphone apps. Their mobile devices allow them to stay connected with their child's school, contact with teachers and classmates, and participate in extracurricular activities, even when they're on the go.

E. The Use of Quizizz

Interesting teaching can attract students' attention and interest. It can also increase student involvement in each lesson. There is no doubt that the landscape of education has changed. In accordance with the lifestyle and desires of today's generation Z who are more inclined towards gadgets, tablets and various electronic devices.

As a result of that, various interesting software and applications have been developed by software engineers to make it easier for students to interact and be entertained while learning in their learning activities.

Quizizz helps teachers a lot from the point of saving time. As we know, a teacher's job is not just to teach. However, it covers a broader scope of work. Sometimes they become a leader to manage the organization, sometimes they also become a mother and father to their students.

Quizizz can help teachers by collecting all forms of failure and various types of questions. Most of these questions have also been 'uploaded' by teachers throughout Malaysia. This allows the teacher to communicate virtually with the question creator.

In addition, Quizizz can attract students' interest and make it more relaxed and interesting. This can be proven if Quizizz itself includes background sound elements when the question is answered correctly. The correct question was answered with the words 'Very good', congratulations from the application itself. Awards like this really play a role when you want to inject enthusiasm into weak students during classroom learning sessions.

1. How To Use Quizizz

How to use this online application is the same as other applications. Each app requires students to log in to their account. This is to make it easier for students to create their own accounts. For students who don't have a Quizizz account. You can make a new registration in the 'sign up' room. Before that, make sure the web page you are browsing is correct. The website is www.quizizz.com.

This registration requires students to have their own email account. Recommended, use a www.gmail.com account . After that, students can register their accounts in Quizizz's new registration room. It is recommended that you enter a password that is easy to remember so you don't forget it later.

For an account that has been successfully registered, Quizizz will send a confirmation email to the email that was registered earlier. For students, you only need to open their email 'inbox' and click on the confirmation. Tahnia. You can now log in to your Quizizz account. It's very easy and doesn't take a long time.

To start use. Students can search in the search room, all kinds of subjects according to the current level. For example, Arabic Language Subject Level 2. Students

can choose, set which questions they are interested in answering. This question set has been uploaded and shared by question developers and developers online. Students can choose to answer subjective and objective questions.

Students may repeatedly answer the question, even if they have answered it before. In this way, he can educate students to practice tubi consistently and then eliminate feelings of despair and boredom quickly. Even more interesting, each question is interspersed with intervals or periods of time. For example, each question is given a 20-second answering period. The period is displayed on their computer screen. This gives a feeling of excitement and accepts the challenge to answer less than that time.

In addition, if students answer with the right answer, they will be exposed on their computer screen to various animations and images accompanied by background music that shows that he is a great and best person. Of course, it attracts students' interest to continue to enthusiastically answer other questions.

For me, it adds to the sense of excitement of students, Quizizz provides the convenience of answering the same set of questions, at the same time and the number of students in the same class.

As a teacher, I am more interested in using this convenience. This facility is called Quizizz host. Hence, I can see the students' abilities, marks and points they collected through the teacher's computer alone. Without the need to walk and look at students' computers one by one.

I will be the admin or develop the 'host'. It can also be considered as a series of groups. Then, after the 'host' is successfully displayed, a secret key consisting of

several numbers will be displayed. This secret key allows only students of that class to join it. It also makes it easier for teachers to unite a specific number of students. Students are asked to enter the secret key into their account space. Next, they will enter the series together with other students who have the secret key.

I make predictions so that students are willing. After that, I pressed the 'start' button. When this button is pressed, all students in the series start answering the questions given within the specified time period. They will also receive notifications of their current position. Is it in the top position or vice versa.

Once the question has been answered, the time given has also expired. I make judgments based on their decisions. Here, surprisingly, there are students who are silent in the lecture room, less active in responding in class, and finally succeed in getting the best position compared to other students. This student initially demonstrated his involvement and ability during learning sessions using computers. Apart from that, this learning begins by using the Quizizz application which is more cheerful and interactive. So can be concluded that:

- a. Learning sessions will become more relaxed and interesting
- b. The collection of questions is obtained quickly and easily
- c. Easy to use. Not tied to computer use, instead it can be accessed via other devices such as smartphones and tablets
- d. Students will be more competitive to get the highest points and top positions according to the accounts they have registered

- e. Teachers can contribute skills to build a collection of questions online and present them publicly to other teachers

2. The Impact of Quizizz on Enhancing English Language Skills

When it comes to successful learning in the modern digital world, educational technology is now a must-have tool. Quizizz is one of many apps out there, but it stands out as a robust platform that has changed the game for students' interaction with and acquisition of English language skills. In this paper, I'll discuss how Quizizz can help students improve their English language abilities, focusing on their vocabulary and grammar knowledge.

Among the many interesting features offered by Quizizz, an online learning platform, are quizzes, games, and surveys. Teachers and students alike will find its multimedia capabilities and intuitive UI to be highly appealing. The software lets teachers make their own tests using a variety of question formats, including multiple-choice, true/false, and fill-in-the-blank, to accommodate students with varying levels of knowledge and skill. A more inclusive and productive learning environment is fostered when instructors can modify their classes according to the different needs of their pupils.

Boosting student engagement and motivation is a major strength of Quizizz. Because it is so user-friendly, the pupils are inspired to be proactive participants in their own learning and develop healthy rivalries and friendships with their classmates. They get more invested in their education and end up doing better in class as a result. Additionally, students can monitor

their progress and pinpoint problem areas with the help of Quizizz's real-time scoring and comments.

Quizizz has a wide variety of vocabulary building challenges for students of all skill levels. The app's extensive collection of pre-made games and quizzes covers a wide range of subjects, from simple expressions to complex terminology. Teachers can use this wealth of information to design classes that meet the requirements of their individual students, giving them the help they need through focused practice and reinforcement.

When it comes to enhancing one's understanding of grammar, Quizizz is second to none. A variety of grammar structures, including verb tenses, sentence construction, and phrase building, are covered in the application's exercises. Students will strengthen their understanding of grammatical principles and gain self-assurance in their abilities to apply them appropriately through these fascinating and interactive exercises.

Overall, Quizizz is a great resource for teaching English, and it might help students a lot with things like expanding their vocabulary and understanding grammar rules. It is appealing to educators and students alike due to its interactive features, real-time feedback, and extensive resources. Teachers must take advantage of new tools like Quizizz to meet the demands of their students in an increasingly digital world by designing interactive lessons that pique their interest and hold it throughout.

- 3. The primary advantages of Quizizz over traditional learning methods**
 - a. Increased Engagement: Quizizz offers interactive and engaging activities, such as quizzes, games,

and surveys, which captivate students' attention and encourage active participation. Because of this, learning becomes more engaging and fruitful.

- b. Flexibility and Accessibility: Quizizz can be accessed online, allowing students to learn from anywhere and at any time, making it an ideal tool for remote learning during pandemics or other situations where traditional classroom settings are not feasible.
- c. Real-Time Feedback: Quizizz provides immediate feedback, enabling students to quickly identify their strengths and weaknesses and adjust their learning accordingly. This real-time assessment helps students stay motivated and focused.
- d. Variety of Materials: Quizizz offers a vast collection of educational materials, including quizzes, games, and surveys, which cater to different learning styles and abilities. This variety helps students stay engaged and interested in the learning process.
- e. Competition and Motivation: Quizizz allows students to compete with their peers, fostering a sense of camaraderie and encouraging them to strive for better results. This competitive environment motivates students to learn and improve.
- f. Efficiency and Effectiveness: Quizizz streamlines the learning process by providing interactive and engaging materials, making it more efficient and effective compared to traditional methods. This efficiency enables students to learn more in less time and with greater retention.

- g. Teacher Support: Quizizz offers teachers the ability to guide and support students through the learning process, ensuring that students receive the necessary attention and guidance. This support helps students stay on track and overcome any challenges they may face.
- h. Student Participation: Quizizz encourages student participation through interactive activities, which helps to build confidence and develop critical thinking skills. This increased participation also helps to reduce the likelihood of students feeling bored or disengaged.
- i. Data Analysis: Quizizz provides detailed analytics and insights on student performance, enabling teachers to track progress, identify areas of improvement, and adjust their teaching strategies accordingly. This data analysis helps teachers tailor their instruction to meet the specific needs of their students.
- j. Cost-Effective: Quizizz is a cost-effective solution for educational institutions, as it eliminates the need for expensive textbooks and materials. This cost-effectiveness makes Quizizz an attractive option for schools and educators.

When compared to more conventional approaches to education, Quizizz's many advantages make it a far more compelling and fruitful learning tool.

5. Quizizz possesses several unique features that are not found in traditional learning methods

- a. Interactive and Engaging Activities: Quizizz provides a wide range of interesting and engaging activities, including games, quizzes,

and surveys, that draw in students and get them involved.

- b. Real-Time Feedback: With Quizizz, students may get instantaneous feedback on their performance, letting them know where they stand and how to improve their learning.
- c. Variety of Materials: Quizizz offers a vast collection of educational materials, including quizzes, games, and surveys, which cater to different learning styles and abilities.
- d. Competition and Motivation: Quizizz allows students to compete with their peers, fostering a sense of camaraderie and encouraging them to strive for better results.
- e. Data Analysis: Quizizz provides detailed analytics and insights on student performance, enabling teachers to track progress, identify areas of improvement, and adjust their teaching strategies accordingly.
- f. Flexibility and Accessibility: Quizizz can be accessed online, allowing students to learn from anywhere and at any time, making it an ideal tool for remote learning during pandemics or other situations where traditional classroom settings are not feasible.
- g. Guru Support: Quizizz offers teachers more effective support, as the application allows them to provide more specific guidance and feedback to students.
- h. Cost-Effective: Quizizz is a cost-effective solution for educational institutions, as it eliminates the need for expensive textbooks and materials.
- i. Variety of Formats: Quizizz offers various formats, such as quizzes, games, and surveys,

which can be tailored to meet the needs and interests of students.

- j. Multimedia: Quizizz uses multimedia elements, such as images, videos, and audio, which help students better understand and retain the material.

These unique features make Quizizz a more effective and engaging learning tool compared to traditional methods.

6. Quizizz enables social interaction among students in several ways

- a. Competition: Students can build friendships and push themselves to their limits through Quizizz's friendly competitions.
- b. Team-Based Quizzes: Students can engage in group quizzes on Quizizz, which encourages them to work together and socialise.
- c. Discussion and Q&A: Quizizz allows students to discuss and ask questions with their peers, enhancing social interaction and helping students understand the material better.
- d. Leaderboards: Quizizz displays leaderboards, showing students' rankings in quizzes, which motivates them to compete and improve their performance.
- e. Comments and Likes: Quizizz enables students to leave comments and likes on each other's answers, promoting social interaction and encouraging students to engage with each other's work.
- f. Group Learning: Quizizz allows teachers to create groups for learning, which enhances social

interaction among students and helps them learn from each other.

Through the integration of these aspects, Quizizz establishes a platform that fosters social learning and enhances students' overall learning experience through engaging and entertaining interactions between peers.

7. Quizizz facilitates teamwork among students to overcome challenges

- a. Collaborative Learning: Quizizz enables students to collaborate on quizzes, which promotes teamwork, unity, and mutual support in reaching academic objectives.
- b. Interactive Activities: Quizizz offers various interactive activities, such as games and surveys, which promote social interaction and teamwork among students.
- c. Real-Time Feedback: Quizizz provides immediate feedback, enabling students to adjust their strategies and work together more effectively to overcome challenges.
- d. Leaderboards: Quizizz displays leaderboards, showing students' rankings in quizzes, which motivates them to work together to improve their performance and overcome challenges.
- e. Communication Tools: Quizizz offers various communication tools, such as comments and likes, which enable students to discuss and collaborate on quizzes, promoting teamwork and social interaction.
- f. Quizizz enables instructors to design personalised tests that address various learning styles and aptitudes, facilitating student collaboration and problem-solving.

- g. Gamification: Quizizz incorporates gamification elements, such as points and badges, which encourage.

By including these features, Quizizz offers an environment where students may engage in productive collaboration to solve problems, thus encouraging social interaction and teamwork.

8. Quizizz: Revolutionizing Education through Gamified Assessment

In the contemporary educational landscape, technology has become an indispensable tool, revolutionizing traditional teaching methods. Among the myriad of educational applications, Quizizz stands out as a dynamic platform that has reshaped the landscape of assessment.

Quizizz has taken a gamified approach to school testing, making it fun and participatory for kids and teachers alike. This essay examines Quizizz from every angle, looking at how it has changed education, what it offers, the problems it has, and how it promotes a mindset of lifelong learning.

In recent years, the integration of technology in education has become increasingly prevalent, catering to the diverse learning needs of students worldwide. Among the plethora of educational tools available, Quizizz has emerged as a frontrunner in the realm of assessment. Instead of using boring old tests, Quizizz uses gamification concepts to make learning immersive, which boosts student engagement and understanding.

Quizizz has witnessed a meteoric rise since its inception, garnering widespread adoption among educators globally. Its user-friendly interface, coupled with a vast repository of customizable quizzes, has made

it a go-to platform for formative assessment. Unlike its counterparts, Quizizz offers real-time feedback and performance analytics, enabling educators to tailor their teaching strategies according to the needs of individual students.

Quizizz is known for its large collection of quizzes that cover a wide range of topics and grade levels. In order to save time and effort while designing lessons, teachers might use pre-existing quizzes or make their own. Incorporating gamification features like avatars, points, and leaderboards, Quizizz encourages students to compete and stay motivated.

