THE EBB AND FLOW OF LEARNING ENGLISH AS A SECOND LANGUAGE IN THE AGE OF AI

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ABSTRACT

The emergence of Artificial Intelligence (AI) has significantly improved English as a Second Language (ESL) in higher education. AI tools like Wordtune, Questgen AI, Duolingo, Taskade, and Memrise can help learners improve their language skills, improve intercultural understanding, and enhance communication abilities. These tools play a crucial role in global corporations and AI-dependent industries. Wordtune is an AI-driven writing tool that enhances language skills by identifying grammatical errors, providing instant feedback, and suggesting alternative words, thereby improving accuracy and fluency. Questgen is an AI tool that creates interactive learning materials, assessments, and language practice tasks, including vocabulary quizzes and flashcards, to aid learners in memorizing and reinforcing new words. Duolingo is a language learning app that uses gamification to make language learning enjoyable for all skill levels, offering personalized feedback and points. Taskade is a tool that enhances language learning productivity by facilitating collaboration, planning activities, monitoring progress, and promoting motivation among learners. Memrise is a popular language learning app offering interactive courses, multimedia elements, spaced repetition, and community features like discussion forums and social sharing. Thus, this paper deals with the ebb and flow of afore-mentioned AI tools in learning English as a Second Language. The authors would analyse the use of AI tools in accelerating the progress of students' English language learning as a second language in the age of AI.

KEYWORDS: *AI tools, English as a Second Language, Language Skills, Analysis, Assessment*

INTRODUCTION

In today's world, using technology has become inevitable. Technology has not only changed people's lives, but it has also affected the way we work, interact, and learn. Innovations of all kinds are always emerging, improving the practicality and efficacy of our activities and job. Artificial Intelligence has made it possible to provide the digital learning content that is being developed today. AI as the foundation of the modern era 4.0 is essential for supporting the technologically mediated learning process (Fitria, 2021)**.** However, there are many variables involved in the intricate process of acquiring a language, and there are many potential results. The degree of acculturation, the volume of intelligible information, the attention paid to second language characteristics and aspects, and the availability of opportunities for meaningful negotiation and production are the factors that specifically impact language learning (Woo & Choi, 2021)**.** Individuals deliberately endeavor to enhance their language proficiency when they pick up more languages.

In order to acquire the four fundamental language skills—reading, writing, speaking, and listening—this process entails comprehending vocabulary and grammar.In the last few years, AI language learning systems have advanced significantly in terms of both their functionality and usability. Many of these tools now provide immersive and interactive learning through the use of virtual reality and augmented reality. AI has benefits and drawbacks for language learning, including the requirement for increased human engagement and the challenge of accurately capturing contextual and cultural subtleties (De la Vall & Araya, 2023)**.** There is no denying these technologies' ability to have a significant impact on schooling in the future. It is our duty as educators and researchers in education to accept accountability for our part in assisting students in acquiring the abilities and information necessary for success. In order to support our students in their future pursuits, we contend that banning the use of AI-based tools in the second language classroom will only harm their learning and chances for success outside of the classroom. Consequently, we need to find a way to tame the beast of AI (Tseng & Warschauer, 2023).

In this connection, this paper discusses the AI tools; Wordtune, Questgen AI, Duolingo, Taskade, and Memrise and their significance in improving the English language. Wordtune, Questgen AI, Duolingo, Taskade, and Memrise are some of the AI tools that are used in the process of learning English as a second language. The authors of this paper examine how these tools can be used to improve students' English language learning in the age of AI by adjusting content and difficulty based on user

performance and preferences, tracking progress, and making personalized recommendations.

