ENHANCING SPEAKING SKILL THROUGH AI-POWERED TECHNOLOGY

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Abstract. *Artificial Intelligent (AI) is a field of computer science devoted to solve cognitive problems, commonly associated with human intelligence, such as learning, problem solving and pattern recognition. From education point of views, it helps teachers to facilitate learning process especially for speaking skill. The research method runs with mixed method (qualitative. And quantitative) The aim of this research is investigating the students' speaking performance with artificial intelligence. The data collection is taken from interviews, photo, and literature studies. The result of this study is the increasing student's speaking performance with AI.*

Keywords: AI, speaking

Abstrak. Kecerdasan Buatan (AI) adalah bidang ilmu komputer yang dikhususkan untuk memecahkan masalah kognitif, yang umumnya terkait dengan kecerdasan manusia, seperti pembelajaran, pemecahan masalah, dan pengenalan pola. Dari sudut pandang pendidikan, hal ini membantu guru untuk memfasilitasi proses pembelajaran khususnya untuk keterampilan berbicara. Metode penelitian dijalankan dengan metode campuran (kualitatif. Dan kuantitatif). Tujuan dari penelitian ini adalah menyelidiki kinerja berbicara siswa dengan kecerdasan buatan. Pengumpulan data diambil dari wawancara, foto, dan studi pustaka. Hasil dari penelitian ini adalah peningkatan kemampuan berbicara siswa dengan AI.

Kata Kunci: AI, Speaking

INTRODUCTION

Adapting to the technological development has become very necessary nowadays and certainly the transformation will continue at any time. Proper way for grabbing benefit of this sophistication is utilizing as much as possible and apply it in everyday life. From the picture of education, adequate theoretical and practical provisions guide students proficient to the existing technology either as a source of learning or source of information. Entering the era of society 5.0, education in Indonesia have to prepare human resource development, synchronize education and industry and use technology as a tool for teaching and learning activities so as to produce high quality graduates. (Bhakti, 2018).

Artificial Intelligence has been widely implemented in educational practices. This AI studies have grown consistently over time. Many researchers began to discuss about technologies in education. The use of AI in learning English significantly increases the participants' abilities in listening, speaking, reading and writing skills (Abimanto, 2023).
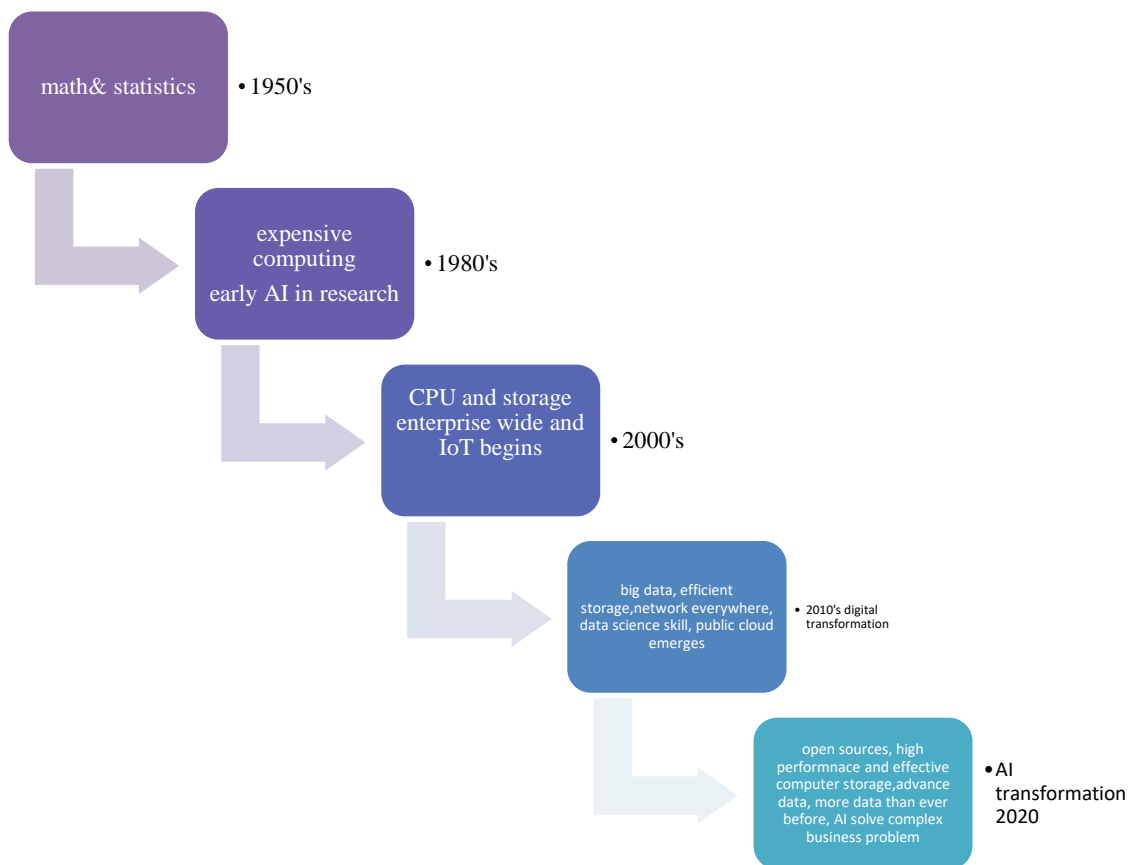
Numerous benefits of AI for learning technology pouring all aspects of the learning process (Sidabutar,2022). AI has the potential to enhance English learners' communication skills by providing personalized and interactive learning experiences. Exploring the opportunities and challenges presented by AI can develop English speaking skills. (Rusmiyanto, 2023).

