



Connecting Motivation and Technology: A Literature Review on EFL Learners in the Digital Age

Dr. Elma S. Groenewald

CEO, SG Virtuosos International 1501-1502 Tran Phu Street, Loc Tho Ward,
Nha Trang City, Khanh Hoa Province, Vietnam

<https://orcid.org/0000-0001-7813-2773> | elmasgroenewald@sgvirtuososinternational.com

Osias Kit T. Kilag

Principal, PAU Excellencia Global Academy Foundation, Inc., Toledo City, Philippines and Vice President for Academic
Affairs and Research, ECT Excellencia Global Academy Foundation, Inc., Balamban, Cebu, Philippines

<https://orcid.org/0000-0003-0845-3373> | okkilag12@gmail.com

Abstract:

This study examines the multidimensional impact of educational technology on teaching English as a Foreign Language (EFL) through language skill development, emotional states, motivational factors, and areas of collaborative teacher-student relationships on. The study using a wide range of literature reveals the positive impact of digital tools such as computer-assisted language learning (CALL) and mobile-assisted language learning (MALL) on language skills, reading skills, in EFL learners and managing communication. But this change journey adds challenges, because educational technology brings with it positive factors such as grit and perseverance as well as potentially stressful factors such as foreign language anxiety. Motivation and learning strategies take center stage, emphasizing how technology use and motivation combine with external motivation to spread among students. Research highlights the critical role teachers play in facilitating technology-driven learning experiences to motivate and engage students, positively affecting learning outcomes. These comprehensive insights offer insights for educators, policymakers and researchers, highlighting the want for a nuanced approach to harnessing the full capacity of tutorial generation to create attractive and transformative language learning environments.

Keywords: Educational Technology, English as a Foreign Language (EFL), Computer-Assisted Language Learning (CALL), Mobile-Assisted Learner (MALL)

Introduction:

In nowadays's language teaching environment, there was progress in the integration of instructional technology, providing language learners with unprecedented access to authentic language input and diverse electronic resources (Rassaei, 2017). The advent of internet technology and the proliferation of electronic devices have had a significant impact on the educational environment of English as a Foreign Language (EFL) students (Benson & Chik, 2011). Researchers have delved into the multidimensional effects of integrating various technologies into education, emphasizing their role in nurturing language skills (Fathali & Okada, 2018).

A major attraction has been the relationship between technology and students' emotional states, especially motivation. Motivation, usually the learner's willingness to interact in a venture and willingness to attempt to take part, plays an important function in the language studying manner (Zhou, 2012). Dörnyei (2001) emphasizes the significance of motivation as an affective state affecting foreign language studying effects. Many studies investigated the relationship between motivation and various factors such as academic achievement and language proficiency (Arabmofrad et al., 2019; Karabatak & Polat, 2017; Mammadov et al., 2021).

The digital age has changed the interaction between individuals, resulting in a paradigm shift in teaching methods and instructional methods (Yadav et al., 2018). Educational technology, as defined by Spector and Yuen (2016), encompasses the theory and practice of designing, designing, implementing, and evaluating instructional strategies and materials. Its influence extends to various technological developments, including computers, the Internet, email, mobile applications, and digital games (Zengin & Aksu, 1999). This research embarks on an exploration of the literature pertaining to the integration of technology in language classrooms and its consequential impact on learners' motivation.

Literature Review:

The digital age has ushered in transformative adjustments in communication, impacting various facets of society, which includes schooling (Yadav et al., 2018). Educational era, encompassing computers, the net, and cellular applications, has played a pivotal role in reshaping gaining knowledge of strategies and coaching methodologies (Zengin & Aksu, 2017).



Computer-Assisted Language Learning (CALL) has emerged as a distinct subject, inspecting the packages of computers in language coaching and mastering (Levy, 1997). Bensalem's (2020) examine validated that the internet, as part of CALL, can decorate learners' studying capabilities, presenting a clean advantage over conventional face-to-face training. Additionally, Hassan Taj et al. (2017) found that computer systems, particularly electronic mail and the internet, make a contribution to enhancing freshmen' L2 studying talents and vocabulary information.

The introduction of Mobile-Assisted Language Learning (MALL) has extended the attain of era into language training. Social packages together with WhatsApp, Facebook, Twitter, YouTube, and Instagram, in conjunction with Course Management Service (CMS), have verified to be huge in language performance and capabilities (Kim & Kwon, 2012). Alshammari et al.'s (2018) investigation using WhatsApp in EFL instruction showed that online learners outperformed in reading comprehension, emphasizing the role of technology in reshaping teacher-learner dynamics.