REVIEW OF LITERATURE & ANALYSIS OF AI TOOLS

Wordtune: The development of artificial intelligence (AI) technology has greatly advanced society. Writing assistants driven by artificial intelligence (AI) have drawn more attention from English as a second language (ESL) communities in recent years. But the majority of these online writing resources concentrate on the editing and revision phases. There aren't many digital tools designed to support users when they write, such as helping them organize or translate their thoughts into written form. Wordtune is an AI-powered writing aid that comprehends the writer's ideas and offers alternatives for recreating them in various lengths and tones (e.g., professional, informal). With the use of this tool, ESL writers can learn how to write in English consistently and in meaningful ways. In higher education, the use of AI-powered tools for writing instruction has grown in recent years. Examples of these tools include Intelligent Tutoring System (ITS), Automated Writing Evaluation (AWE), and Automated Essay Scoring (AES) (Zhao et al., 2024). Wordtune caters to users of varying writing skill levels. For example, Wordtune lets novices translate words and phrases from other languages into English. This even allows a user to have an English paraphrase of the source text with a few non-English words. With Wordtune's multiple rewrite feature, more experienced L2 learners can improve the quality of their writing. Intermediate users can choose the right words and concise sentence patterns for their prose by evaluating and comparing these rewrites (Fitria, 2021).

Advantages Of Wordtune
Improvement of Vocabulary: Wordtune could be a mnemonic for memorizing methods that improves students' retention of new words and their definitions. To help with retention, this could entail matching words to catchy songs or melodies.

Tailored Comments: Based on each learner's unique strengths and shortcomings, an AI language learning program like Wordtune may offer them individualized feedback. Learners can use this feedback to focus on particular areas for improvement, such pronunciation, grammar, or vocabulary usage.

Learning that adapts: Wordtune may modify its activities and material in response to the development and performance of the learner. Through the analysis of learner data, including regions of difficulty and exercise replies, the tool is able to dynamically modify the content and level of difficulty to meet the needs of the user.

Help with Composition and Grammar: Wordtune can help students improve their writing and correct their grammar. The tool's use of natural language processing (NLP) algorithms could help writers become more fluent and clear by spotting grammatical mistakes, making suggestions for improvements, and providing alternative wording.

Practice Pronouncing Words Correctly: Wordtune may have features for pronunciation practice, such as voice recognition software that evaluates and reports on the accuracy of learners' pronunciation. When speaking in the target language, this can help learners sound more natural and enhance their spoken language abilities.

Interactive and Captivating Learning: Wordtune could use interactive exercises and gamification components to increase learners' enjoyment and engagement with language acquisition. Through the use of features like progress tracking, challenges, and incentives, the program can encourage users to remain dedicated to their language learning process.

Disadvantages Of Wordtune
Overuse of technology: Learning should not be passive, with students not actively using the language or honing their critical-thinking abilities if they rely too much on online resources such as Wordtune.

Limited Language Content: Students studying less frequently taught languages may discover less resources or help than those studying more generally spoken languages, depending on the language or languages that Wordtune supports.

Possible Distraction: Wordtune's gamified and interactive features run the risk of diverting students from their intended language study, which could result in ineffective study techniques or a shorter attention span.

Questgen AI: Numerous online resources have been developed to automatically produce questions from any text section and their succinct responses. The comparison's criteria such as; maximum text size permitted, question types that can be generated, maximum number of questions that can be generated with the tool, instrument availability (free vs paid), language in which text can be entered, automatic vs manual intervention, duration of task completion as determined by our experiment, and algorithm used by this tool to generate the question. Advanced artificial intelligence algorithms and computational linguistics are the foundation of the Questgen Question Generator (QG) tool4. There are numerous models of transformers utilized, including GPT-3, GPT-2, T5, and BERT. It can be accessed via an open-source NLP library, an application, and an API. There is a trial version available, however it only allows for 15 free attempts. An API and application subscription is needed to access features and try them all at no cost. The application and API are more accurate than the free and open-source Questgen QG library. It is possible to construct three different kinds of questions: multiple-choice (MCQs), Boolean (yes/no), and short-answer. After choosing the type of inquiry and inserting a text message of between 50 and 500 words, the user can expect the questions and answers to show up in seven seconds (Alnefaie et al., 2023).