Therefore, this research focuses on supporting students' speaking performance with availability of AI to support the learning process. With the sophistication of AI, it is expected that will provide convenience for teachers in improving teaching materials, learning methods, and the learning evaluation process as well as pay close attention to such development and trends.

LITERATURE REVIEW

AI Transformation

AI has an affluent history in education which characterized by adaptive learning systems and personalized instruction that evolves continuously. AI in education opens many sources for learning English teaching language through applications (Siemen, 2013). Below is chart of AI transformation from the early until present:

Figure 1. AI transformation

Application Domain on Artificial Inteligence

The AI has three groups domain namely cognitife, robotic, and AI user interface (Islam,2022). Below is the explanation:

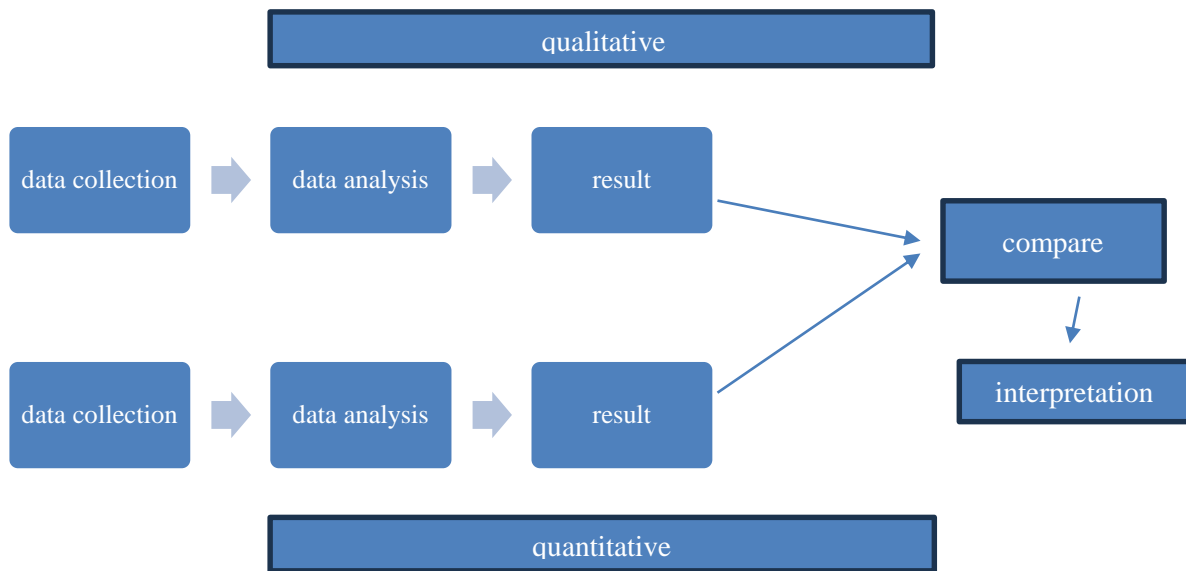|	
Cognitive application	Expert Systems Learning Systems Fuzzy Logic Algorithms Genetics Neural Networks Intelligent Agents
Robotic Application	Visual Perception, Stimulation, Dexterity, Moving Force, Navigation
Natural Interface Application	Natural Language Recognition, Conversation Interface, Multisensor Virtual Reality, Artificial Intelligence