The benefits of Quizizz are manifold, transcending conventional methods of assessment. Firstly, it promotes active learning by encouraging students to participate actively in quizzes rather than passively absorbing information. Additionally, Quizizz caters to different learning styles, offering a multimedia-rich experience that appeals to visual, auditory, and kinesthetic learners alike. Quizizz also encourages students to learn at their own speed, so they can review previously covered material whenever it is most convenient for them.

By revolutionising how teachers evaluate their students' growth, Quizizz has changed the face of education forever. Quizizz has increased engagement and enthusiasm for learning by gamifying evaluation, creating a more fun and engaging classroom setting. Moreover, Quizizz promotes formative assessment, enabling educators to gauge student understanding in real-time and intervene promptly when necessary. As a result, Quizizz has contributed to improved academic performance and retention rates among students.

Quizizz does have several restrictions and difficulties, despite its many advantages. The potential for people to become too dependent on technology, which could hinder their ability to think critically and solve problems, is one of the main worries. In addition, Quizizz's gamified design can unintentionally encourage shallow learning, in which pupils prioritise rote memory over critical analysis. Concerns about equity and access also arise because not all pupils may have the same opportunities to utilise technology or have consistent access to the internet.

Looking ahead, Quizizz has the potential to further revolutionize education by incorporating artificial intelligence and adaptive learning algorithms. By personalizing the learning experience based on individual student preferences and performance, Quizizz can cater to the diverse needs of learners more effectively. Moreover, Quizizz can expand its reach by partnering with educational institutions and organizations to provide access to underserved communities.

In conclusion, Quizizz represents a paradigm shift in educational assessment, harnessing the power of technology to create a more engaging and interactive learning experience. Its gamified approach has redefined the concept of testing, making it more enjoyable and effective for both educators and students. As we navigate the complexities of the digital age, Quizizz stands as a beacon of innovation, paving the way for a future where learning knows no bounds.

9. Quizizz: Revolutionizing Education through Interactive Assessment

Technology has become an invaluable tool in contemporary education, altering long-established approaches to instruction. Among the many educational apps out there, Quizizz is a cutting-edge platform that has changed the way assessments are conducted. Quizizz has revolutionized testing by making it more interactive and inventive, making it more enjoyable for students and teachers alike. This essay will examine Quizizz from every angle, looking at its features, pros, cons, and how it helps students study well.

Over the past few years, Quizizz has grown in popularity and is now used by teachers all around the globe. It has a variety of subject and grade-level quizzes that can be easily customized and has an intuitive design. The gamification elements used by Quizizz make learning a more interesting and enjoyable experience for pupils, as opposed to standard assessment techniques. Quizizz allows teachers to track their students' progress in real-time and adjust their lessons appropriately with the help of performance analytics and feedback.

The vast quiz library on Quizizz is one of its most distinctive characteristics; it covers a broad range of subjects and can be modified to meet individual learning goals. Teachers can make their own quizzes or use ones that others have made and posted on Quizizz. In addition, Quizizz uses gamification features like avatars, points, and leaderboards to encourage students to compete and stay motivated. Students are more engaged, and when taught utilizing this gamified approach, students are more inclined to engage and remember what they've learned. Quizizz has many uses beyond standard evaluation tools, and it has many positive effects on classroom instruction and student achievement. First, Quizizz encourages students to

actively participate in their education by providing them with entertaining and engaging ways to connect with course content. Images, movies, and audio clips are just a few of the multimedia components that Quizizz uses to appeal to a wide variety of learners and their preferred methods of instruction. Additionally, Quizizz enables self-paced learning, so students may go back to topics whenever it's convenient for them and monitor their progress as they go. This encourages students to engage with the content on a deeper level and gives them agency over their learning process.

When it comes to evaluating students' understanding and development, Quizizz has been a game-changer. By providing instant feedback and performance analytics, Quizizz enables educators to identify areas of weakness and intervene promptly to provide additional support. Furthermore, Quizizz promotes a culture of continuous learning by offering opportunities for revision and reinforcement of key concepts. This not only enhances academic performance but also instills a sense of confidence and self-efficacy among students. Additionally, Quizizz fosters collaboration and peer-to-peer learning through its multiplayer mode, allowing students to engage in friendly competition and share knowledge with their peers.

It is important to recognize the difficulties and factors related to Quizizz's use, despite the fact that it provides useful features. One potential concern is the risk of over-reliance on technology, which may detract from the development of critical thinking and problem-solving skills. Moreover, the gamified nature of Quizizz may inadvertently promote surface-level learning, where students focus on memorization rather than deep

understanding. Educators must strike a balance between leveraging technology to enhance learning outcomes and ensuring that students develop essential skills that extend beyond the digital realm.

Looking ahead, Quizizz has the potential to further innovate and evolve to meet the changing needs of educators and students. By harnessing the power of artificial intelligence and machine learning algorithms, Quizizz can personalize the learning experience to cater to individual student preferences and learning styles. Additionally, Quizizz can expand its reach by partnering with educational institutions and organizations to provide access to underserved communities. By continuing to prioritize innovation and accessibility, Quizizz can continue to revolutionize education and empower learners worldwide.

In conclusion, Quizizz represents a paradigm shift in educational assessment, offering a dynamic and interactive platform that enhances student engagement and promotes effective learning outcomes. Its gamified approach and user-friendly interface make it a valuable tool for educators seeking to create a stimulating and inclusive learning environment. As technology continues to advance, Quizizz stands poised to play a pivotal role in shaping the future of education, fostering a culture of lifelong learning and empowerment.

10. Quizizz: Empowering Education through Interactive Assessment

Technology has become a powerful player in today's educational landscape, altering conventional wisdom about how to teach and how students learn. Among the plethora of educational tools available, Quizizz shines as a beacon of innovation, offering a

dynamic platform that has significantly impacted the realm of assessment. Through its interactive and gamified approach, Quizizz has transformed the mundane task of testing into an engaging and enjoyable experience for both educators and students. This comprehensive essay aims to explore the multifaceted aspects of Quizizz, including its features, benefits, challenges, impact on education, and future prospects.

By giving teachers a flexible platform to make interactive quizzes and evaluations that meet the needs of their students, Quizizz has become a game-changer in the field of education. Quizizz takes a different approach to evaluation than the norm by using gamification concepts to keep students interested and engaged. For teachers of all subjects and levels, it's a great resource because to its intuitive design and large collection of editable quizzes. Quizizz also provides analytics on student performance and real-time feedback, so teachers may keep tabs on their students' development and adjust their lessons appropriately.

Quizizz stands out from the competition thanks in large part to its extensive database of tests on a variety of disciplines. Educators have the flexibility to create their quizzes or choose from pre-existing ones shared by the Quizizz community. The platform's gamified elements, including points, leaderboards, and avatars, add an element of competition and excitement to the learning process, motivating students to actively participate and strive for improvement. Additionally, Quizizz incorporates multimedia elements such as images, videos, and audio clips, catering to different learning styles and enhancing comprehension.

The benefits of Quizizz extend beyond traditional assessment methods, offering numerous

advantages for both educators and students alike. Firstly, Quizizz promotes active learning by encouraging students to engage with course material in a fun and interactive manner. By providing instant feedback and corrective guidance, Quizizz helps students identify areas of weakness and focus their efforts on areas that require improvement. Moreover, Quizizz facilitates self-paced learning, enabling pupils to revisit concepts during their own time and monitor their development as they go. This fosters a deeper understanding of the material and promotes a sense of ownership over one's learning journey.

By revolutionising how teachers gauge their students' understanding and growth, Quizizz has changed the face of education forever. Quizizz improves students' learning experience by bringing gamification and engagement into the classroom. Teachers can see where their students are struggling and step in quickly to help them out with the help of its performance metrics and real-time feedback. Plus, with Quizizz's multiplayer option, students may compete in a fun way while also sharing what they've learned with their classmates. As a result, students develop stronger bonds with one another and have a more enjoyable educational experience as a whole.

Although Quizizz has many advantages, it is important to recognize the difficulties and factors to be taken into account when using it. One potential concern is the risk of over-reliance on technology, which may detract from the development of critical thinking and problem-solving skills. Moreover, the gamified nature of Quizizz may inadvertently promote surface-level learning, where students focus on memorization rather than deep understanding. Educators must strike a

balance between leveraging technology to enhance learning outcomes and ensuring that students develop essential skills that extend beyond the digital realm.

Looking ahead, Quizizz has the potential to further innovate and evolve to meet the changing needs of educators and students. By harnessing the power of artificial intelligence and machine learning algorithms, Quizizz can personalize the learning experience to cater to individual student preferences and learning styles. Additionally, Quizizz can expand its reach by partnering with educational institutions and organizations to provide access to underserved communities. By continuing to prioritize innovation and accessibility, Quizizz can continue to revolutionize education and empower learners worldwide.

In conclusion, Quizizz represents a paradigm shift in educational assessment, offering a dynamic and interactive platform that enhances student engagement and promotes effective learning outcomes. Its gamified methodology and intuitive design make it an excellent resource for teachers who want to foster an engaging and welcoming classroom. With the rapid advancement of technology, Quizizz is well-positioned to be a game-changer in the field of education going forward, encouraging a spirit of continuous learning and self-determination. By leveraging the power of technology to enhance teaching and learning, Quizizz is paving the way for a brighter and more promising future in education.

The use of Quizizz has been found to be effective in enhancing the learning experience of students, particularly in vocabulary building and grammar comprehension. The application offers a range of interactive activities, such as quizzes, games, and surveys, which cater to different

learning styles and abilities. The real-time feedback and scoring provided by Quizizz facilitate the monitoring of student development and the identification of problem areas. In addition, the application's gamification elements, such as points and badges, encourage students to engage with the material and strive for better results. The study by Amalia (2020) found that the use of Quizizz in a vocabulary building course for English language learners resulted in significant improvements in students' vocabulary knowledge and grammar skills. The study also highlighted the importance of teacher support and guidance in the effective use of Quizizz. Another study by Naipspos (2020) found that Quizizz was effective in improving students' grammar skills, particularly in the areas of sentence structure and verb tenses. The study also noted that the application's interactive features, such as the ability to create custom quizzes and track student progress, were key factors in its effectiveness. Overall, the studies suggest that Quizizz is a valuable tool for enhancing the learning experience of students, particularly in the areas of vocabulary building and grammar comprehension. The application's interactive features, real-time feedback, and gamification elements make it an engaging and effective tool for students and teachers alike.

CONCLUSION

Everyone involved in the educational process—from students to instructors to schools—stands to gain heavily by incorporating technological tools into classroom instruction. As a first point, technology has made knowledge more accessible and faster than ever before. Electronic books, journals, instructional videos, and scholarly papers are just a few of the many educational materials that students have access to online that can enhance their grasp of material. Online education also gives students more freedom to study when and how it is most convenient for them, which improves efficiency and tailors instruction to each student's unique requirements.

Additionally, the use of technology enhances student engagement and interaction with the learning material. Interactive whiteboards, learning apps, and virtual simulations are some of the tools that may make learning more engaging and dynamic. Students can gain a better grasp of difficult subjects through guided visualization and practical application with the help of this interactive. Students may be more motivated and invested in their learning when technology-based lessons incorporate gamification features.

In the third place, students and teachers are able to work together and communicate more effectively with the help of technology. As well as facilitating online discussions and group projects, online educational tools and communication apps allow instructors to give timely feedback. This helps students develop crucial collaboration skills for their future success in school and improves the efficiency of their understanding of course material. With the help of technology, education has become more accessible and flexible, catering to different styles of learning

and individual needs. It has truly become an indispensable instrument in the realm of modern education.

Artificial intelligence (AI) has many great uses in educational settings. The ability to tailor one's education is a major plus. Artificial intelligence can examine student data to identify their learning preferences, areas of strength, and areas for improvement. This allows for the personalization of instructional resources, leading to greater efficacy and efficiency in the classroom. Artificial intelligence also has the ability to give immediate feedback, which allows students to comprehend their errors and grow from them more quickly than with more conventional approaches.

While there are many benefits to using AI in the classroom, there are also some drawbacks. The difficulty in gauging the emotional state of the pupils is one of the drawbacks. Artificial intelligence (AI) is great at evaluating data and coming up with technological answers, but it still can't compare to human teachers when it comes to understanding the subtleties of pupils' emotions and psychological requirements. Depending too much on technology is another negative. Disruptions to the learning process could happen as a result of technological issues or data security breaches. Concerns regarding the security of student data gathered and processed by AI systems are another issue.

To sum up, educational institutions should think about and deal with the possible downsides of AI, even though it offers numerous chances to make learning more efficient and effective. Finding a happy medium between AI's potential benefits and concerns might be as simple as integrating AI with a more human-centered approach.

Duolingo and Quizizz are two examples of AI programmes that have already shown promise as a novel approach to education that can enrich students' educational

experiences. Students can learn a new language with the help of Duolingo and its gamification strategy. Not only does this programme offer a wide range of tasks, but it also has a fun reward system that children are sure to love.

Conversely, Quizizz provides a number of tools that facilitate both cooperative and competitive learning. Teachers can provide their pupils real-time feedback on their understanding with customisable interactive quizzes. Students are more engaged and enthusiastic about learning because to the game mode and leaderboard feature.

Learning using Duolingo and Quizizz together makes for a fun and engaging classroom experience. Teachers can make class more interesting and productive using this technology, and students can practise and perfect their abilities in a more dynamic setting. Students are more invested in their studies and have better results when they use these programmes.

