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THE ROLE OF VISUAL DIGITAL TOOLS IN ENHANCING ENGLISH SPEAKING PROFICIENCY AMONG ESL LEARNERS: A LITERATURE REVIEW

Parpieva Mashkhurakhon Mamadalikhon kizi

Email: parpiyeva0102@gmail.com

Phone number: +998941140141

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Abstract: The integration of digital technology into language education has transformed the way English speaking skills are taught and developed. Among various technological resources, visual digital tools such as instructional videos, multimedia presentations, interactive applications, and visual simulations have attracted increasing attention due to their potential to support oral language development. This literature review examines the contribution of visual digital tools to the enhancement of English speaking proficiency among learners of English as a Second Language (ESL).

Drawing upon Mayer's Cognitive Theory of Multimedia Learning and Paivio's Dual Coding Theory, the paper explores how the combination of visual and verbal information facilitates language processing, vocabulary retention, and speaking performance. Previous studies indicate that visual support increases learner engagement, provides meaningful contextual cues, and reduces foreign language anxiety, thereby encouraging more active participation in speaking activities. Furthermore, visual materials assist learners in organizing ideas, expanding vocabulary use, and developing confidence during oral communication.The review suggests that visual digital tools can serve as effective pedagogical resources when integrated purposefully into speaking instruction. However, their effectiveness largely depends on instructional design and teacher guidance. The paper concludes that visual digital technologies should complement rather than replace communicative teaching practices. Future research is recommended to investigate the long-term impact of emerging technologies, including artificial intelligence and adaptive visual learning systems, on speaking development in diverse ESL contexts.

Keywords: ESL learners, speaking proficiency, visual digital tools, multimedia learning, educational technology, language anxiety.

Аннотация: Широкое внедрение цифровых технологий в систему образования оказывает значительное влияние на методы обучения и развития навыков говорения (speaking) на английском языке. В частности, такие визуальные цифровые средства, как видеоматериалы, мультимедийные презентации, интерактивные приложения и визуальные симуляции, признаются эффективными инструментами для развития устной речи. Данный обзор литературы анализирует роль этих средств в развитии навыков говорения у учащихся ESL (English as a Second Language).Исследование опирается на теорию мультимедийного обучения Майера (Mayer's Multimedia Learning Theory) и теорию двойного кодирования Пайвио (Paivio's Dual Coding Theory), раскрывая, каким образом совместное представление визуальной и вербальной информации способствует обработке языка, укреплению словарного запаса и совершенствованию навыков говорения. Проанализированные исследования показывают, что визуальные материалы повышают активность учащихся на занятиях, создают содержательный контекст обучения и снижают уровень тревожности,

связанной с устным общением на иностранном языке. Результаты свидетельствуют о том, что визуальные цифровые средства являются эффективным педагогическим ресурсом при их целенаправленном использовании на занятиях по развитию навыков говорения.

Ключевые слова: учащиеся ESL, навыки говорения, визуальные цифровые средства, мультимедийное обучение, образовательные технологии

Annotatsiya: Raqamli texnologiyalarning ta’lim tizimiga keng kirib kelishi ingliz tilida speaking ko‘nikmalarini o‘qitish va rivojlantirish usullariga sezilarli ta’sir ko‘rsatmoqda. Xususan, videolar, multimedia taqdimotlari, interaktiv ilovalar va vizual simulyatsiyalar kabi vizual raqamli vositalar og‘zaki nutqni rivojlantirishda samarali vosita sifatida e’tirof etilmoqda. Mazkur adabiyotlar sharhi ushbu vositalarning ESL (English as a Second Language) o‘quvchilarining speaking ko‘nikmalarini rivojlantirishdagi o‘rnini tahlil qiladi. Tadqiqot Mayerning Multimedia Learning nazariyasi hamda Paivioning Dual Coding Theory nazariyasiga tayangan holda, vizual va verbal ma’lumotlarning birgalikdagi taqdimoti tilni qayta ishlash, lug‘at boyligini mustahkamlash va speaking faoliyatini yaxshilashga qanday yordam berishini yoritadi. Tahlil qilingan tadqiqotlar vizual materiallar o‘quvchilarning darsdagi faolligini oshirishi, mazmunli kontekst yaratishi hamda xorijiy tilda gapirish bilan bog‘liq xavotirni kamaytirishini ko‘rsatadi. Natijalar shuni ko‘rsatadiki, vizual raqamli vositalar speaking darslarida maqsadga muvofiq qo‘llanganda samarali pedagogik resurs bo‘lib xizmat qiladi.