Table 1. Domain on AI

Definition of Speaking

Wallace (1978: 98) defines speaking as a meaningful oral practice, so people have to understand every word he says because it uses a foreign language. This speaking ability will support a person to express interesting ideas orally. based on Harmer's opinion (in Tarigan, 1990:12). speaking skills can be obtained by applying three things, namely introducing a new language, practice, and communicative activities. Ladouse (1991) which defines speaking as the ability to express oneself. Speaking is also referred to as an action to report through the words spoken with the ability to speak.

RESEARCH METHOD

This research runs with Mixed methods research which is an approach to investigate behavioral, social, and health-related problems by collecting and analyzing quantitative and qualitative data strictly in response to research questions, and integrating or "mixing" the two forms of data in a particular research design to produce the best results. new and more complete insights or understandings than what might be gleaned from quantitative or qualitative data alone. these procedures may be framed by theory and/or philosophy or world view (creswell, 2018).

Figure 2. research design approach (Adopted from Creswell 2012)
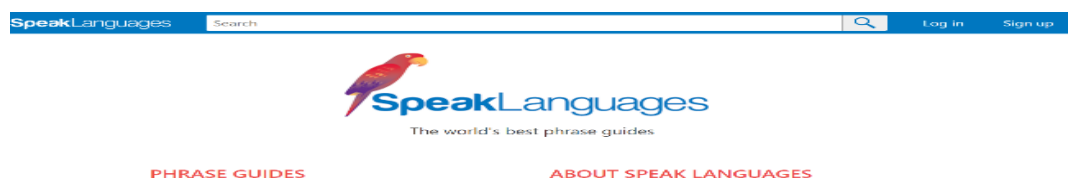
DISCUSSION

AI-Based English Learning

The rise of artificial intelligence (AI) technology removes the classic statement such as learning English can be difficult, time-consuming and expensive endeavour. By now, learning English can be done in anywhere, anytime, and anyhow.

AI technology offers a variety of interactive experiences such as playing games that can simultaneously use conversations with virtual characters, providing lessons according to personal needs, preparing tips and suggestions for improving English skills, and AI also provides English lessons from the lowest to the highest levels. Following are the example of AI-Based English Learning.
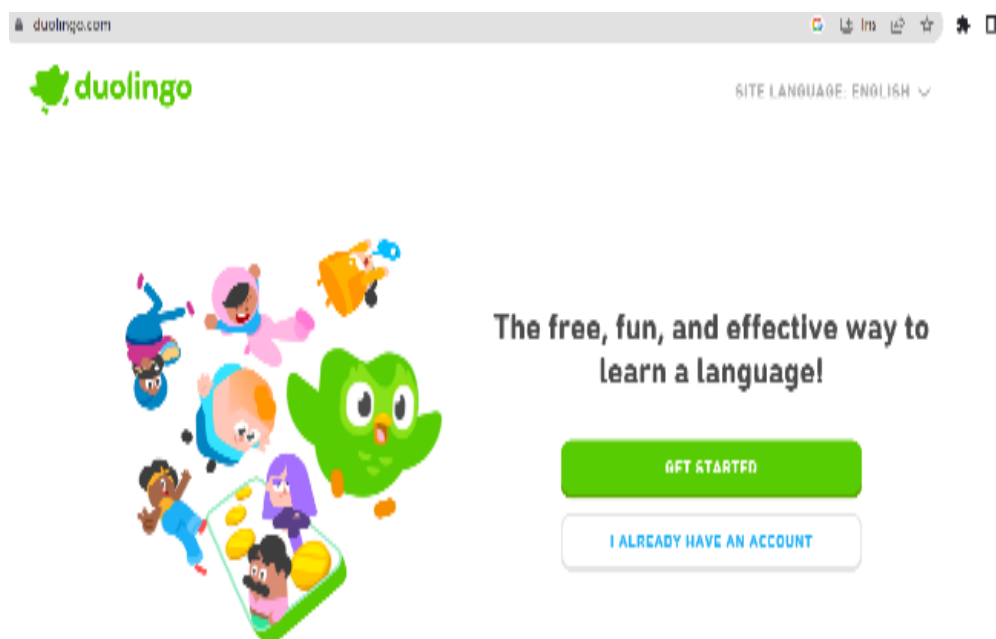
1. Speaklanguages