REFERENCES

- [https://tekno.kompas.com/read/2023/11/26/12150047/10
-manfaat-artificial-intelligence-dalam-dunia-
pendidikan-yang-perlu-diketahui?page=all](https://tekno.kompas.com/read/2023/11/26/12150047/10-manfaat-artificial-intelligence-dalam-dunia-pendidikan-yang-perlu-diketahui?page=all)
- [https://www.dicoding.com/blog/pemanfaatan-dan-
dampak-ai-dalam-bidang-pendidikan/](https://www.dicoding.com/blog/pemanfaatan-dan-dampak-ai-dalam-bidang-pendidikan/)
- <https://surakarta.go.id/?p=30307>
- [https://www.kompasiana.com/husnahfikria/64bf562b08a
8b52bc34e16a2/kelebihan-dan-kekurangan-ai-
dalam-dunia-pendidikan?page=all](https://www.kompasiana.com/husnahfikria/64bf562b08a8b52bc34e16a2/kelebihan-dan-kekurangan-ai-dalam-dunia-pendidikan?page=all)
- [https://www.idxchannel.com/inspirator/siapkah-
penemu-apps-bahasa-duolingo-simak-kisahnya-
berikut-ini/all](https://www.idxchannel.com/inspirator/siapkah-penemu-apps-bahasa-duolingo-simak-kisahnya-berikut-ini/all)
- [https://www.geeksforgeeks.org/what-is-duolingo-how-
does-it-work/#how-does-duolingo-work](https://www.geeksforgeeks.org/what-is-duolingo-how-does-it-work/#how-does-duolingo-work)
- [https://www.researchgate.net/publication/376531945_Pe
ngaruh_Fitur-
Fitur Aplikasi Duolingo Terhadap Popularitasnya](https://www.researchgate.net/publication/376531945_Pengaruh_Fitur_Fitur_Aplikasi_Duolingo_Terhadap_Popularitasnya)
- [https://www.harapanrakyat.com/2021/12/aplikasi-
duolingo-gratis/](https://www.harapanrakyat.com/2021/12/aplikasi-duolingo-gratis/)
- [https://seputarpangandaran.com/cara-menggunakan-
aplikasi-duolingo/](https://seputarpangandaran.com/cara-menggunakan-aplikasi-duolingo/)
- [https://medium.com/@marwanesamii/duolingo-pros-
and-cons-of-the-worlds-most-popular-language-
learning-app-bc751efb3fd6](https://medium.com/@marwanesamii/duolingo-pros-and-cons-of-the-worlds-most-popular-language-learning-app-bc751efb3fd6)
- [https://jonedu.org/index.php/joe/article/view/3567/295
8](https://jonedu.org/index.php/joe/article/view/3567/2958)
- [https://brittanywashburn.com/2018/05/how-to-use-
quizizz-in-classroom/](https://brittanywashburn.com/2018/05/how-to-use-quizizz-in-classroom/)
- [https://www.linkedin.com/pulse/quizizz-educational-
platform-thats-revolutionizing-learning-raihan](https://www.linkedin.com/pulse/quizizz-educational-platform-thats-revolutionizing-learning-raihan)

ATTACHMENT

Questionnaire

1. Saya senang menggunakan aplikasi Duolingo untuk belajar bahasa inggris
2. Saya merasa aplikasi Duolingo membantu saya dalam meningkatkan kosa kata saya
3. Saya menikmati fitur-fitur yang tersedia di aplikasi Duolingo
4. Saya merasa terdorong untuk terus belajar saat menggunakan aplikasi belajar Duolingo.
5. Saya menganggap Duolingo sebagai aplikasi yang efektif dalam pembelajaran bahasa guna meningkatkan kosa kata
6. saya menggunakan Duolingo secara teratur
7. Saya merasa antusias setiap kali membuka aplikasi Duolingo
8. saya merasa puas dengan kemajuan belajar saya melalui Duolingo
9. Saya merasa aplikasi Duolingo mudah digunakan
10. Saya merekomendasikan Duolingo kepada teman atau keluarga saya yang ingin belajar kosa kata bahasa inggris
11. saya merasa aplikasi Duolingo tidak memberikan variasi dalam metode pembelajaran bahasa
12. saya merasa tidak tertantang dengan latihan-latihan yang diberikan oleh Duolingo?
13. Saya merasa aplikasi Duolingo tidak memberikan nilai tambah dalam mendukung pendidikan saya
14. Saya merasa aplikasi Duolingo tidak membantu memotivasi saya untuk terus belajar kosa kata
15. saya merasa tidak terbantu dengan adanya fitur ulasan dan koreksi dari Duolingo

16. saya merasa aplikasi Duolingo tidak ramah pengguna
17. saya merasa aplikasi Duolingo tidak fleksibel dalam memenuhi kebutuhan belajar saya
18. Saya merasa tidak terbantu dengan adanya fitur pengingat belajar di Duolingo
19. Saya merasa tidak semangat atau jemu saat menggunakan Duolingo
20. saya merasa sulit dan tidak dapat menemukan waktu yang cukup untuk menggunakan Duolingo secara konsisten.

Students' response to the use of Duolingo

Timestamp	Score	Name	Level	Genre	Native Language	Kelebihan	Kekurangan	
3/22/2024 9:28:14	0	CHANDRA	14	Laki-laki	SMKN 2 Rancaekek	VII	Saya sering menggunakan aplikasi Duolingo untuk belajar bahasa Inggris. Saya merasa aplikasi Duolingo mudah dimengerti saya memiliki fleksibilitas yang besar di aplikasi Duolingo. Saya merasa aplikasi Duolingo memberikan banyak pilihan materi dan teknologi yang canggih. Saya merasa aplikasi Duolingo memberikan pelajaran yang efektif dalam mendukung tujuan belajar saya. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.	Saya merasa aplikasi Duolingo memberikan pelajaran yang sederhana dan mudah dipahami. Saya merasa aplikasi Duolingo mudah dipahami. Saya merasa aplikasi Duolingo menyajikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo memberikan pelajaran yang mudah dimengerti dan mudah dipahami. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.
3/22/2024 9:30:45	0	MALVIN SAPUTRA	13	Laki-laki	SDN 2 Rancaekek	VII	Saya merasa aplikasi Duolingo mudah dipahami. Saya merasa aplikasi Duolingo menyajikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.	Saya merasa aplikasi Duolingo memberikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.
3/22/2024 9:31:33	0	Delon Juarta	14	Siapa 2 semester	Pria	VII	Saya merasa aplikasi Duolingo mudah dipahami. Saya merasa aplikasi Duolingo menyajikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.	Saya merasa aplikasi Duolingo memberikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.
3/22/2024 9:31:33	0	Cahyani	14 tahun	Priangan	AMBN 2 Rancaekek	VII	Saya merasa aplikasi Duolingo mudah dipahami. Saya merasa aplikasi Duolingo menyajikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.	Saya merasa aplikasi Duolingo memberikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.
3/25/2024 12:15:45	0	SILKI	13	Laki-laki	SMKN 2 Rancaekek	VII	Saya merasa aplikasi Duolingo mudah dipahami. Saya merasa aplikasi Duolingo menyajikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.	Saya merasa aplikasi Duolingo mudah dipahami. Saya merasa aplikasi Duolingo menyajikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.
3/25/2024 12:23:23	0	Audrey jehti	13	Laki-laki	Siapa 2 Rancaekek	VII	Saya merasa aplikasi Duolingo mudah dipahami. Saya merasa aplikasi Duolingo menyajikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.	Saya merasa aplikasi Duolingo mudah dipahami. Saya merasa aplikasi Duolingo menyajikan pelajaran yang menarik dan menarik. Saya merasa aplikasi Duolingo cocok untuk saya meningkatkan minat dan minat belajar.

ICT IN LANGUAGE TEACHING

A. How to Use Technology in the Classroom to Enhance Student Engagement

1. Technology: An Integral Part of Modern Education

To engage their pupils in the classroom, many teachers are utilizing various forms of technology, which has become an essential component of modern education. Numerous ways that technology can be utilized to improve student engagement, ranging from interactive whiteboards and tablets to virtual reality simulations and online learning environments.

2. Benefits of Using Technology in The Classroom

Using technology in the classroom can give students a more dynamic and engaged learning experience, which is one of its main advantages. For instance, educators can utilize interactive whiteboards to display multimedia materials and lead class discussions, or they can use tablets to give students access to online resources for learning. Because they can engage in experiential learning activities instead of only listening to lectures or reading from a textbook, this can help students stay motivated and engaged.

Technology can also be utilized to improve student participation by offering channels for communication and cooperation. Social media and online learning platforms can be used to create virtual learning communities where students can ask questions, share ideas, and receive feedback from teachers and their peers. Students may feel more engaged in the educational process and be inspired to participate fully in their education as a result of this.

Technology can be used to suit the requirements of varied learners and tailor instruction in addition to offering interactive and collaborative learning experiences. For each student, teachers can design a unique learning path based on their strengths and shortcomings using adaptive learning software. Students may feel more engaged with the subject matter and inspired to take charge of their education as a result of this.

Of course, it's vital to realize that technology is only one of many tools that teachers can use to engage children. It is critical to strike the appropriate balance between the use of technology and other teaching tactics, as well as to accommodate individual students' needs and preferences.

B. Tips to Use Technology in the Classroom to Enhance Student Engagement

The following advice should be taken into consideration by educators who want to employ technology in the classroom to increase student engagement:

- 1. Choose technology that aligns with your teaching goals.** Prior to implementing any technology in your classroom, consider your objectives and how the technology will help you reach them.
- 2. Integrate technology seamlessly into your lesson plans.** Traditional teaching methods should not be replaced by technology; rather, it should be used to augment them. Think about how you can use the technology to improve student learning and how it will work with your current lesson plans.
- 3. Provide clear instructions and support**
Ensure that students are able to use technology effectively and have access to the tools they require

for success. If you want to assist troubled students, think about providing training sessions or putting up a tech support system.

4. Monitor and assess student progress

Track students' progress and provide them feedback on their study using technology. By doing so, you'll be able to determine which areas your students require more assistance in and modify your teaching methods accordingly.

By implementing these suggestions, educators can make better use of technology to raise student interest and provide an engaging, dynamic classroom. Teachers may support their students' continued motivation, engagement, and connection to the learning process by embracing the potential of technology.

C. How To Use Technology in Your Classroom Right Now for Education

1. Guidance on Using Educational Technology in the Classroom

These days, technology permeates every aspect of our lives. There is a technical tool or application that can facilitate communication, education, and personal development everywhere we look. Therefore, it makes sense that educational technology has gained popularity as a teaching tool. Don't panic if you're unsure of how to begin integrating instructional technology in your classroom. To assist you in getting started, this article will provide some basic guidance.

Why Should You Use Educational Technology in Your Classroom? What Is Educational Technology?

Digital tool utilization in a classroom context is referred to as educational technology or EdTech. These can be anything from virtual reality experiences to

interactive whiteboards, and everything in between. Why should teachers think about incorporating EdTech into their lesson plans?

It can, for starters, raise student interest. Teachers can offer content in fresh and engaging ways that will keep students engaged in their education by utilizing technology in the classroom. Additionally, EdTech can facilitate creativity and teamwork, which will help kids acquire critical 21st-century skills.

Furthermore, it can offer individualized learning experiences since technologies like adaptive programs allow teachers to modify their lessons to fit the needs and skill levels of each unique student. All things considered, instructional technology is a great asset to any classroom and has many advantages.

2. How Do You Get Started with EdTech Even If You're Not Sure What It Is?

Many instructors may be hesitant to incorporate technology into their classrooms but keep in mind that there are numerous tools accessible to help with this process. One of the first stages is to speak with colleagues who have used EdTech before and learn what works for them.

Furthermore, participating in online training courses or workshops for professional development can give you invaluable practical tool experience. It's also critical to comprehend your learning objectives and the ways in which technology might support them.

And don't overlook the plethora of knowledge available on blogs and websites devoted to educational technology! Technology integration in the classroom can benefit both you and your kids if you take the time to perform research and try out various tools.

a. Resources And Instruments to Help You Use EdTech in Your Classroom Education

Technology has become an essential tool in today's educational environment, benefiting both teachers and students. However, it can be difficult to decide which resources are worthwhile investing in because there are so many possibilities available.

A great place to start is EdSurge, a website that provides tutorials, webinars, and reviews of EdTech solutions along with insightful articles and reviews for educators wishing to integrate technology into the classroom. OmniCalculator is an additional valuable tool that comes in handy for computing grades, percentages, and other things. Nearpod is an excellent choice for educators who want to incorporate exams, polls, and virtual reality elements into their lessons. It provides pre-made presentations.

Finally, you can use simulations in your instruction. Students gain an understanding of how real-world events could unfold depending on their actions as they play simulations.

b. Making Certain That Students Gain from Using EdTech and Can Learn More Effectively

It is crucial to keep in mind that educational technology should supplement, not replace, the student learning process when it comes to its introduction in the classroom. Finding a balance between conventional techniques and technologically based resources is crucial. Encouraging students to work at their own pace and giving them access to a variety of learning modes can

be effective strategies for raising interest and enhancing comprehension [1].

In order for instructors and students to properly use and maximize the advantages of new technologies, it is equally imperative that they receive ongoing training. We can make sure that technology really helps students in their learning journey by concentrating on these factors and ensuring that it acts as a supplement rather than a replacement. You can use engaging and fascinating films to introduce pupils to technology in the classroom.

c. Obstacles Or Difficulties with Using EdTech In The Classroom And How To Get Past Them

While there are numerous advantages to integrating technology into the classroom, there are also certain issues that need to be resolved. Unreliable access to gadgets and the internet is one prevalent problem. To get around this, educators should prepare ahead of time and implement cooperative group projects or alternate device use in the classroom.

Finding a balance between screen time and conventional teaching methods is another difficulty. It's critical to stress that technology should support education rather than replace it. Instructors can use technology to help students learn, but they should also include engaging, hands-on activities to encourage participation and active learning.