NLP models are able to produce text that incorporates functional game elements, such as tasks and relationships, and produce a player narrative that is aware of the player's surroundings. Word probability is predicted using Bidirectional Encoder Representations from Transformers (BERT) in a given context. For quests, we employ BERT in PCG by selecting words from a list according to the given score. This then acts as a cue for a different model that we employ: trained on a sizable corpus of English text data, the Generated Pre-trained Transformer 2 (GPT-2). GPT-2 was created expressly to produce writings in response to prompts (Al-Nassar et al., 2023). Human respondents are asked to grade the generated quests according to the specified criteria in a poll designed to assess the quality of quest generation using LLMs. The quest generating model's level of hallucination or how incorrectly the quests relate to the story is measured by contradiction, progression value, relatedness, and coherence. Relatedness and coherence also measure how well the created quest represents the story (Mishra, 2023).

Advantages of Questgen AI
Time Management: When preparing tests, quizzes, or study materials, educators can save a lot of time by using Questgen AI, which can quickly produce a huge number of questions on a variety of topics.

Personalization: To ensure that assessments closely match the curriculum and instructional goals, users can modify the generated questions to fit particular learning objectives, levels of difficulty, or formats.

Continuity: Questgen AI can reduce potential biases or inconsistencies that may occur from manual question development by maintaining consistency in question structure, formatting, and difficulty level.

Adaptability: The tool offers a wide variety of question kinds, including multiple-choice, true/false, short answer, and essay questions, to satisfy different assessment demands. It can also adjust to individual learning styles and preferences.

Accessibility: Questgen AI can increase the accessibility of educational resources for students in underserved or distant places where access to traditional learning materials may be limited by automating the development of questions.

Feedback Generation: Questgen AI can produce explanations or feedback for both right and wrong responses in addition to questions. This feature improves learning by offering insightful information and support.

Engagement: Questgen AI-generated well-written questions have the power to effectively engage learners by fostering critical thinking, problem-solving abilities, and a deeper comprehension of the material.

Constant Enhancement: By using feedback loops and data analysis, Questgen AI can continually learn from and enhance its question-generation skills, guaranteeing that the relevance and quality of created questions change over time.

Disadvantages of Questgen AI
Insufficient Contextual Knowledge: Questgen AI may find it difficult to fully understand a topic or issue, which could result in the creation of questions that are superficial, inappropriate, or irrelevant.

Managing Subjective Content: Questgen AI may have trouble coming up with questions on qualitative or subjective subjects when there are no absolute right or incorrect answers. This can make it less applicable in fields like philosophy or literature.

Quality Control: Questgen AI may generate questions that differ in terms of quality, accuracy, and relevancy if appropriate supervision and quality control procedures aren't in place. To guarantee that the generated questions are appropriate for assessment, educators must examine and validate them.

Limited Creativity: Questgen AI might have trouble coming up with original or open-ended questions that call for higher-order cognitive abilities like synthesis, analysis, or problem-solving. This might make it less useful for evaluating intricate learning goals.

Duolingo: Approximately 95 languages are available for learning on Duolingo as of the time of the current systematic review, and users can also learn languages other than English. First, users select the language they want to learn, and if they know a little bit about the subject already, they can take a placement test. They receive bonuses for reaching daily goals of earning a specific number of experience points. The Streak is increased by one day for each lesson finished on a given day (achievement), and it is reset to zero if no lessons are completed on any particular day (reinforcement). The program occasionally presents the user with optional challenges, such extending the streak for a number of extra days, comparing experience points with players in other leagues, or rewarding the user when the task is finished (Shortt et al., 2023). At first, Duolingo was designed to be a fun and free online language learning tool that would be enhanced by user translations. Badge is one of Duolingo's key features. A badge is a visual, online depiction of an accomplishment that is defined as a prerequisite for achieving objectives, moving forward, and producing outcomes in an educational setting. The primary objective of the badges is to increase students' motivation for their studies (Inayah et al., 2020). Duolingo is favored over traditional assignments and media due to its ease of use. This indicates that Duolingo is more engaging and simple to use, making it a comfortable choice for use as a teaching tool in the classroom (Ajisoko, 2020).