    This site is completely free. The main purpose of speak language is to give English materials specifically for adults who want to deep learning about English because this site prepares in depth phrase guides which covering all the important phrases, vocabulary lists allow fast acquisition of important word, and also provide high quality sound professionally recorded by native speaker

Figure 1 speaklanguage website

2. Duolingo

    Giving the latest assessment science and AI empowering whomever for personalized english skill testing. It also presents a test called the Duolingo English Test (DET) as a certification used for tertiary registration requirements. Duolingo English Test (DET) as an ideal choice because you can take it without leaving your home. The costs incurred to take DET are not as expensive as the costs incurred when registering for IELTS or TOEFL. This test takes around 1 hour and the process to get a score only takes two days.

Figure 2 duolingo website

3. SmallTalk2Me

SmallTalk2.me is a Google Chrome extension that can recognize your voice when on a Zoom or Google Meet call. This tool analyses your voice, identifies your speech, and can then suggest words, phrases and even grammar. The step using this AI by clicking start recording, take two minutes test, then receive detailed feedback instanly, and finally select the best feature.

Figure 3 SmallTalk2Me website

4. Elsaspeak

ELSA (English Learning Speech Assistant) Speak is the world's smartest English pronunciation trainer that can listen to the way we pronounce words and sentences to pinpoint mistakes and provide accurate judgments. ELSA can provide specific suggestions to improve English skills.
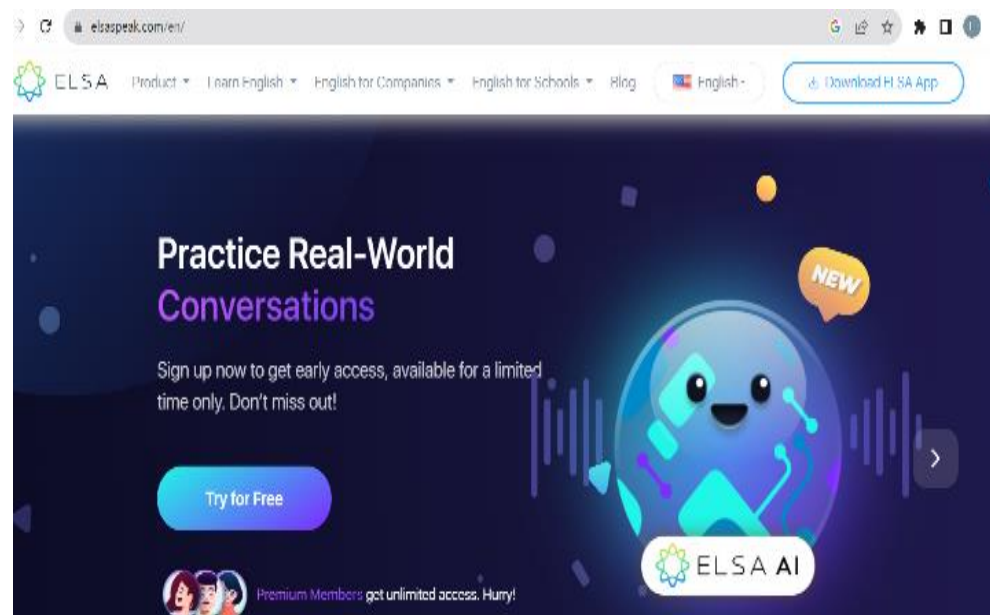

Figure 4.Elsaspeak website

Student's Performance with AI-Powered Technology

From the questionnaire and pre and post test that have been distributed about student's performance with AI-Powere Techology, it can be stated that all students have been reached the speaking performance with AI-Powered Technology.

CONCLUSION

Artificial intelligence is a field of computer science specifically aimed at creating software and hardware that fully mimics some of the functions of the human brain. Four popular AI-Powered for learning English help students to increase their speaking performance

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