Kalit so‘zlar: ESL o‘quvchilari, speaking ko‘nikmasi, vizual raqamli vositalar, multimedia ta’limi, ta’lim texnologiyalari.

1. Introduction

The rapid advancement of digital technology has significantly influenced educational practices across the world. In language education, digital resources have become an essential component of teaching and learning processes, particularly in the field of English language instruction. The emergence of multimedia platforms, online learning environments, educational applications, and visual learning tools has created new opportunities for learners to engage with language in more meaningful and interactive ways. Among the four language skills, speaking is often regarded as the most challenging for learners of English as a Second Language (ESL). Unlike reading or listening, speaking requires learners to produce language spontaneously while simultaneously managing grammar, vocabulary, pronunciation, and communication strategies. As a result, many learners experience anxiety, lack confidence, and hesitate to participate in oral communication activities.Traditional language teaching approaches frequently emphasize grammatical accuracy and memorization rather than communicative competence. Consequently, learners may possess adequate linguistic knowledge but struggle to apply it in real-life interactions. In response to these challenges, educators have increasingly incorporated visual digital tools into language instruction. Videos, multimedia presentations, interactive simulations, infographics, digital storytelling platforms, and educational applications provide learners with contextualized language input and opportunities for meaningful communication. The growing popularity of these tools raises important questions regarding their effectiveness in enhancing speaking proficiency. Therefore, this literature review aims to examine the role of visual digital tools in improving English speaking skills among ESL learners. Specifically, the paper explores the theoretical foundations underlying

multimedia learning, reviews empirical studies on the use of visual technologies in speaking instruction, and discusses the benefits and limitations associated with their implementation.

2. Theoretical Framework

2.1 Mayer's Cognitive Theory of Multimedia Learning

One of the most influential frameworks explaining the effectiveness of visual learning materials is Mayer's Cognitive Theory of Multimedia Learning (2009). According to this theory, learners process information through two separate channels: a visual channel and an auditory channel. Learning becomes more effective when information is presented through both channels simultaneously. Mayer argues that meaningful learning occurs when learners actively select relevant information, organize it into coherent mental structures, and integrate it with prior knowledge. Visual digital tools facilitate this process by combining text, images, audio, and animation, enabling learners to construct richer mental representations of language concepts. In speaking instruction, multimedia resources provide contextual support that helps learners understand vocabulary, pronunciation, and communicative situations more effectively. Videos, for instance, offer visual cues such as facial expressions, gestures, and situational contexts that enhance comprehension and language production.

2.2 Paivio's Dual Coding Theory

Paivio's Dual Coding Theory (1986) further supports the use of visual digital tools in language education. The theory proposes that verbal and non-verbal information are processed through distinct but interconnected cognitive systems.When learners encounter both verbal explanations and visual representations, they create multiple memory pathways that strengthen retention and recall. As a result, vocabulary and language structures become easier to retrieve during speaking tasks.For ESL learners, visual stimuli such as images, diagrams, and videos provide concrete references that facilitate understanding and communication. This dual processing mechanism contributes to greater speaking fluency and confidence.

2.3 Krashen's Affective Filter Hypothesis

Krashen (1982) emphasized the role of emotional factors in language acquisition. According to the Affective Filter Hypothesis, anxiety, fear, and low self-confidence can impede language learning by creating psychological barriers that limit language input processing.Visual digital tools may help lower learners' affective filters by creating supportive and engaging learning environments. When learners receive visual cues and contextual support, they feel more prepared to participate in speaking activities and are less afraid of making mistakes.