And last, getting parents' and administrators' support can also be a challenge. Gaining support from all parties involved in the educational process can be accomplished by educating them about the research showing how EdTech can enhance student results and

by training educators in its use of. Even though using technology in the classroom can be difficult at first, it's worthwhile to overcome these obstacles so that kids can benefit from cutting-edge, interesting learning opportunities.

D. How to Use Technology in the Classroom: Benefits & Effects

Technology is necessary in the classroom because it makes information instantly accessible, according to Drexel University School of Education. Even for instructors and students, smartphones, laptops, and tablets are already commonplace items in daily life. To provide students of all ages with meaningful learning experiences, it makes sense to investigate the use of technology in the classroom.

Learning objectives are actively engaged by students when various forms of technology, such as virtual classrooms, are used in the classroom. The use of technology in the classroom opens doors for customized learning to address each student's particular requirements in a larger classroom setting.

1. What does Technology Integration Mean in Education?

The use of technology to improve student learning is known as "technology integration in education." Learning objectives are actively engaged by students when various forms of technology, such as virtual classrooms, are used in the classroom. The use of technology in the classroom opens doors for customized learning to address each student's particular requirements in a larger classroom setting.

2. How to Integrate Technology in the Classroom

It's a frequent misperception that integrating technology into the classroom will cost school districts money, but children don't always need their own computers or tablets to be successful in the digital age. For both auditory and visual learners, integrating technology into whole-class instruction can increase student engagement. Including basic technologies Online grading platforms, games, PowerPoint presentations, and online homework assignments can all have a significant impact on students' development in the classroom.

a. Power Points and Games

PowerPoint presentations can be used to interest students while introducing a concept being covered in class. Links to films that complement the concepts offered in the Powerpoint presentation can be integrated into the slides in addition to the usage of graphics and bulleted information.

After a class or unit, teachers can use educational applications like Kahoot to review material. While students can create anonymous user names to play the game, teachers can develop and share Kahoots. Students who might typically be reluctant to participate in class can now participate as a collective. Teachers can choose to assign students to work in groups or alone with Kahoot, a game that can be played on computers or phones.

b. Internet Homework Assignments

One method that many teachers might start incorporating technology into the classroom is by posting homework assignments online (via learning systems like Moodle, Blackboard, and Brightspace).

The ease of access to assignments can boost student participation and assist with organizational skills.

c. Online grading Systems

In order for educators to identify a student's areas of strength and growth, as well as their parents', communication is an essential component of education. Transcript data management, attendance analysis, and grade posting are all made possible by online grading systems like PowerSchool, which create and open channels of communication between teachers and students.

d. Classroom Tablets

Teachers can use technology to provide differentiation throughout instruction in classrooms where students are fortunate enough to have tablets. Throughout tasks, students are free to work at their own pace, and teachers can provide one-on-one help.

a. Listserv

Parents can organize and manage their emails with software like Listserv. Teachers can notify parents through newsletters, updates, and conversations about key announcements that maintain regular channels of communication.

1. Strategies Of Implementation for Age Groups

Technology has several advantages that can improve any modern classroom. There will be differences in the implementation and use of technology in classrooms across different grade levels and subject areas, though.

2. Ways to Incorporate Technology in the Elementary Classroom

Younger pupils can use technology to develop the foundational abilities they'll need for future independent study. Interactive games are a useful tool for teaching students reading, numeracy, spelling, and phonemic awareness. Teachers and students can upload their own word lists to websites like Spelling Training in order to practice pronouncing words correctly and make interactive games. These websites can be used by parents to practice basic skills outside of the classroom.

3. Using Technology in the Middle School Classroom

Students can use technology to acquire fundamental life skills as they start to transition into independent thinkers. Having separate teachers for each subject can help middle school students become more independent. It is possible to apply the use of technology to learn research skills in any subject field. Easy Bib and other such websites assist students in locating reliable sources using many search engines and educate them on properly citing those sources to prevent plagiarism.

4. Technology in High School Classrooms

After completing secondary school, pupils can learn how to use technology for their future careers and college study. Students who are familiar with Google Drive and Microsoft Office learn how to create and share documents, create spreadsheets, and provide and receive comments on their work in an easy-to-understand manner. These Google and Microsoft features are used by many professions to manage information and facilitate collaboration amongst coworkers and clients.

5. Why is It Important to Integrate Technology in The Classroom

When they provide students the chance to use technology in the classroom, teachers frequently experience success. When technology is utilized to teach in education, there are many advantages and consequences, and not all of them are good, according to some. One may argue that having an endless supply of entertainment and information available at all times is distracting, but when technology is used in the classroom in conjunction with established procedures that are evaluated or monitored, the benefits of its use exceed the drawbacks.

- a. Keeping students engaged: An essential component of any lesson plan is active engagement. Technology engages kids because it is participatory, regardless of whether they are working individually or in groups.
- b. Aids pupils with various learning modalities: Not every student absorbs knowledge and retains it at the same rate or in the same manner. Teachers can use technology to adapt content to the right level of student learning and differentiate their education. Students can work at their own paces when using technology.
- c. Prepare students with life skills: Because technology is so prevalent in daily life, it has evolved into a distinct kind of literacy in and of itself. A lot of professions use Google Drive or Microsoft Office on a regular basis for at least one of the following tasks: making decks or slide shows for presentations, using spreadsheets to balance

budgets, or sending documents via email to convey crucial information. Encouraging children to acquire and hone these abilities equips them for life after school.

- d. Visit Drexel University's School of Education Instructional Technology Specialist: Certification program for more details on courses and certifications related to using technology in the classroom.

CONCLUSION

To sum up, integrating technology into the classroom can be a great way to raise student interest and create a more lively, interactive learning environment. Technology offers educators a variety of ways to involve their students in experience learning, whether it is through interactive whiteboards, tablets, or online learning environments. It can also be applied to fulfill the requirements of varied learners, personalize instruction, and promote cooperation and communication.

But it's crucial to keep in mind that teachers have a variety of tools at their disposal to engage their students, and technology is only one of them. Achieving the ideal balance between technology use and other instructional tactics is crucial, as is taking into account each student's unique requirements and preferences. Teachers can use educational technology to improve student engagement and create a positive learning environment for their students by adhering to best practices and keeping up with the newest advancements in the field.

In the end, having a firm grasp of your teaching objectives and leveraging technology to help you achieve them are the keys to using it effectively in the classroom. You may build a dynamic and engaging learning environment that supports your students' success by carefully examining how technology can support your teaching objectives.

While edtech can be a great tool in the classroom, it's crucial to think through its intended usage before making any purchases. Successful integration of EdTech requires ensuring that technology is a supplement to conventional teaching techniques, offering training to educators and students, and resolving any potential obstacles.

The fact that technology plays a significant role in today's schooling is the most significant lesson I learned from this course. It is crucial to be able to pick up new technologies as well as use the ones that are available today. I now have the abilities to more effectively incorporate technology into my classroom thanks to this course. In addition to helping the children, this also helps me as a teacher. My already-familiar talents with technology have been refined by this class. In addition, it has introduced me to a few new tools that I can use in my classroom in the future. I am now more equipped to design a classroom for the digital age. This includes using technology to assess kids, encourage innovation, and teach them about new technology and how to use it and not. These technological elements have allowed me to become the greatest teacher I can be. There are numerous instances of how technology is used in the classroom and how beneficial it is in the modern world. According to an analysis of the country's report card (Philips, 2001; Science 2000 key results, 2001), pupils in grade 12 scored higher in science when:

The teachers participated in scientific activities once a week. Data was gathered and analyzed using computers, and students had access to the internet at home. The teaching approach was inquiry-based. Students who had access to computers scored five or six points higher than those who did not when professors used them for data analysis, simulations, and models. This is consistent with the movement toward scientific inquiry and conceptual comprehension. Students studying science can use computers to search for data (values of scientific constants, for example), plot lab results on graphs, and analyze data. When teachers employed multi-media, laser discs, or science presentations, average scaled scores also improved. What's

crucial to remember is that for it to work, it must be applied correctly.

The results of the study indicated that once or twice a week moderate use was the most advantageous. Scores were lower in classes where pupils were exposed to technology daily. It is suggested that rather than being a replacement for instruction, technology should be utilized to improve education by getting students involved in higher-order thinking skills. The study also revealed that minority groups' scores, including those of African Americans, American Indians, and Hispanics, were significantly below average. These minority groups' inferior socioeconomic standing is mostly to blame for this. This ratio will increase to almost 40% during the ensuing few decades. Something must be done right now to stop them from falling farther behind. We have observed that technology can serve as a personal instructor and a useful resource for ESL students, challenging learners, and intercultural education. The Individuals with Disabilities Education Act (IDEA) was amended in 1997, and it emphasizes the use of technology and states that children who require special education should be required to have access to AT devices and services. The Tech Act, P.L. 100-407, was introduced to improve AT device and service accessibility and quality for all American individuals and families. The goal of the ED Tech program is to continuously innovate innovative approaches to integrating technology into instruction. Money will be made available to schools that educate large numbers of underprivileged pupils. This is a positive step, in my opinion. At the moment, schools with low grades face penalties. The majority of these schools are located in inner cities, where there is a dearth of resources, including money, supplies, and teachers. Since technology helps struggling students the most, I think/recommend that these schools

should be the ones to receive financing for it rather than withholding funds from them.

The foundation of the modern economy is a global viewpoint. We must cooperate and compete with the rest of the globe. Education must therefore be tailored in this way. Because labor is less expensive abroad, low-skilled workers in this country do not benefit economically. Higher order thinking skills are necessary in today's workforce in order to secure employment. We've seen that technology can make this possible. We also need to understand how to collaborate globally and about various cultures. Projects involving the internet and the web where communities from all over the world can engage are useful. The inadequacy of American education in teaching foreign languages or global awareness is among its drawbacks. It is highly advised to work on tasks like email for foreign languages or scientific research via the Internet. Students benefit from this in terms of real-life association and their capacity to operate in cross-functional settings.

In the modern world, technology is a need, and we have to be prepared for it. Parents desire that their children leave school with the abilities necessary to either enter the workforce of today or pursue further education and training. Employers want for workers who can reason, communicate, make judgments, are literate, dependable, and eager to learn. Technology plays a crucial role in education in the twenty-first century, according to the Department of Education and other federal authorities.

By breaking up lectures into the appropriate chunks to ensure that each student can complete the task at hand, computers can guarantee success for everybody. They provide fast, precise findings (Bennett, 2002). The reward is more valuable and effective the tighter the link is between the action and reward. Learning may be a continuous

process with computers and other technology. Time restrictions won't apply to instruction.

Technology has been used in classrooms, according to Rushin (n.d.). It contributes to improving teachers. Students show greater interest in the process when they observe their teacher experimenting. Students can use technology to see the world as a resource and to take ownership of their own destiny. Additionally, it helps students because it gives them more options and chances than a typical classroom to investigate and share knowledge.

When it comes to educating, learning, and assimilating into society, technology is a useful and adaptable instrument. For teachers to effectively use new tools, preparation is the most crucial requirement. Effective use of technology in the classroom is possible, and it is necessary for the benefit of society, educators, and students.

REFERENCES

- Behrmann, M.M. (1995) Assistive technology for students with mild disabilities. ERIC Clearinghouse on Disabilities and Gifted Education Reston VA. (Eric Document Reproduction Service No. ED 378 755.
- Bermudez, A.B. and Palumbo, D. (1994). Bridging the gap between literacy and technology: Hypermedia as a learning tool for limited English proficient students. *The Journal of Educational Issues of Language Minority Students* 14, 165 - 184.
- Coiro, J. (2003). Reading comprehension on the Internet. Expanding our understanding of reading comprehension to encompass new literacies. *The Reading Teacher*, 56(5), 458 - 564.
- Denver, CO - Tour Stop 15. (2002, July 12). U.S. Department of Education. Retrieved March 11, 2003
- Hassard, J. (n.d.). Using the Internet as an effective science teaching tool. Retrieved April 3, 2003.
- Haury, D.L. and Milbourne, L.A. (2002). Using the internet to enrich science teaching and learning. Clearinghouse for Science, Mathematics and Environmental Education. (ERIC Digest Reproduction Service No. SE 062 506.
- Howes, E.V., Hamilton, G.W., and Zaskoda, D. (2003). Linking science and literature through technology. Thinking about interdisciplinary inquiry in middle school. *Journal of Adolescent & Adult Literacy*, 46(6), 494 - 504.
- Introduction: No Child Left Behind (2002). U.S. Department of Education (n.d.). Retrieved March 11, 2003.
- Leu, D. J. Jr., and Leu, D. D. (1999). Teaching with the Internet: Lessons from the Classroom. (3rd. Ed.) Christopher-Gordon Publishers, Inc.

- New York, NY - Tour Stop 25. (2002, September 25). U.S. Department of Education. Retrieved March 11, 2003.
- Phillips, G.W. (2001, November 20). The release of the National Assessment of Educational Progress (NAEP) the Nations' Report Card: science 2000. National Center for Education Statistics. Retrieved September 5, 2002
- Sleeter, C. & Tettahah, S. (2002). Technology as a tool in multicultural teaching. *Multicultural Education*, 10(2), 3 - 9.
- Smolin, L.I. & Lawless, K.A. (2003). Becoming literate in the technological age: New responsibilities and tools for teachers. *The Reading Teacher*, 56(6), 570 - 577.
- The Facts About... 21st-Century Technology (2002). U.S. Department of Education (n.d.). Retrieved March 11, 2003.
- The University of the State of New York, (Albany, NY, March 1996). Learning Standards for English Language Arts. Retrieved January 30, 2003.