Advantages of Duolingo
Availability: Anyone with a device, such as a computer or smartphone, and an internet connection can use Duolingo. Users

can easily participate in language learning at any time and from any location because of this accessibility.

Interesting User Interface: To make learning interesting and pleasurable, the platform uses gamification strategies including leveling up, earning points, and receiving incentives. This can support consistent practice and help sustain motivation.

Tailored Education: Duolingo's algorithm provides activities and content that are tailored to each user's learning preferences and level of proficiency. Users are able to focus on areas that require improvement and learn at their own pace thanks to this customized method.

Language Variety: Duolingo provides lessons in a large number of languages, including less often taught languages like Swahili and Welsh as well as well-known languages like Spanish and French. Users can investigate languages of curiosity or practical utility thanks to this variety.

Interactive Lessons: Text-to-speech technologies, graphics, audio, and other multimedia components are all incorporated into the platform's interactive lessons. This multimodal method improves understanding and helps with retention.

Tasks for Developing Skills: Duolingo offers tasks that address a range of language skills, such as grammar, vocabulary, speaking, listening, and reading comprehension. Through the use of these abilities in various settings, users cultivate a comprehensive command of the language.

Progress tracking: By monitoring their performance over time, users may see how they've improved and pinpoint areas in which they still need to grow. This feedback system promotes goal-setting and ongoing education.

Cost-effective: Duolingo is a reasonable choice for language learners on a tight budget because it provides a free edition with access to all of its essential features. Furthermore, Duolingo Plus, the platform's premium subscription, offers more features and advantages at an affordable cost.

Additional Learning Resource: Duolingo is a useful additional resource for language learners, even though it might not be enough to become fluent in a language on its own. To improve overall language skills, it can be utilized in conjunction with other resources like textbooks, classes, or immersion experiences.

Disadvantages of Duolingo
Insufficient Contextual Learning: For some users, Duolingo's exercises are not sufficiently contextualized, which might make it challenging to understand words and phrases in everyday situations. Learners could have trouble understanding idioms and subtleties if they are not given context.

Excessive Reliance on Translation: Duolingo makes extensive use of translation activities, which could not accurately represent how people naturally think in a foreign language. As a result, students may translate words for words rather than comprehending the structure and meaning of sentences in the original language.

Limited Depth in grammatical Explanation: Although Duolingo teaches grammatical principles, its explanations are frequently succinct and might not be sufficient for certain learners. Users may require additional resources to completely comprehend complex grammatical rules as part of their learning process.

Limited themes and Vocabulary: It's possible that Duolingo's themes and vocabulary aren't always suited to each learner's unique interests or requirements. It's possible for users to find themselves unable to talk about more complicated subjects or lacking terminology in specific specialist areas.

Possibility of Plateauing: If a user only uses Duolingo, they may find that their language learning progress stalls. In order to keep improving, students might need to add more resources to their Duolingo practice or have more exposure to the language in real-world settings.

Taskade: Effective use of an AI Language Learning Partner Bot is around personalizing your learning process. You may program Taskade's AI bots to meet your unique language learning requirements. They can understand your learning objectives and adjust their teaching approach by reading the materials you give them.You can instruct the bot to concentrate on the circumstances that are most pertinent to you, whether you're trying to brush up on business jargon or get ready for an international trip. Because of this active customisation process, your bot continuously adapts to your shifting interests and advances in language proficiency. Taskade provides practice sessions in vocabulary, grammar, and pronunciation that are customized according to your learning objectives and current skill level. You may quickly improve and make corrections to your language activities since you receive immediate feedback. The representative monitors your progress, emphasizing areas for development and subjects that need more attention. In order to help you not only speak the language but also comprehend its subtleties, it might offer cultural background and examples of idiomatic usage. Practice speaking and understanding by having simulated conversations to help you get ready for real-life situations.