Moreover, the advantageous impact of mobile gadgets on language novices' vocabulary and writing capabilities has been highlighted in Wu's (2015) observe. However, Sadeghi and Dousti (2013) counseled that the effectiveness of CALL and MALL programs relies upon on proper usage and is prompted by means of moderating variables like character differences, task complexity, and educational environment.

Educational Technology and Emotional States:

Beyond its direct impact on language skills, academic generation significantly affects beginners' emotional states (Guri-Rosenblit, 2018). Non-cognitive elements like grit, persistence, and mindsets were proven to be suffering from on-line studying in technological education (McClendon et al., 2017). Lan and Moscardino (2019) argued that grit is an crucial thing of tutorial achievement within the context of online studying, specifically within the era of the COVID-19 pandemic.

Grit, attitude, and persistence have been identified as factors that growth newcomers' engagement in on-line instructions and enhance learner fulfillment (McClendon et al., 2017). Nussbaum et al. (2020) emphasized the position of critical questioning, creativity, heuristic evaluation, and grit inside the improvement of on-line language learning contexts. Liu et al.'s (2021) observe specifically targeted on grit in cell mastering contexts amongst EFL novices, highlighting its giant relationship with instructional overall performance.

Furthermore, academic technology has been identified for its function in fostering learner engagement (Chiu, 2021). Golonka et al. (2014) asserted that the primary goal of generation is to engage rookies and enhance social interactions with friends. Khojah and Thomas (2021) located that task designs thru virtual technology in educational contexts can improve learner engagement in language abilities.

However, it's miles essential to acknowledge that technology in EFL educational contexts can evoke terrible emotions, including foreign language tension (Dogan, 2020). Warschauer (1996) observed that rookies have a tendency to be aggravating in an internet context, distinguishing among overseas language anxiety and online gaining knowledge of tension. The differing attitudes in the direction of generation amongst beginners make contributions to versions in tension levels, impacting their usual motivation.

The Concept of Academic Motivation:

Motivation, a widely studied issue in foreign language learning investigations, is characterized as a learner's willingness or desire to be engaged in or commit effort to complete a task (Zhou, 2012). Gardner (1985) defined motivation as a combination of effort plus a desire to achieve the goal of learning the language. Broussard and Garrison (2004) emphasized that motivation is the attribute that moves individuals to do or not do something.

Motivation is regarded as a essential emotional kingdom affecting overseas language gaining knowledge of fulfillment (Dörnyei, 2001). Alrabai and Moskovsky (2016) indicated that L2 studying proficiency is extensively affected by motivation, self-sufficiency, perspective, nervousness, and self-confidence. The integration of technology in academic contexts is essential for developing right techniques of guidance that foster instructional motivation required for learning and knowledge English as a overseas language (Dörnyei, 2001). Numerous investigations were conducted at the have an effect on of numerous sorts of motivation on academic overall performance (Arabmofrad et al., 2019; Karabatak & Polat, 2020; Mammadov et al., 2021).

Methodology:

The systematic literature assessment observed a complete seek approach to become aware of applicable research at the impact of tutorial generation on learners' motivation in English as a foreign language (EFL) contexts. Searches have been conducted in digital databases, together with however not confined to PubMed, IEEE Xplore, ERIC, Scopus, and Google Scholar. The search phrases included combos of key terms which include "academic era," "language learning," "motivation," "EFL inexperienced persons," and associated variations.



Studies have been covered based totally on predefined criteria. Inclusion standards encompassed studies articles, convention papers, and reviews posted in peer-reviewed journals from the past two a long time. The consciousness become on investigations exploring the relationship among educational generation and motivation inside the context of studying English as a foreign language. Non-English articles, beside the point studies, and duplicates were excluded in the course of the screening manner.

The initial search yielded a substantial quantity of impactful articles. Two independent reviewers carried out an initial screening via examining titles and abstracts to determine relevance. The full texts of selected articles were then assessed for eligibility. Discrepancies inside the selection manner have been resolved through discussion and consensus.

Data extraction became accomplished systematically using a predefined statistics extraction form. Relevant data, which include the writer(s), ebook year, studies design, contributors, technology interventions, motivational consequences, and key findings, turned into extracted from each decided on take a look at. This dependent approach ensured consistency and facilitated the synthesis of facts.