ICT IN LANGUAGE TEACHING: ELSA SPEAK

BACKGROUND

In the quickly evolving digital age, the use of information and communication technology (ICT) in education is becoming more and more important. The application of Elsa Speak AI is one ICT innovation that has bearing on education. A program called Elsa Speak AI makes use of artificial intelligence (AI) to enhance English speaking abilities.

Proficiency in spoken English is becoming more and more crucial in Indonesian education. English is a universal language that is utilized in commerce, higher education, and worldwide communication, among other spheres of life. Nonetheless, many Indonesian students struggle to improve their English-speaking abilities.

Elsa Speak AI in Education ICT in Indonesia may be a useful tool for raising students' proficiency in spoken English. With the use of artificial intelligence (AI), the app gives students precise feedback and individualized speaking practice. Students can practice speaking English on their own and receive detailed feedback and recommendations by using Elsa Speak AI. As a result, pupils' English-speaking fluency, intonation, and pronunciation all improve.

Elsa Speak AI's benefit in Indonesian educational ICT is its capacity to offer speaking practice that is both flexible and adaptive. The app may be tailored to each student's needs and skill level. Additionally, a variety of learning topics are provided by Elsa Speak AI, including everyday conversations, presentations, and interviews, to help students.

Elsa Speak AI in Education ICT in Indonesia is not without its difficulties, though. One of them is that certain places have inadequate infrastructure and access to technology. Ensuring that every student has sufficient access to devices and the internet is crucial for the successful implementation of Elsa Speak AI.

In the context of ICT education, we will explore the advantages and difficulties of utilizing Elsa Speak AI to help Indonesian students become more fluent in English speakers. The steps that can be taken to maximize the usage of this technology in education will also be covered.

INTRODUCTION

The term artificial intelligence (AI) describes the efforts undertaken to build computer programs that can simulate human behavior and mental processes. The ability of machines or computers to think and act like humans is how the general public defines artificial intelligence (Andrew M. Olney, Irene-Angelica Chounta, Zitao Liu · 2024). Therefore, the ability of instruments or programs to faithfully replicate human thought processes and actions is the basic idea of artificial intelligence (H Chen - Science Insights Education Frontiers, 2024). According to A Abulibdeh, E Zaidan, R Abulibdeh - Journal of Cleaner Production, (2024), the notion that artificial intelligence will be integrated into household computers may result from the way things are already set up. It could manifest itself in our lives in a multitude of ways. W Forero-Corba, FN Bennasar - RIED-Revista Iberoamericana de (2024) asserts that artificial intelligence is the contemporary analog of electricity.

Artificial intelligence is a contender to be positioned as the central element of the Fifth Industrial Revolution given its potential to be a powerful driver in ensuring economic prosperity (H Galindo-Domínguez, N Delgado in Teacher Education, 2024). Further study and advancement of artificial intelligence will affect many different areas, such as the management and instruction of classrooms and schools as well as the overall restructuring of the social structure. The development of artificial intelligence is likely to have a significant impact on schools, one of the major organizations whose basic curricula will need to adapt to the digital age and include 21st century abilities. Chen, Hong (2024) argues that as new technologies become more and more integrated into our daily lives, schools may find themselves compelled to make accommodations for them.

How stakeholders in the domains of engineering, law, business, and education interpret this development and foresee the application of AI in education.

DISCUSSION

Artificial intelligence (AI) technology enables computers and other devices to simulate human intelligence and problem-solving abilities. Artificial Intelligence (AI) can perform jobs that often require human intelligence or assistance, either independently or in combination with other technologies (such robotics, sensors, and geolocation). Digital assistants, GPS navigation, driverless automobiles, and generative AI tools (like Open AI's Chat GPT) are a few examples of AI in the news and in our daily life.

Often studied in connection with machine learning and deep learning, artificial intelligence is a subfield of computer science. AI algorithms that simulate human decision-making processes are created in various domains with the capacity to "learn" from available data and generate increasingly accurate classifications or predictions over time. Even others who are against artificial intelligence think that the launch of ChatGPT appears to be a step in the right direction.

The application of AI is growing every day. But as interest in using AI technologies in business expands, conversations on ethical and responsible AI become increasingly important. For additional information regarding IBM's stance on these issues, refer to Developing trust in AI.

English is the most important language in the world, despite being a foreign language. Many people speak it as their primary or second language all over the world. Additionally, the English language acts as a bridge to scientific and technological knowledge, which is essential to the development of many nations' political and economic systems on a worldwide scale. All Indonesian schools teach English as a foreign language, therefore proficiency in the

language is essential for job seekers. Every academic level was instructed on it.

While studying English, their speaking, reading, writing, and listening skills. Speaking is a skill that needs to be mastered, but we also need to precisely and clearly enunciate our words so that others can comprehend what we're saying.

An artificial intelligence drawn from humans, known as Society 5.0, will transform millions of data points collected from the internet in every facet of life. This new wisdom will be embraced by the social order. People's lives will undoubtedly improve as a result of this shift, which is why speaking English is now essential for interacting with people from other countries and backgrounds. These days, it's imperative to speak more than one language, notably English, especially if one wants to pursue certain careers.

Effective communication requires clear and succinct speech, which is linked to life success because it's important in both social and private settings (Agheli, 2024.). The three primary components of fluency in the English language are speaking, reading, and writing. Speaking skills are the most crucial to master as conversing with others is the main goal of learning English (Faubla Vera. 2024.). Of the four basic English language skills, speaking is the hardest since it calls for the speaker to make up sentences as they go along. According to Fadlan (2024), difficulties are usually caused by a variety of problems, such as pupils' inadequate knowledge of English vocabulary, grammar, and pronunciation. Moreover, there are internal factors that affect pupils' English language proficiency, like a lack of motivation and self-assurance. This will, of course, limit students' ability to show their proficiency.

1. Education and Artificial Intelligence

According to a statement made by Henry Ford, "If I had asked people what they wanted, they would have said faster horses." Chen, Hong (2024) highlight this assertion. At first glance, it seems that schools are providing "faster classes" with quicker turnaround times.

In the twenty-first century, is the teaching of skills, critical thinking, and metacognition sufficient? Or should we create entirely original, hitherto unimagined technology, especially for the present day? What kind of educational chances could artificial intelligence offer that will preserve human social and emotional qualities while differentiating humans from robots or self-driving cars? These subjects most likely will.

Although the theory of general artificial intelligence has been researched since the 14th century, Sonko (2024). Work is credited with bringing it to light just lately (Humble & Mozelius, 2019). Research on artificial intelligence in education has attracted a lot of interest. They are becoming more and more important in the literary and academic spheres. We are seeing an expansion of AI research in organizational management as "artificial intelligence leadership" has begun to be examined in the literature (Bankins 2024).

As artificial intelligence becomes increasingly prevalent in the classroom, systems and practices in education are probably going to undergo major adjustments. In light of the study's findings, Habbal (2024) hypothesized that artificial intelligence would help teachers give their students more tailored teaching.

Opportunities for learning that are better and more acceptable for marginalized groups, such as those who are refugees, disabled people, lack formal schooling, and live in distant locations (Ayenda 2024).

Empirical studies illustrate how artificial intelligence methods and intelligent learning settings can improve the delivery of efficient, highly customized solutions (Pinnington 2024). While it seems that human teachers must be actively involved in their classrooms in order to provide high-quality instruction, artificial intelligence sees boosting educational standards in all areas, particularly.

2. Data Gathering and Analysis

Semi-structured interviews were used in this investigation. Participants answered an online poll with questions regarding "what they think of AI, how it will be integrated into education, the future outlook, and the positive and negative implications they've heard about."

possess regarding AI in education." The answers to the previously listed questions were utilized to analyze participant attitudes on the employment of artificial intelligence in the classroom. To create the questions that would be used in the study to gauge participant opinions, three experts in the field of educational sciences were consulted. The questions were appended to an online form that the participants first filled out. To get additional in-depth information on the subject, the participants were then interviewed face-to-face about the information they had provided on the form.

All of the data was analyzed using the content analysis method, which progressed from codes to more in-depth topics. The objective here is to go through the data collected from every individual participant line by line. Themes originated from the establishment of codes and are ultimately connected to the literature. While

selecting the themes and coding each phase, every line was taken into account.

Considering. The findings section included further context for the codes that were found throughout the research, such as the individualization of training. The participants' perspectives are analyzed considering hypothetical scenarios and their past knowledge and understanding of AI.

3. Reliability

Dependability is essential in qualitative research. To employ a more dependable technique in the study, a subject-matter expert academician supervises the phases of qualitative research data collection, coding, tabulation, and reporting. Additionally, the researchers discussed their early assumptions regarding the subject. Participants were requested to submit their preliminary evaluations. In order to perform a comprehensive study known as an analyst triangulation, three academicians worked separately. There was an application of the triangulation of data sources approach (Tentiang, 2024). In addition, we tried to examine as many AI research as possible, ranging from industry to health, to help with perspective triangulation. Triangulation in qualitative research is the use of multiple methods or data sources to develop a comprehensive of knowledge.

A. Elsa Speak Application

Technology is the most practical and effective tool available today to support language instruction and learning both inside and outside of the classroom. Artificial intelligence, or AI, is a novel kind of technology that speeds up and engages students' learning. Students can practice and apply as needed, anywhere, at any time, with the aid of this software. Students also had the freedom to select their preferred method of instruction. It might also inspire all students to participate in the learning process. Fortunately, Blumenfeld et al. (Pamungkas, 2024)) believe that this could operate as a "hook" to get kids interested in being active and allow them to study independently.

Given the variety of English learning programs accessible, application developers frequently develop artificial intelligence (AI) technology as a human support tool. Artificial intelligence (AI) is the name given to a simulation of human intelligence in the form of a machine that has been taught to think similarly to an actual human. According Zhang (2024), artificial intelligence (AI) is the science and technology of creating intelligent devices, especially intelligent computer programs or applications. AI is a step toward creating computers, robots, or software that has intelligence comparable to that of humans (Hongen, 2024).

Each program is designed to assist users in completing specific activities, such as those involving productivity, creativity, or communication. There are several tools and applications that may be downloaded from the internet to help with English study. Vietnamese Vu Van founded the English Learning Speech Assistant, or "ELSA Speak," in 2015. Its main office is in San Francisco, California. ELSA was recently listed as one of the 13 IT firms in Southeast Asia with tremendous potential by the South

China Morning Post. Its goal is to help pupils speak English with assurance, clarity, and fluency. It's easy to download ELSA on your smartphone from the Play or App Store.

Nazarov (2024) define pronunciation as the process of producing speech sounds, such as vowels, articulation, intonation, and accents, in response to the accuracy or acceptability of speech. Behzod (2024) believes that one of the hardest things to learn and master is English pronunciation. According Bashori (2024), the difficulty in acquiring English vocabulary stems from the possibility of mispronouncing words due to the significant differences in segmental and suprasegmental pronunciation between English and Indonesian. Since English is an intonated language, mispronouncing a word will alter both its type and meaning. Similarly, while intonation differences in Indonesian do not alter a word's class, they may alter its meaning in certain contexts.

ELSA Speak is one artificial intelligence tool that can be used to train English pronunciation. ELSA Speak is an application that instructs users on grammar and vocabulary using speech synthesis technology (Manurung, 2024). With a mispronunciation detection rate of over 95%, ELSA uses speech recognition technology to help users improve and correct their English pronunciation (Lestri Wahyuni, 2024). There are more than 1300 courses and 70 subjects that can be utilized to train pronunciation, ranging from words to sentences relevant to the user's needs. Users can also receive feedback to rectify their pronunciation faults (Cristina, 2024).

An app called ELSA Speak (English Language Speech Assistant) is intended to assist users in pronouncing words correctly and confidently when speaking English (Permatasari, 2024). We can utilize this software to improve our English-speaking abilities, particularly with regard to

pronunciation. One of the most crucial fundamental abilities for developing oral language abilities, including speaking and listening, is English pronunciation. According to Suci (2024), pronunciation is the creation of a sound system that does not obstruct communication from the perspective of the speaker or the listener. Put differently, pronunciation can be understood as the ability to pronounce English words in a clear and understandable manner. As a result, we may pronounce words correctly by studying pronunciation.

The ELSA Speak application's usage of artificial intelligence (AI) technology is thought to be highly beneficial for enhancing pronunciation and other aspects of English-speaking abilities. With a number of interactive elements, the application's AI can assist users in improving their English-speaking abilities. However, this program also has an additional feature that sets it apart: automatic speech recognition technology, another name for automatic voice recognition (ASR). Yani Lubis (2024) states that the goal of this feature is to transform human voice lexical content into an input that a machine can read (Bollelgala, 2024). The application will immediately offer corrections for errors that need to be fixed.

Users using iOS and Android devices can get this program from the App Store or Play Store, respectively. There are two versions of the ELSA Speak application: a free version and a premium version. In order to access additional features, the user must first subscribe and pay the monthly, three-month, or annual fee. One of the greatest apps available for helping anyone, especially English language learners, pronounce words correctly is ELSA Speak. It is possible to describe this application as a versatile programmer that includes virtual language instruction software. Anyone can utilize this application, including

private users, individuals, and global educational institutions.

Naturally, ELSA Speak uses two accents: the British accent and the American accent. These accents are widely used worldwide and each has its pronunciation style and characteristics. The application's goal is to reduce non-native English accents. As a result, the ELSA Speak Application can be highly helpful in identifying patterns and distinctions in language use. In this manner, the goal of this program is to enhance word pronunciation accuracy similar to that of a native speaker.