The technology of artificial intelligence (AI) is a new and exciting field that improves and shapes work processes. Artificial intelligence (AI) tools improve education delivery and acquisition, including research, teaching, and learning. Intelligent services like document writing, online interaction, assessment, verification, translation, task analysis, feedback, prediction, error correction, summary, article review, and more are provided by the software- and digitally-dependent instruments. Although it is not

an unprecedented task, the ability of GenAI technology to produce acceptable student texts is a practical barrier for education. According to Sharples, "Transformer AI systems belong to an alternative history of educational technology, where students have grabbed developing equipment to make their lives easier, such as computer software, mobile phones, pocket calculators, and now AI essay generators. Teachers and other institutions respond in a predictable manner: they ignore, resist, and then eventually adjust (Griffiths et al., 2024).

Advantages of Taskade

Organized Learning: Taskade enables users to arrange their vocabulary, exercises, lessons, and language learning activities in an orderly fashion. This organization supports students in maintaining attention and efficiently monitoring their development.

Collaborative Learning: Taskade facilitates group work so that students can complete language learning assignments. Learning languages can be very helpful for those who wish to practice writing or speaking with others thanks to this function.

Task Management: Using Taskade, language learners can divide their learning objectives into more manageable, smaller tasks. This method helps students feel less overwhelmed by the amount of content to cover and makes learning more attainable.

Flexibility: Taskade is accessible from a range of gadgets, such as PCs, tablets, and smartphones. Because of its flexibility, language learners can study at any time and from any location, which facilitates the integration of language learning into daily activities.

Multimedia Integration: Taskade is capable of handling multimedia files, including pictures, audio files, and movies. With the help of this tool, language learners can add real-world resources to their learning process, such as songs, movies, and podcasts.

Customization: Taskade gives users the ability to personalize their language learning experience to suit their own requirements and tastes. They are able to design exercises, vocabulary lists, and study programs that are specific to their learning goals.

Progress Tracking: Taskade offers a variety of features, including task completion indicators, progress bars, and checklists, for monitoring progress. Learners can track their progress in language competency using this feature, highlighting areas that still need work.

Integration with Other Language Learning Tools and Resources: Taskade can be combined with other language learning tools and resources, including online courses, language exchange websites, and apps for flashcards. Learners now have simple access to more learning resources and the learning process is streamlined by this connection.

Disadvantages of Taskade

Restricted Language Learning capabilities: Taskade's main purpose is task management, and although it provides customization, it might not have all the capabilities needed for language learning. More extensive tools specifically designed for language acquisition may be available on specialized language learning platforms or applications.

Interface Complexity: Some language learners may find Taskade's interface overly complex, especially if they are used to simpler tools that are only focused on language learning. This is because of the platform's numerous work management and collaboration functions. This intricacy has the ability to divert students from their main objective, which is to acquire a language.

Possibility of Distraction: Taskade offers personalization and freedom, but it also makes room for possible distractions. Learners can discover that they spend more time experimenting with these features than really concentrating on language learning assignments because of its collaborative capabilities and integration with multimedia content.

Dependency on Technology: Using Taskade to learn a language requires reliance on technology, which has benefits and drawbacks. Technical difficulties, such as device compatibility issues, internet access issues, or software bugs, may interfere with the learning experience and irritate students.

Memrise: With Google Classrooms, educators can efficiently generate and arrange homework, offer insightful criticism, and interact with learners. Online or hybrid learning approaches have many advantages over traditional classroom instruction. The main advantages of Google Classroom are its free availability, student scheduling flexibility, and work adaptability. A free tool for learning languages is called Memrise. The program is used by users in communities to enhance and instruct language acquisition for all participants. Memrise offers a number of special features. The Memrise workout system is one of this application's features. Strong memories can be trained and stored in the brain using this technique. Similar to how this method, when paired with games and flashcards, makes learning languages, particularly vocabulary, enjoyable. Implementing a deeper learning process is made simpler for both teachers and students by this application. This is because there are no lesson deadlines to worry about, allowing teachers and students to gather, distribute, and mark assignments (Taebenu & Katemba, 2021).