The quality of the selected studies became assessed to gauge the robustness of the proof. A nice evaluation device, tailored from current hints for exclusive study designs, was hired. The standards blanketed research design, sample length, statistics analysis methods, and the readability of pronounced results. Studies were classified based on their methodological rigor.

A narrative synthesis approach become employed to systematically analyze and combine the findings from the chosen studies. Common subject matters, styles, and versions in the impact of educational era on newcomers' motivation were identified. The synthesis procedure involved organizing the records, exploring relationships among variables, and drawing overarching conclusions.

Findings and Discussion:

Positive Impact on Language Skills:

Numerous studies have underscored the transformative have an impact on of instructional generation, in particular in the realms of laptop-assisted language studying (CALL) and cellular-assisted language getting to know (MALL), at the language skillability of English as a Foreign Language (EFL) newbies. Bensalem (2020) carried out a complete research, revealing that the incorporation of technological advancements, which includes internet integration, now not best improved the studying abilities of EFL novices but additionally fostered seamless communicate among them. Moreover, the usage of diverse digital equipment, encompassing films, the internet, computer systems, and multimedia elements, exhibited a fine affiliation with heightened vocabulary knowledge and advanced studying comprehension (Hassan Taj et al., 2017; Alshammari et al., 2018).

The congruence between those findings and established theoretical frameworks accentuates the pivotal role of generation in furnishing a studying environment that engages more than one senses and encourages interaction. The adaptability of digital tools to numerous getting to know patterns addresses inherent challenges encountered in traditional instructional settings (Abrenilla, et al., 2023). The found high-quality correlation between era usage and more suitable language skills affords strong support for the strategic integration of educational era, asserting its capacity to amplify language studying effects. Recognizing generation's potential to cater to various learning needs will become vital, guiding educators in tailoring instructional procedures that resonate with the various preferences and capabilities of EFL novices.

The synthesis of CALL and MALL in language training mirrors the evolving landscape of tutorial methodologies, transferring past traditional paradigms. Embracing this shift now not only acknowledges the dynamic nature of language acquisition but also displays a pedagogical commitment to leveraging technological gear that resonate with present day freshmen. As we navigate the virtual age, the function of educators extends past content delivery to curating studies that harness the full capability of technology, thereby fostering a technology of language newbies geared up with each proficiency and flexibility (Kilag, et al., 2023). This alignment between theoretical underpinnings and empirical evidence underscores the importance of strategic and considerate integration of instructional generation in language schooling, ensuring a holistic and effective method to language talent development.

Influence on Learners' Emotional States:

Educational era emerges as a powerful force shaping the emotional panorama of language novices, exerting each fine and terrible impacts on their psychological states. Non-cognitive factors, together with grit, patience, and attitude, had been diagnosed as beneficiaries of on-line gaining knowledge of within technological training, marking a positive stride in newcomers' emotional resilience (McClendon et al., 2017). Moreover, the correlation between motivation, engagement, and fulfillment with vital elements like crucial questioning, creativity, heuristic



assessment, and grit in on-line language learning contexts in addition underscores the capacity of technology to definitely form inexperienced persons' emotional experiences (Liu et al., 2021).

This dual effect on newcomers' emotional states prompts a name for a nuanced and empathetic method to the integration of tutorial era. The high-quality sides make a contribution to an enriched and motivating learning environment, fostering attributes such as grit and resilience which can be pivotal for success in language acquisition. However, it's miles vital to renowned the shadow aspect, as on-line studying has been associated with heightened ranges of foreign language tension (Warschauer, 1996). The coexistence of effective and negative emotional responses necessitates a tailored and student-centered approach.

The findings highlight the critical function of educators in navigating this intricate emotional terrain. Attunement to learners' emotional stories becomes paramount, necessitating proactive measures to bolster advantageous emotional engagement and concurrently cope with anxiety-inducing factors of on-line language gaining knowledge of (Andrin, et al., 2023). Incorporating techniques that cultivate a supportive and inclusive online environment can mitigate poor emotional responses, ensuring that learners not handiest acquire language abilities however also undergo a fantastic emotional transformation at some stage in their academic adventure. As training transcends physical classrooms into the digital realm, the emotional properly-being of rookies stands as a testimony to the holistic impact of instructional generation on the language studying enjoy.