B. ELSA Speak Application's Features

The ELSA application's basic interface is user-friendly and facilitates easy navigation between themes, abilities, levels, reports, and other features, according to research conducted by Senowarsito (2024). Nonetheless, ELSA programs can use a variety of display languages. Users can choose to change the display language to either their native tongue or their preferred language. Depending on the user's degree of proficiency, this entails sharpening skills related to minimal pairs, beginning and finishing sounds, schwa, th-sounds, and consonant clusters. If it's what's known as a single sound within a word-segmental phoneme in applied linguistics.

Topics and skills covering culture, technology, gastronomy, entertainment, and everyday communication are all included in the ELSA application.

C. Speaking

Of the four basic language skills, speaking is seen to be the most important for learning a second or foreign language. According to Hammond (2024), speaking is seen as a very important ability since oral communication demands it. Furthermore, speaking is defined by Hammond-Tooke (2024) as the process of creating and expressing meaning in a variety of circumstances through verbal and nonverbal cues. According to William David (2024), speaking is an essential component of learning and teaching a second language. Speaking with clarity and conciseness is a sign of effective communication. Speaking is an instructional strategy that promotes goal-achieving communication and the sharing of ideas, aspirations, and goals (Ziyuan, 2024).

Since English is a universal language for communication, everyone needs to practice speaking with the right terminology and subtleties. Globally, it has been put to use (Crystal, 2003). It is acknowledged as an international language since most people on the globe utilize it on a daily basis for a number of purposes, such as working, studying, obtaining job, conducting business, and obtaining an education. It goes without saying that fluency in English is necessary to guarantee that the message is understood by the intended audience. Word production is a part of this. Speaking is one of the most crucial aspects of knowing the English language. Effective communication is essential in the job.

A universal language for communication is English. Globally, it has been put to use (Crystal, 2003). It is acknowledged as an international language since most people on the globe utilize it on a daily basis for a number of purposes, such as working, studying, obtaining job, conducting business, and obtaining an education. It goes

without saying that fluency in English is necessary to guarantee that the message is understood by the intended audience. Word production is a part of this. Speaking is one of the most crucial aspects of knowing the English language. Effective communication is essential in the job.

Of the four basic language skills, speaking is seen to be the most important for learning a second or foreign language. According to Islam et al. (2022), speaking is seen as a very important ability since oral communication demands it. Furthermore, speaking is defined by Che (2024) as the process of creating and expressing meaning in a variety of circumstances through verbal and nonverbal cues. According to Chen (2024), speaking is an essential component of learning and teaching a second language. Speaking with clarity and conciseness is a sign of effective communication.

Speaking is an instructional strategy that promotes goal-achieving communication and the sharing of ideas, aspirations, and goals (Yi Chen, 2024). Everyone should learn how to speak with the proper nuances and terminology because it's essential for day-to-day life (Schmitt, 2008). Over the past 40 years, speaking proficiency in second language learning has significantly grown (Che, 2024). The importance of English and its globalization have led to a rise in the need for people who can speak it fluently in a range of fields. Data suggest that certain components of speaking ability can be taught in second or foreign language schools (Derakhshan et al., 2016).

According to Harmer (2007), speaking is a way of interacting with others and talking with them or sending a message to them. The speaker must pay close attention to terminology, grammar, and pronunciation. Even though a student satisfies all the requirements to be an excellent speaker, he cannot think of himself as such.

Indonesian students are not accustomed to learning how to pronounce English words. These learning habits need to be addressed immediately because they require understanding the language's meaning as well as its pronunciation. Even if you understand the meaning of the terminology, mispronounced words will make it difficult for you to use the language. As a result, most pupils desire to talk.

1. The Elements of Speaking

Speaking is a complex skill since it involves elements of grammar, vocabulary, pronunciation, fluency, and comprehension, at the very least, according to Harmer (2007: 343). Speaking involves a few key components, which are:

a. Pronunciation

The pronunciation of a word or a language refers to how it is spoken. This could refer to commonly accepted phonetic sequences for a word or language pronunciation in a particular dialect (sometimes called "correct" or "standard" pronunciation), or it could simply refer to a certain person's method of pronouncing a word or language.

Pronunciation is the process of creating speech sounds for communication, and it is essential to communication. Students need to be able to pronounce phonemes correctly, use appropriate intonation and stress patterns, and speak in cohesive sentences in order to speak English fluently. Along with other considerations, pronunciation also considers articulation, rhythm, intonation, and phrasing.

b. Grammar

In speaking, assuming that the sentence structure is understood, communication proceeds as intended. It is crucial that speakers are conscious of the grammar they use when conversing. The framework that people employ to arrange meaningful language expressions and communicate intelligible messages is called sentence structure.

Grammar is, at its most basic, a system of rules that help us structure our sentences. It includes a range of aspects of the English language, including:

- Elements of speech, including verbs, adjectives, prepositions, conjunctions, nouns, and adverbs.
- Clauses that highlight a group, such as independent, dependent, and compound
- Punctuation, such as commas, semicolons, and periods, in both short- and long-haul usage
- Temporal and longitudinal language mechanics, including word

c. Vocabulary

A vocabulary, also known as a lexicon, is a list of words, typically the terms that are known to a person or the words that are part of a language. The English word vocabulary originated with the Latin term *vocabulum*, which means "a word, name". It is an essential component of language and communication that facilitates the exchange of ideas, feelings, and thoughts. There are two main types of vocabulary: terms that one recognizes but does not use often, or passive vocabulary, which is made up of words that one uses regularly. It is possible to write, sign, or speak vocabulary. A person may have changes in their language due to trauma, illness, or amnesia. Additionally, it can expand throughout time using a range of strategies, including

d. Fluency

Fluency can be defined as "the ability to keep going when speaking spontaneously." Students should be able to use the tools and resources available to them to communicate effectively when speaking, regardless of grammar and other faults. The term "fluency" describes the ability to read "like you speak." According to Hudson, Lane, and Pullen, fluency is defined as follows: "Reading fluency is made up of at least three key elements: accurate reading of connected text at a conversational rate with appropriate prosody or expression." Non-fluent readers suffer from one or more of the following reading deficiencies: they read slowly, they make a lot of mistakes, or they don't employ the appropriate words and expression.

d. Comprehension

The term "fluency" describes the ability to read "like you speak." According to Hudson, Lane, and Pullen, fluency is defined as follows: "Reading fluency is made up of at least three key elements: accurate reading of connected text at a conversational rate with appropriate prosody or expression." Non-fluent readers suffer from one or more of the following reading deficiencies: they read slowly, they make a lot of mistakes, or they don't employ the appropriate words and expression.

2. Inhibition

There are moments when people feel hesitant to speak up. Unlike writing, listening, or reading, speaking requires some real-time audience exposure. Many students find it difficult to talk in a foreign language in class because they are afraid of making mistakes, of

coming across as dumb or judgmental, or simply of bringing attention to themselves.

a. Lack of topical knowledge

The second issue is that students frequently lament that they can't recall what they were thinking or that they didn't feel compelled to express it. According to Baker and Westrup (2003), students' low vocabulary, grammar, and sentence structure expertise makes it very difficult for them to react when asked to describe anything in a foreign language by their teachers. This finding is consistent with the idea previously discussed.

b. Low or uneven participation

Each participant will have very little talking time since in a large gathering, only one person can speak at a time in order to be heard. The fact that some students choose to take the lead while others speak up very little or not at all exacerbates this issue.

c. Mother-tongue use

It's possible that students who speak their mother tongue in class will do so more frequently since it's more comfortable, speaking to one another in a foreign language is uncomfortable, and speaking in their native tongue makes them feel less "exposed." It may be challenging to get some classes—especially the less motivated or disciplined ones—to speak only in the target language when they are in small groups.

3. Functions of Speaking

According to Michelle (2009: 183), speaking is the most crucial ability to teach when learning a language. The primary focus of teaching speaking in a foreign

language is on oral communication. To be considered a proficient speaker of a foreign language, one must not only be able to identify the source of the sound but also convey the sense of the sentence being uttered. As stated by Richards (2007: 2) in Jondeya (2011:16), speaking serves three distinct purposes:

- a. Talk as interaction describes the impromptu conversations we have with others on a regular basis. The idea behind spontaneous speech is to communicate with others by using our ideas to transmit messages. Social interactions are the primary objective of this function.
- b. When conversing as a transaction, the focus is mostly on conveying the intended message and assisting the other person in understanding it accurately and clearly. When employing this type of spoken language, teachers and students usually focus on meaning or speaking about what they understand.
- c. Talking in public is known as "talk as performance." This suggests that monologue is given more weight than dialog in speaking exercises. Speaking in public was done as a performance during speeches, story recounting, announcements, and other events.

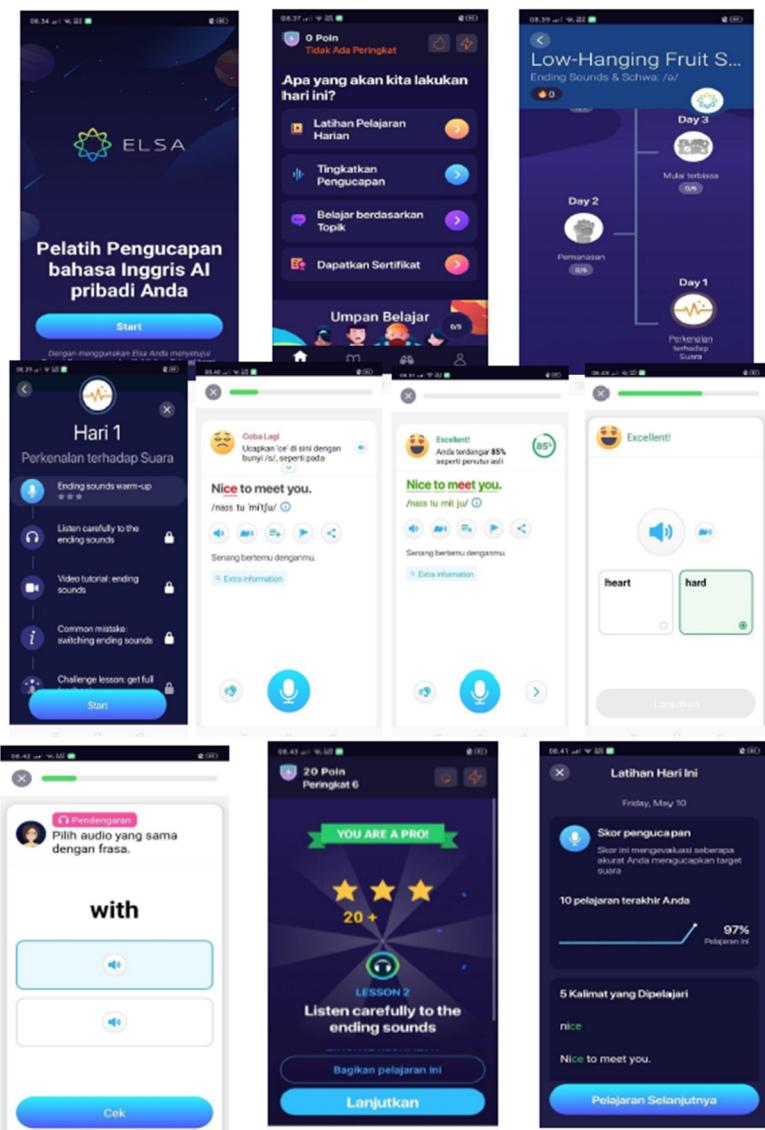
Students' future success is impacted by their ability to speak effectively and understandably in a foreign language, particularly English. As a result, it is crucial for teachers to focus heavily on teaching speaking. Because learning English requires producing words orally in order to communicate thoughts or messages, it is frequently thought that learning English is challenging. Students become bored and lose interest in participating in their lessons as a result

of the repetitive nature of the teaching and learning process in the classroom. Furthermore, one of the reasons why students' levels of English proficiency are low is the lack of learning materials. In order to encourage students to learn and speak English, teachers should use engaging and enjoyable teaching strategies (Hulu, 2018).

A review of the research revealed that speech recognition software, English podcasts, video conferencing, videos, mobile learning, and other technology-based learning platforms are excellent tools for EFL learners to acquire foreign languages (Panagiotis & Krystalli, 2021). Additionally, employing English learning applications can help students become more proficient in oral communication. These programs also allow students to speak the language and learn it naturally rather than through coercion (Ngu et al., 2021).

A word or sentence is first heard in an audio sample during the learning process, and it is then re-enunciated in accordance with what is heard and displayed on the screen. Speaking skills can also be improved by students using the ELSA Speak application's voice recognition feature, which converts spoken words into an input that computers can comprehend. Students are able to read more because the system scans less material as users' abilities increase (Nyandra et al., 2018). The software also assesses and assigns scores for pronunciation, understanding, word stress, vowels, and proper form usage. For instance, if a learner pronounces a word incorrectly, learning tools can quickly detect and assist in correcting it. Since teachers cannot modify the speech of distant learners, this voice recognition technology could be

Here are the steps to use the ELSA Speak application on smartphone:



- a. Open the Playstore or Appstore, search the “ELSA Speak” then download it.
- b. After following the steps as shown in the pictures, it means that you have entered the ELSA Speak application.
- c. On the home screen there are four menus, and choose the second menu.
- d. From the menu there are some steps for teaching speaking skill to students for treatment.

After hearing how the target voice is spoken, users can record themselves. ELSA assesses the recording's accuracy and offers feedback on both accurate and inaccurate pronunciation. When a word or sound is said correctly, a bell sounds and you can receive a score of up to 100; when you pronounce a sound or word incorrectly, you hear a buzzing sound and can listen to the recording of the erroneous pronunciation for comparison.