3. Literature Review

Recent studies have demonstrated the growing effectiveness of visual digital tools in enhancing speaking proficiency among ESL learners. Mahdi (2022) investigated the impact of interactive multimedia environments on speaking and presentation skills among non-native English speakers. The study revealed that learners who engaged with multimedia resources demonstrated higher speaking performance and greater classroom participation compared to those receiving traditional instruction. The findings suggest that visual support can increase learner engagement and facilitate language production. Similarly, Young and West (2018) examined asynchronous multimedia-based oral communication activities and found that digital platforms provided learners

with valuable opportunities to practice speaking outside the classroom. The flexibility of digital environments allowed students to rehearse responses, reflect on their performance, and gradually build confidence.Research published in Computers & Education also highlights the benefits of technology-enhanced language learning. Li and Chan (2024) reported that AI-mediated speaking interactions improved learners' willingness to communicate and increased speaking confidence. Learners perceived digital speaking environments as less threatening than face-to-face interactions, which encouraged more frequent language use. Another important finding concerns vocabulary acquisition. Studies indicate that visual representations support vocabulary learning by establishing meaningful associations between words and concepts. Improved vocabulary retention subsequently contributes to greater speaking fluency and communicative effectiveness. In addition, multimedia materials provide exposure to authentic language use. Through videos, learners observe natural pronunciation, intonation patterns, body language, and conversational strategies. Such exposure enables students to develop more realistic speaking abilities and cultural awareness.Overall, the literature consistently suggests that visual digital tools positively influence speaking development through enhanced engagement, improved vocabulary retention, reduced anxiety, and increased opportunities for communication practice.

4. Discussion

The reviewed literature demonstrates that visual digital tools offer several pedagogical advantages for speaking instruction.First, these tools provide contextualized language input. Unlike isolated vocabulary lists or grammar exercises, multimedia resources present language within authentic communicative situations. Learners can observe how language is used in context and apply similar patterns during speaking activities.Second, visual digital tools increase learner motivation and engagement. Interactive presentations, educational videos, and digital storytelling activities create dynamic learning experiences that encourage active participation. Motivated learners are more likely to engage in speaking practice and persist through communication challenges.Third, visual resources support speaking organization and idea generation. Many learners struggle to express their thoughts due to limited vocabulary or difficulties organizing ideas. Visual prompts such as images, mind maps, and infographics provide structure that facilitates oral production.Another significant benefit involves anxiety reduction. Speaking anxiety remains one of the most common obstacles in ESL classrooms. Visual support serves as a scaffold that helps learners feel more prepared and confident. This aligns with Krashen's assertion that lower anxiety levels contribute to more effective language acquisition. Despite these advantages, challenges remain. Excessive multimedia use may lead to cognitive overload if instructional materials are poorly designed. Furthermore, technological resources cannot replace meaningful teacher feedback and human interaction. Effective implementation therefore requires a balanced approach in which technology supports rather than dominates the learning process.

5. Conclusion

Visual digital tools have become increasingly valuable in contemporary ESL education. Theoretical perspectives such as Mayer's Cognitive Theory of Multimedia Learning, Paivio's Dual Coding Theory, and Krashen's Affective Filter Hypothesis provide strong justification for integrating visual technologies into speaking instruction.The reviewed studies indicate that visual digital tools enhance speaking proficiency by improving vocabulary retention, increasing learner engagement, reducing anxiety, and providing authentic communication opportunities. Through

videos, multimedia presentations, interactive applications, and visual simulations, learners gain access to meaningful contexts that support oral language development.However, technology alone cannot guarantee successful learning outcomes. The effectiveness of visual digital tools depends on thoughtful instructional design and appropriate teacher guidance. Future research should investigate the long-term effects of emerging technologies, particularly artificial intelligence and adaptive learning systems, on speaking development across diverse educational contexts.As digital innovation continues to shape education, visual digital tools are likely to remain an important component of communicative language teaching. When used strategically, they have the potential to create more engaging, inclusive, and effective speaking environments for ESL learners.

References

1. Krashen, S. D. (1982). Principles and Practice in Second Language Acquisition. Pergamon Press.
2. Li, R., & Chan, C. K. Y. (2024). Improving EFL learners' speaking skills and willingness to communicate through AI-mediated interactions. Computers & Education, 210, 104967.
3. Mahdi, H. S. (2022). Improving speaking and presentation skills through interactive multimedia environment for non-native speakers of English. SAGE Open, 12(1), 1–10.
4. Mayer, R. E. (2009). Multimedia Learning (2nd ed.). Cambridge University Press.
5. Paivio, A. (1986). Mental Representations: A Dual Coding Approach. Oxford University Press.
6. Young, C., & West, R. E. (2018). Speaking practice outside the classroom: A literature review of asynchronous multimedia-based oral communication in language learning. EUROCALL Review, 26(1), 59–79.