This tool is intended specifically for people who are interested in learning more about vocabulary development. Therefore, the target audience for this tool should include any instructor who wants to motivate their pupils to discover their vocabulary data or any student who wants to increase their vocabulary in a straightforward and enjoyable way. Memrise is incredibly user-friendly. Using a flash card repetition method to speed up learning and memorization (Nuralisah & Kareviati, 2020).

Memrise is a digital flashcard app that uses spaced-repetition system (SRS) and adaptive learning to teach vocabulary. It is thought that this approach will help students build their vocabulary in a more desirable way. According to one definition, adaptive learning is "an online learning approach where the learner's engagement with earlier content influences (at least somewhat) the type of materials presented later on." Presuming that vocabulary and adaptive learning are related is a sign of its dynamic and interactive nature, which is also present in Memrise (Fathi et al., 2018).

Advantages of Memrise
Content Created by Users: With Memrise, users may make and share their own courses, giving students access to a wealth of material catered to their individual requirements and areas of interest. Specializing in subjects or dialects not commonly taught in general language courses, this user-generated content can address them.

Rich Multimedia Content: Memrise uses multimedia to help with comprehension by including audio files, pictures, and sample phrases. Especially for visual or auditory learners, this multimodal method can improve learning efficacy.

Interactive Learning: To make learning interesting and fun, Memrise uses interactive techniques including games, quizzes, and flashcards. Learning can remain motivated and concentrated with the support of this interaction.

Spaced Repetition: To enhance the remembering process, the platform uses algorithms for spaced repetition. It makes sure that learners revisit content at the appropriate moment to strengthen their memory by presenting words and phrases at intervals timed to enhance retention.

Interaction within the Community: Memrise uses social sharing, forums, and leaderboards to help language learners feel more connected to one another. In addition to tracking their development in comparison to others, users can interact with other students and share pointers and advice.

Mobility: Students may study anywhere, at any time, with Memrise's mobile apps for iOS and Android smartphones. The adaptability of this allows students to include language practice into regular activities, including taking breaks or commuting.

Gamification Components: Memrise uses gamification components like points, streaks, and prizes to encourage consistent practice and keep students interested. These gamified elements have the potential to increase learning enjoyment and addictiveness, which will encourage students to keep going with their studies.

Disadvantages of Memrise
Rote memorization is overemphasized: Memrise's spaced repetition method helps users learn vocabulary quickly, but it may encourage rote memorization at the expense of a deeper comprehension of word meanings and usage contexts. It might be difficult for learners to use recently learned terminology in everyday communication contexts.

Variations in Audio Quality: Although Memrise offers audio recordings to help with pronunciation, the caliber of these recordings varies according to the course developer. Accurate pronunciation skills development may be hampered by low audio quality or imprecise pronunciation models.

Limited Possibilities for Writing and Speaking: Memrise's interactive features mostly concentrate on word identification and recall, offering minimal chances for practicing speaking and writing. It is possible that language learners will not improve their writing or speaking fluency as quickly as they would with more communication-focused language learning techniques.

Limited Attention to Grammar: Memrise may not place enough emphasis on sentence structure and grammar rules in favor of focusing largely on vocabulary learning. With Memrise courses alone, learners could struggle to put together meaningful sentences or comprehend difficult grammar topics.

CONCLUSION
The complex process of learning a language involves a lot of variables, with a lot of possible outcomes. The factors that specifically affect language learning are the level of acculturation, the amount of comprehensible material, the attention given to the qualities and aspects of the second language, and the availability of opportunities for meaningful negotiation and production. After all this thorough analysis, the researchers conclude that the deployment of the above-mentioned AI- driven tools of education technology help empower all the core skills of the English language. At the same time, it has a few limitations such as restricted language learning capabilities, interface complexity, possibility of distraction, and over-dependence on technology. However, the learners cannot hold back thinking about the disadvantages of the AI tools as they emerged as elemental tools in aiding them to master their language learning.

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