The software also gives the ability to connect to Younglish.com, a website that delivers YouTube videos with an audiovisual emphasis on particular sounds, words, or phrases, as well as a dictionary that provides the pronunciation of any word. Additionally, ELSA provides a feature known as "Progress" that has three components: a "Assessment," a "Word Bank," and a "ELSA Pronunciation Score" (ESP). Three sections—"Word Sound," "Word Stress," and "Conversation"—of "Word Bank" provide an overview of the progress made. Word stress evaluates syllable stress, whereas word sound provides input regarding specific phonemes.

A compilation of the results from ELSA activities makes up the second progress component, called EPS. Users can record thirteen sentences using the third progress element, "Assessment," which then offers feedback on

segmental problems such consonants, clusters, aspiration sounds, and schwa. In addition, ELSA gives users access to accurate score percentages and comprehensive reports.

- a. The Application Elsa's Speech Regarding Pronunciation of Students ELSA Speak is one resource that can be used to learn and improve pronunciation. Users can download this program for free from the App Store and Google Play Store. ELSA Speak offers various interesting and practical tools for learning speaking and pronunciation. This app has automatic speech recognition as one of its features. When training, users can receive immediate feedback thanks to this function.
- b. The Application Elsa's Speech Regarding Pronunciation of Students ELSA Speak is one resource that can be used to learn and improve pronunciation. Users can download this program for free from the App Store and Google Play Store. ELSA Speak offers various interesting and practical tools for learning speaking and pronunciation. This app has automatic speech recognition as one of its features. When training, users can receive immediate feedback thanks to this function.

The gamification strategy and appealing app design employed in this one also contribute to the app's ability to make learning more engaging. ELSA Speak has been widely used by people to enhance their pronunciation and speaking skills. ELSA Speak's importance has been demonstrated by a multitude of studies. Students' speaking abilities were significantly impacted by the English Language Speech Assistant (ELSA) application, as per the results of a study

conducted by Aswaty and Indari (2022).

The Advantages of Elsa Speak for Students' Pronunciation □ Content Design Providing students with a comprehensive approach to enhance their pronunciation abilities is a major focus of Elsa Speak. The program's content design makes use of a number of aspects in an effort to create a fun and effective learning environment. Interactive exercises that actively involve students in the learning process are provided by ELSA Speak. Users may be asked to mimic natural speakers, repeat words, sentences, or dialogues, or practice specific intonation patterns or sounds in these drills. These exercises promote involvement and help enhance pronunciation skills in a practical and enjoyable way thanks to their interactive format.

Speech recognition technology is also included in the application, which is crucial for providing students with accurate and timely feedback. As users speak into the app, the speech recognition algorithm analyzes their pronunciation and compares it to models for native speakers. Students can identify their areas of weakness and promptly improve their pronunciation by using this feedback. Gamification elements in ELSA Speak improve learning outcomes and inspire students. Gamification is the application of game-like features, such as leaderboards, levels, badges, and rewards, to encourage a sense of competitiveness and achievement. By earning prizes and climbing the levels, learners are motivated to keep improving their speaking abilities.

Personalized comments is yet another crucial component of ELSA Speak. The program also provides a detailed description of how to use prominence, intonation, word and sentence stress, vowel and consonant sounds, diphthongs, and syllabic constituents (Sarmita and Aminullah, 2019). Each student receives feedback that is

tailored to their own needs, enabling them to focus on the areas that require the greatest progress.

4. Educational and Training Planning

According to Sarmita and Aminullah's (2019) research, the ELSA Speak program offers a comprehensive solution to the issue of mispronounced words. Because the program specifically focuses on contrasting the varied sounds of each, learners will be able to notice and distinguish between the various vowel and consonant sounds. With the help of the app, users can learn these sounds more precisely and nuancedly by providing opportunities for practice and clear guidance. Furthermore, ELSA Speak can display and recognize semantic intonation patterns in addition to grammatical ones. Tone is the term for the pitch variation used in spoken language, which is a communication tool.

Regarding the exercises that ELSA Speak provides, the sounds and the directions are generated clearly. Students will be able to hear and understand the target sounds due to this clarity, which makes it easier for them to practice and mimic those sounds correctly. Clear instructions are beneficial to learners because they make it easier for them to follow the exercises and understand the specific objectives or tactics being covered. The main objective of ELSA Speak's design, according to Sarmita and Aminullah (2019), was to create a setting that facilitates a better understanding of the subject matter being studied. By contrasting the two, the application gives users a well-organized and intuitive platform for improving their English pronunciation.

5. E-learning

According to Khampusaeen et al. (2023), ELSA

Speak uses gamification elements to enhance user engagement and make learning more enjoyable. The technique of engaging and motivating users by introducing elements of games into non-gaming contexts, such as educational applications, is known as gamification. In the case of ELSA Speak, gamification is employed to encourage user motivation and a sense of competition. Using the app's achievements, awards, and leaderboards, users may monitor their progress and evaluate how they are doing in relation to other users. By receiving awards, reaching milestones, and seeing their names on leaderboards, users are encouraged to continue using the application and hone their pronunciation talents.

ELSA Speak uses gamification to infuse enthusiasm and interest into the learning process. It transforms the potentially tedious process of learning a language into an enjoyable educational endeavor. Because of this, users might get more excited and committed to using the app often, which could eventually result in improved speaking skills. It's critical to keep in mind that every user's experience with gamification will be unique, and that various users may find it motivating in varying degrees. But ELSA Speak's gamification features aim to enhance the user experience overall and make learning a language more appealing and enjoyable (Khampusaeen et al., 2023).

2. Automated Spoken Word Recognition

ELSA Speak makes use of automatic speech recognition (ASR) technology to provide users with quick feedback on how they pronounce words (Sarmita and Aminullah, 2019). Using ASR technology, the application analyzes user speech and compares it to

native speaker models, providing real-time feedback on a variety of pronunciation, rhythmic, intonation, and pacing difficulties.

With ASR technology, users of ELSA Speak can receive instant feedback on how effectively they speak words. By using this input to identify places where they might be having difficulty or making mistakes, users can immediately make improvements and modifications. Instant feedback is quite beneficial since it helps users concentrate on certain pronunciation problems and enhances their voice to sound more accurate and natural.

3. Entire School Environment Is Safe

Users can improve their English-speaking skills in a safe and accepting atmosphere with ELSA Speak (Saragih et al., 2021). This is made possible by the application's usage of artificial intelligence (AI) technology, which drives the learning process. Users can practice speaking English without concern for others' opinions because ELSA Speak is AI-driven. Unlike practicing with a live conversation partner or in a classroom setting, where people could feel self-conscious or worried about making mistakes in front of others, the AI engine underlying ELSA Speak eliminates the judgment component. Consequently, a judgment-free atmosphere is established that permits people to freely experiment and investigate their English-speaking talents.

Because ELSA Speak provides a safe practice environment, users are allowed to make mistakes. Making errors is an essential part of learning since it helps users identify their areas of improvement and apply the lessons they learn. Users are free to try new things, try new pronunciation techniques, and play

around with different intonation patterns without worrying about being judged or afraid of sounding unprofessional. With the freedom to make errors and grow from them, users gradually acquire confidence in their ability to communicate in English.

4. Personalized Electronic Remarks

Beyond only giving customers feedback on pronunciation, ELSA Speak goes above and beyond by offering tailored training and comments. The application modifies its recommendations based on the possibility that each user may have unique speech problems. When a user engages with ELSA Speak, they receive tailored feedback regarding their areas of difficulties. The program looks at how they often pronounce things and points out particular areas, such vocal tone, tongue position, or mouth shape, that may need work. ELSA Speak provides personalized recommendations on how users might adjust their pronunciation to increase accuracy in light of these findings.

5. For instance

If a user consistently struggles to produce a particular vowel sound, ELSA Speak may provide guidance on the appropriate lip shape or tongue position. In a similar vein, if a user frequently speaks with an incorrect voice pitch, the app might offer advice on how to adjust their intonation to sound more fluid and natural. By providing direction and tailored feedback, ELSA Speak helps users focus on their specific areas of difficulty and make targeted improvements. With the use of this customized method, users can address their specific pronunciation problems and improve their English-speaking proficiency.

6. Adaptability

ELSA Speak distinguishes itself with its versatility and adaptability by offering a range of customized solutions tailored to individual needs. Because the application can accommodate different learning schedules and speeds, users can learn at their own pace and allocate their time and effort according to their preferences. One of the main flexibilities of the application is the freedom it offers users with regard to learning intensity. Users have the discretion to choose how much or how little effort they choose to apply. Whether they have a lot of free time or little free time, the program adapts to their availability and allows them to grow at a rate that suits them.

Furthermore, ELSA Speak offers practice tasks and short courses. Because these learning tools are targeted and streamlined, users can complete them more quickly, making it easier for them to integrate learning into their busy schedules. To put it briefly, fair learning modules allow users to continuously engage with the program even when they are pressed for time.

Additionally customizable are the ELSA Speak user interface and experience. The application's straightforward and user-friendly design contributes to its ease of use (Kholis, 2021). The user-friendly interface and straightforward design, which eliminate any superfluous details and let users practice pronunciation without interruptions, enable a seamless learning experience.

Because of the program's adaptability, users can now accomplish their academic goals with greater control and comfort. It boasts a simple design, bite-sized course options, and support for various learning speeds.

These capabilities improve the overall effectiveness and user experience of ELSA Speak by allowing users to tailor their learning experience to match their own objectives and goals.

- a. Utilizing Elsa Speak AI can be challenging due to its technical sophistication. Elsa Speak AI and other generative AI algorithms are examples of highly complicated algorithms that can need certain prompt instructions in order to produce the best possible responses. There could be difficulties for users in comprehending and applying the AI technology.
 - b. Although Elsa Speak AI takes a novel method, it could not include the human element of coaching that is necessary for sophisticated language learning. The ability to obtain individualized feedback and instruction may be limited in the absence of direct human connection.
- b. Including in virtual education

Meeting the needs of students while incorporating Elsa Speak AI into online pronunciation instruction may provide challenges. It might be necessary for lecturers and educators to implement pedagogical strategies to enhance the virtual learning environment and guarantee efficient use of the AI platform.

CONCLUSION

Artificial intelligence (AI), which can be narrow or super intelligent, has had a significant impact on a number of industries, including transportation and healthcare. Its capacity to forecast and analyze massive volumes of data has created new opportunities and enhanced efficiency.

In the last five years, artificial intelligence has advanced remarkably and is now influencing individuals, organizations, and society in the real world. Since the field's inception in the 1950s, its fundamental issues of language and image processing have been greatly advanced by computer programs' capacity to carry out complex jobs in both domains. Research and development teams are making use of these advancements and applying AI to applications that will directly affect society, even if the field's original goal of fully replicating human intellect in machines is still far off. The application of AI methods in healthcare, for instance, is starting to take shape, and the brain sciences are both a beneficiary and a contributor to these developments.

The field's achievements have brought about a turning point, and it is now critical to consider the drawbacks and dangers that the widespread use of AI is exposing. With deliberate deepfakes or just unaccountable algorithms generating mission-critical suggestions, people may be mislead, subjected to discrimination, or even suffer bodily injury as a result of the growing ability to automate judgments at scale. Biases and inequality that already exist are likely to be reinforced and even made worse by algorithms that have been trained on previous data. Though computer scientists and scholars examining cognitive processes have traditionally been the domain of computer scientists and academics investigating AI, it has become evident that all fields of human inquiry, particularly the

social sciences, must be engaged in a wider discussion about the field's future. Reducing the adverse effects.

Looking ahead, several critical actions must be performed. Governments are crucial in influencing the advancement and use of AI, and they have been swiftly adapting to recognize the technology's significance for economics, science, and the process of self-governance. However, government institutions are still lagging behind, and continued time and financial commitment will be necessary to address the issues brought on by quickly advancing technology.

not only control the most significant effects of AI applications on society, but also plan ahead to guarantee the development of knowledgeable communities. One essential step to help prepare the next generation to live in and around artificial intelligence is to incorporate knowledge of AI principles and ramifications into K-12 education.

The AI research community itself must learn how to inform the public about significant trends and discoveries in a way that is both practical and educational, devoid of hype and transparent about the chances and advantages that come with them, as well as the risks and unexpected repercussions. It is imperative for AI researchers to acknowledge that total autonomy is not the ultimate objective for AI systems. As a species, we are strong because we can cooperate to achieve greater things than any one of us could do on our own. That system for the entire community must include AI, and there must be open channels of communication between automated and human decision-makers.

REFERENCES

- Williamson, Ben, Janja Komljenovic, and Kalervo Gulson, eds. *World yearbook of education 2024: Digitalisation of education in the era of algorithms, automation and artificial intelligence*. Taylor & Francis, 2023.
- Chen, Hong. "The ethical challenges of educational artificial intelligence and coping measures: A discussion in the context of the 2024 World Digital Education Conference." *Science Insights Education Frontiers* 20.2 (2024): 3263-3281.
- Abulibdeh, Ammar, Esmat Zaidan, and Rawan Abulibdeh. "Navigating the confluence of artificial intelligence and education for sustainable development in the era of industry 4.0: Challenges, opportunities, and ethical dimensions." *Journal of Cleaner Production* (2024): 140527.
- Forero-Corba, Wiston, and Francisca Negre Bennasar. "Techniques and applications of Machine Learning and Artificial Intelligence in education: a systematic review." *RIED-Revista Iberoamericana de Educación a Distancia* 27.1 (2024).
- Galindo-Domínguez, Héctor, et al. "An analysis of the use of artificial intelligence in education in Spain: The in-service teacher's perspective." *Journal of Digital Learning in Teacher Education* 40.1 (2024): 41-56.
- Rahiman, Habeeb Ur, and Rashmi Kodikal. "Revolutionizing education: Artificial intelligence empowered learning in higher education." *Cogent Education* 11.1 (2024): 2293431.
- Rahiman, Habeeb Ur, and Rashmi Kodikal. "Revolutionizing education: Artificial intelligence empowered learning in higher education." *Cogent Education* 11.1 (2024): 2293431.