Motivational Factors and Learning Orientations:

Within the realm of technology-mediated language mastering, Gardner's (2010) conceptualization of integrative and instrumental motivations emerges as a important lens thru which rookies' attitudes and orientations closer to language acquisition are shaped. Integrative motivation, characterized via a bent to immerse oneself inside the goal language society, takes middle stage in era-based environments, signifying rookies' heightened engagement with the language and its cultural context (Uy, et al., 2023). A noteworthy revelation from the look at conducted by means of Peng and Fu (2021) provides intensity to this narrative, indicating that intrinsic and extrinsic motivations wield have an impact on over educational performance in combined instruction, with extrinsic motivation wielding more prominence among Chinese EFL rookies.

The resonance among technology use and integrative motivation unveils the capacity of digital tools to craft immersive language gaining knowledge of experiences. The symbiotic courting between beginners and the target language society, facilitated via generation, amplifies the integrative motivation that Gardner posited as a motive force for language proficiency. However, the prevalence of extrinsic motivation among beginners, particularly within the Chinese EFL context, alerts a nuanced venture (Manire, et al., 2023). To raise intrinsic motivation, educators must undertake instructional techniques that go past the utilitarian elements of language gaining knowledge of and faucet into the inherent pleasure of discovery and mastery.

The pursuit of intrinsic motivation aligns seamlessly with the proposition that recreation-primarily based learning packages and realistic methodologies function catalysts for cultivating a real love for language acquisition (Kilag, et al., 2023). The gamification of language studying now not simplest introduces an detail of amusement however also fosters an surroundings in which freshmen are stimulated with the aid of the inherent satisfaction of learning itself. This shift from an outside locus of motivation to an internal possible profoundly impact the depth and sustainability of language skillability.

As educators navigate the complex landscape of generation-mediated language instruction, the strategic incorporation of intrinsic motivation turns into vital. Balancing the appeal of immersive stories with the cultivation of intrinsic motivation ensures that rookies no longer most effective gather linguistic competence but additionally develop a long-lasting affinity for the language. In essence, the interaction among motivational elements and technology-mediated learning orientations underscores the need for a holistic pedagogical approach that transcends the confines of mere ability acquisition.

Role of Teacher and Learner Engagement:

Central to the fulfillment of tutorial generation is the pivotal role played with the aid of each teachers and novices in shaping the dynamics of the learning surroundings. The integration of virtual equipment by way of instructors emerged as a key determinant influencing learner motivation, engagement, and standard academic success (Kalanzadeh et al., 2014; De Souza et al., 2021). This underscores the transformative electricity that educators maintain in leveraging technology to create meaningful and impactful gaining knowledge of studies.

The findings accentuate the importance of teacher practise and improvement packages geared toward improving educators' proficiency in integrating digital gear seamlessly into their pedagogical approaches. Teachers, ready with the talents to navigate the technological landscape, come to be facilitators of dynamic and motivating getting to know environments. Consequently, it turns into vital for educational establishments to spend money on schooling tasks that empower educators to harness the full potential of virtual gear for the gain of learner engagement.



Student engagement, a key factor in the effectiveness of technology-enabled learning, is incredibly related to a variety of factors. Designing projects through digital technologies, strong teacher-student relationships, and incorporating authentic materials all contribute to increased student engagement (Khojah and Thomas, 2021; Çelik and Aydin, 2014).). These factors emphasize the need for a multifaceted approach in which instructional design, interpersonal relationships, and content validity all come together to enhance the overall learning experience.

Furthermore, the embrace of collaborative activities and interactive classrooms emerges as a potent strategy to catalyze learner engagement (Günüç and Kuzu, 2014). Collaborative learning not only fosters a sense of community but also taps into the social aspects of learning, aligning with the constructivist principles that underpin effective pedagogy. The interactive nature of such environments ensures that learners actively participate in the learning process, promoting deeper understanding and knowledge retention.

The symbiotic relationship between instructors, students, and academic technology unveils a panorama ripe with opportunities for stronger engagement and motivation. The nice impact of trainer involvement underscores the pivotal role of educators as orchestrators of transformative getting to know reviews. As the instructional panorama continues to evolve, nurturing the collaborative partnership among teachers and era turns into instrumental in shaping a future wherein learner engagement is not only facilitated however also expanded to new heights.

Conclusion:

This complete exploration into the intersection of educational technology and English as a Foreign Language (EFL) gaining knowledge of illuminates a nuanced landscape wherein digital gear wield significant have an impact on over diverse dimensions of the mastering technique. The examine navigated via the nation-states of language skills development, emotional states, motivational factors, and the dynamic interaction among instructors and inexperienced persons in technology-mediated contexts.