- Alier, Marc, Francisco García-Peña, and Jorge D. Camba. "Generative Artificial Intelligence in Education: From Deceptive to Disruptive." (2024).
- Yang, Yuqin, et al. "Artificial Intelligence for Enhancing Special Education for K-12: A Decade of Trends, Themes, and Global Insights (2013–2023)." *International Journal of Artificial Intelligence in Education* (2024): 1-49.
- Guo, Shuchen, Yuanyuan Zheng, and Xiaoming Zhai. "Artificial intelligence in education research during 2013–2023: A review based on bibliometric analysis." *Education and Information Technologies* (2024): 1-23.
- Agheli, Pouya, et al. "Effective communication: When to pull updates?." *ICC 2024-IEEE International Conference on Communications*. IEEE, 2024.
- Fadlan, Muhammad. ANALYSIS OF SPEAKING DIFFICULTIES FACED BY THE SECOND SEMESTER STUDENTS IN THE ENGLISH EDUCATION STUDY PROGRAM AT JAMBI UNIVERSITY ACADEMIC YEAR 2023/2024. Diss. Universitas Jambi, 2024.
- Chen, Hong. "The ethical challenges of educational artificial intelligence and coping measures: A discussion in the context of the 2024 World Digital Education Conference." *Science Insights Education Frontiers* 20.2 (2024): 3263-3281.
- Bankins, Sarah, et al. "A multilevel review of artificial intelligence in organizations: Implications for organizational behavior research and practice." *Journal of Organizational Behavior* 45.2 (2024): 159-182.

- Habbal, Adib, Mohamed Khalif Ali, and Mustafa Ali Abuzaraida. "Artificial Intelligence Trust, risk and security management (AI trism): Frameworks, applications, challenges and future research directions." *Expert Systems with Applications* 240 (2024): 122442.
- Kemp, Ayenda. "Competitive advantage through artificial intelligence: Toward a theory of situated AI." *Academy of Management Review* 49.3 (2024): 618-635.
- Pinnington, Ashly, Farzana Asad Mir, and Zehua Ai. "The significance of general skills training for early career graduates: relationships with perceived organizational support, job satisfaction and turnover intention." *European journal of training and development* 48.7/8 (2024): 705-729.
- Yu, Xiaofei, Tengtian Ai, and Kai Wang. "Application of nanogenerators in acoustics based on artificial intelligence and machine learning." *APL Materials* 12.2 (2024).
- Pamungkas, Aji. "The Role of Students as Agents of Change in Increasing Young Voter Participation in the 2024 General Election." *of International Conference on Social Sciences*. 2023.
- Zhang, Hongen, et al. "Investigating the influence of fibre type and content on the toughness and ductility of geopolymers mortar with acoustic emission technology." *Cement and Concrete Composites* 147 (2024): 105434.
- Nazarov, Behzod. "ENGLISH SPEAKING: TIPS FOR IMPROVING PUBLIC SPEAKING, CONVERSATION SKILLS, AND PRONUNCIATION." *Talqin va tadqiqotlar* 2.2 (39) (2024).

- Bashori, Muzakki, et al. "Look, I can speak correctly': learning vocabulary and pronunciation through websites equipped with automatic speech recognition technology." *Computer Assisted Language Learning* 37.5-6 (2024): 1335-1363.
- Manurung, Lastri Wahyuni, Christina Natalina Saragi, and Apriani Silviani Sitinjak. "Diagnosing The English Department Students' English Vowel And Consonant Pronunciation Errors By Using Elsa Speak Application." *Innovative: Journal Of Social Science Research* 4.1 (2024): 3673-3686.
- Permatasari, Suci, and Yani Lubis. "ENHANCING PRONUNCIATION SKILLS IN EFL STUDENTS THROUGH THE ELSA SPEAK APPLICATION." *Indonesian EFL Journal* 10.2 (2024).
- Bollelgala, Danushka, and Vered Shwartz. "Proceedings of the 13th Joint Conference on Lexical and Computational Semantics (* SEM 2024)." *Proceedings of the 13th Joint Conference on Lexical and Computational Semantics (* SEM 2024)*. 2024.
- Senowarsito, Senowarsito, Agnesia Stefanny Susanto, and Sukma Nur Ardini. "Learning Pronunciation Using Record, Listen, Revise (RLR) Method in Dictionary Speech Assistant-ELSA Speak Application: How the Flow of Thinking Goes." *Journal of Languages and Language Teaching* 12.2 (2024): 883-894.
- Hammond-Tooke, William David, ed. *The Bantu-speaking peoples of southern Africa*. Taylor & Francis, 2024.
- Che, Ziyuan, et al. "Speaking without vocal folds using a machine-learning-assisted wearable sensing-actuation system." *Nature Communications* 15.1 (2024): 1873.
- Chen, Yi-chen. "Effects of technology-enhanced language learning on reducing EFL learners' public speaking

anxiety." *Computer Assisted Language Learning* 37.4 (2024): 789-813.

BIOGRAPHY



Mangnguluang. P is an English teacher and vice principal for students at UPT SMP Negeri 4 Binamu, Jeneponto Regency, Indonesia. He has been teaching for about 15 years. 1st degree graduate at Muhammadiyah University of Makassar. Currently he is focusing on completing his master's program in the English department at YPUP Makassar, Indonesia. He has undergone various training as a teacher, including how to implement the Independent Curriculum in schools.



Juandi Pronelo received a bachelor's degree in 2011 from the STKIP YPUP Makassar, Indonesia. He is now (2024) as an English teacher at a junior high school. He had attended English teacher professional education for about 3 months in 2021. He is currently pursuing a master's degree in English education at STKIP YPUP Makassar. He can be contacted at anditupalangi@gmail.com



Nirmala M., is an English teacher at junior high school 6 Bontoramba, Jeneponto, South Sulawesi, Indonesia. She has been teaching there for almost 9 years. She completed her undergraduate education in 2014 at the University of Muhammadiyah Makassar majoring in English education. And is currently in the process of completing her master's program at STKIP

YPUP Makassar, South Sulawesi, Indonesia with a major in English education.



Hasnawati was born in Bonto Baddo on September 9th, 1986. she is an English teacher at Junior high School Satap 8 Binamu Jeneponto South Sulawesi, Indonesia. She has been teaching 2010 until now. Bachelor degree graduate from Makassar State of University and is currently in the process of completing a master's program in English education at STKIP YPUP Makassar, Indonesia. She is active in English teacher's deliberation organization. She can be contacted at hasnawatihasnawati461@gmail.com



Nurhaeda Badaruddin was born in Ujung Pandang, South Sulawesi on March 3rd, 1983. she is an English teacher at Junior high School 1of 18 Makassar South Sulawesi, Indonesia. She has been teaching 2008 until now. Bachelor degree graduate from Makassar State of University and is currently in the process of completing a master's program in English education at STKIP YPUP Makassar, Indonesia. She is active in English teacher's deliberation organization.



Nurmadinah Waris finished her undergraduate program at Makassar State University. Currently, she is registered as an English teacher at State Junior High School 4 Polewali, West Sulawesi, Indonesia. Previously, she has had over a decade of teaching experience in various formal and non-

formal institutions. In addition to teaching, she also has a great passion for literacy, art, and photography. She has published several anthology books and is actively involved in managing online classes on drawing and photography. Currently, she is completing a postgraduate program in English Language Department at YPUP Makassar, Indonesia.



Muthmainnah is a senior lecturer at Universitas Al Asyariah Mandar in West Sulawesi, Indonesia. She has extensive experience as a lecturer, global speaker, and international leader. Muthmainnah has held numerous positions at her university, including Chairman of the Indonesian Language Department, Public Relations Officer, Director of Women's Centre Studies, Deputy Director of Quality Assurance Unit, and currently, Deputy Director of the Language and Character Development Institute. Muthmainnah is also an accomplished author, having written 81 national and International books, published by esteemed publishers such as IGI Global, Springer, Emerald, Wiley, Taylor and Francis



Luís Miguel Cardoso holds a PhD in Modern Languages and Literatures, in the speciality of Comparative Literature from the University of Coimbra, Portugal. He was Dean of the School of Education and Social Sciences of the Polytechnic Institute of Portalegre, Portugal, between 2010 and 2018 and Deputy Director of the Master in Media and Society. He was President of ARIPESE, Association of

Reflection and Intervention in the Educational Policy of Higher Education Schools in Portugal (2015 – 2018) and Coordinator of the Communication Bureau of the Polytechnic Institute of Portalegre (2013 – 2017). Adjunct Professor at the Department of Language and Communication Sciences at the School of Education and Social Sciences of the Polytechnic Institute of Portalegre, Portugal, he has been a professor of Higher Education since 1995 and is currently a researcher at the Centre for Comparative Studies at the University of Lisbon. He is a member of several international organizations and associations, as well as a member of the editorial board of international journals in the areas of Language and Communication Sciences, Comparative Literature, Literature and Cinema, Literacies and Education.



Hussain A. Younis received a bachelor's degree from the University of Basrah, Iraq, and master's from Shiats University, India. He is currently pursuing a Ph.D. in the School of Computer Sciences, Universiti Sains Malaysia (USM). He is a lecturer in the College of Education for Women, University of Basrah. His research interests include artificial intelligence, electronic education, robots, image processing, pattern recognition, QR codes, biometrics, and intelligent information systems. He can be contacted at hussain.younis@uobasrah.edu.iq



Dr. Ali Said Al-Matari – Mathematics Instructor at A'Sharqiyah University PhD in Arts, Humanities and Translation. Ambassador of the Varkey International Teacher Award. Among the top 50 teachers in the world for the year 2017 in the Global Teacher Award, winner of the Khalifa Award for Excellence in the category of creative teacher in the field of public education in the Arab world for the year 2016/2017. Second place in the Faisal Bin Qassim Al Thani Award for Educational Research for the category of teachers in the Gulf countries 2016. Researcher in sociology, educational administration, curricula, teaching methods, and integrating technology with education. Intel Tutorial Instructor. Member of the Oman Association for Educational Technologies (OSET). Member of the Gulf Society for Comparative Education (GCES). She has participated in presenting papers in many local, regional and international conferences. An expert from Microsoft 2020, I have more than 70 published scientific papers. Oversaw the implementation of more than 1,000 technical projects within the Intel Educational



Ahmad Al-Yakin, He is an associate professor at Universitas Al Asyariah Mandar in West Sulawesi, Indonesia. He is a lecturer, a national speaker, and a leader. He was the chairman of the civic education department at the teacher training and education faculty, and he was Assistant Dean at his university, to name a few of her accomplishments at his university. He is now the vice rector of Universitas Al Asyariah Mandar

university. In the current year, he is active as a lecturer, researcher, and national coordinator of Merdeka Belajar Kampus Merdeka, on the advisory boards of Language, Character Institution, and Women's Centre Studies, and on the advisory board of the Students Association at his university. He is also active as a member of the Indonesian Association of Pancasila and the Civic Education Profession and author of 50 books published by Emerald, Springer, IGI, Roudledge, Taylor and Francis

He also has excellent experience as a visiting professor at Celebification and lectures on research methods, smart digital classroom and education management, and many other topics relevant to sociology research and teacher development, SDGS for quality education, and quality enhancement in higher education.

His interests and doctorate areas are Sociology, Sociology Education, AIEd, and Social Science. He is ready for national and international collaboration and teamwork.



Dr. Eka Apriani, M.Pd. is an English Lecturer at English Tadris Study Program of the Faculty of Tarbiyah in Islamic State Institute of Curup.

She is a Editor in Chief in Journal of English Franca and International Journal of Education Research and Development. She is also the secretary of Corolla Education Centre Foundation, Indonesia. She Received her Master Degree (Master of Language Education) from Sriwijaya University in 2013 and Doctor of Education in Bengkulu University 2022.

She has published some researchs in international journal and national journal. She has Scopus Id and WOS Id. She is a member of profession organisations: ADRI, TEFLIN,

PDPI, and ELITE. She is treasurer of ADRI in Bengkulu Province.

Her research interest is in Writing skill and ICT in learning English. She write some books: The beauty of Rejang Lebong, Semantics Crossword, Metode Pengajaran BIPA, Drama Manuscript: The Marriage of Siti Zubaidah, etc. She has also some Intelektual Property Right: Semantics Crossword, The beauty of Rejang Lebong, The Marriage of Siti Zubaidah, Metode Pengajaran BIPA, etc.



Dadan Supardan, S.Si, M.Biotech. is an Lecturer at PGMI (cri bhs ingfrisny) Study Program of the Faculty of Tarbiyah in Islamic State Institute of C urup.

He is a Journal Manager in the Journal of English Franca and the International Journal of Education Research and Development. He is also the president of Corolla Education Centre Foundation, Indonesia. He Received his Master Degree from Gajah Mada University in 2013. He has published some research in international journals and national journals. He has Scopus Id and WOS Id. He is a member of profession organisations: ADRI and HPPBI.



9 788198 213716

Published by:



CAPE FORUM OF BY AND FOR YOUR TRUST PUBLICATIONS

Kaniyakumari | Tamilnadu | India

Email: capeforumyoutrust@gmail.com

Website: <https://www.Capeforumyoutrust.org>

Copyright © 2025 by CAPE FORUM – YOU TRUST, All rights Reserved.