The wonderful effect of tutorial era on language capabilities, as underscored by severa studies (Bensalem, 2020; Hassan Taj et al., 2017; Alshammari et al., 2018), displays the transformative potential of digital gear. The incorporation of various mediums, which includes movies, the net, computers, and multimedia, no longer handiest complements language skillability but also addresses the multifaceted demanding situations inherent in traditional mastering environments. This high quality correlation among generation use and language talents lays a sturdy basis for advocating the powerful integration of tutorial generation to enhance language getting to know consequences.

However, this transformative adventure isn't without complexities. The examine delved into the complex realm of learners' emotional states, revealing a dual impact that encompasses both superb and bad feelings. While academic era definitely influences non-cognitive factors like grit and endurance (McClendon et al., 2017), it simultaneously introduces challenges which includes extended foreign language tension (Warschauer, 1996). This dichotomy emphasizes the need for a balanced and attentive technique, wherein educators play a crucial position in fostering wonderful emotional engagement while addressing potential stressors.

Motivational factors and gaining knowledge of orientations in generation-mediated contexts emerged as any other key focal point. The alignment of technology use with integrative motivation highlights its potential to create immersive language mastering studies. However, the dominance of extrinsic motivation amongst novices indicators a call for strategic educational tactics to domesticate intrinsic motivation, spotting the pivotal role of attractive and enjoyable mastering stories.

The look at underscored the symbiotic courting between teachers, novices, and academic technology, emphasizing the pivotal role of educators in shaping the effectiveness of virtual equipment. Teachers emerged as facilitators of technology-mediated mastering stories, influencing learner motivation, engagement, and academic achievement positively (Kalanzadeh et al., 2014). This places a highlight on the importance of instructor education applications that empower educators to navigate the technological panorama seamlessly.

This study gives a holistic know-how of the difficult dynamics at play inside the realm of educational generation and EFL studying. As the instructional landscape maintains to adapt, acknowledging and addressing the multifaceted dimensions explored in this take a look at may be instrumental in harnessing the entire capacity of technology to create engaging, motivating, and transformative language learning stories.

References:

Abrenilla, E. M., Redido, C., Abendan, C. F., & Kilag, O. K. (2023). The Next Chapter of ELT: Embracing AI-Infused Pedagogies and Evolving Educational Strategies in the Post-Pandemic Landscape. *Excellencia: International Multidisciplinary Journal of Education* (2994-9521), 1(5), 124-135.



- Andrin, G., Kilag, O. K., Abella, J., Tañiza, F., Groenewald, E., & Cordova Jr, N. (2024). Innovative Pedagogy: The Influence of Impromptu Speaking on Students' English Oral Proficiency. *Excellencia: International Multi-disciplinary Journal of Education (2994-9521)*, 2(1), 36-46.
- Alshammari, R., Parkes, M., & Adlington, R. (2018). Factors influencing Saudi Arabian Preparatory Year students' skills and attitudes in the use of mobile devices in learning English as a Foreign Language. *International Journal of Research Studies in Educational Technology*, 7(1), 9-27.
- Arabmofrad, A., Derakhshan, A., & Atefinejad, M. (2019). An interplay between Iranian EFL learners' specific and general interlanguage pragmatic motivation and their meta-pragmatic awareness. *Iranian Journal of English for Academic Purposes*, 8(3), 77-94.
- Benson, P., & Chik, A. (2011). Towards a more naturalistic CALL: Video gaming and language learning. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 1(3), 1-13.
- Broussard, S. C., & Garrison, M. B. (2004). The relationship between classroom motivation and academic achievement in elementary-school-aged children. *Family and consumer sciences research journal*, 33(2), 106-120.
- Chiu, T. K. (2021). Digital support for student engagement in blended learning based on self-determination theory. *Computers in Human Behavior*, 124, 106909.
- Demir, M. D., & Tavil, Z. M. (2021). The effect of technology-based materials on vocational high school students' listening skill. *Journal of Language and Linguistic Studies*, 17(S1), 448-457.
- Doğan, Y. (2020). Effect of foreign language classroom anxiety on Turkish EFL learners' online learning anxiety. *Academic studies in foreign language education*, 21-35.
- Dörnyei, Z. (2001). *Motivational strategies in the language classroom* (Vol. 10). Cambridge: Cambridge University Press.
- Fathali, S., & Okada, T. (2018). Technology acceptance model in technology-enhanced OCLL contexts: A self-determination theory approach. *Australasian Journal of Educational Technology*, 34(4).
- Gardner, R.C. (1985) *Social Psychology and Second Language Learning: The Role of Attitude and Motivation*. London: Edward Arnold.
- Guri-Rosenblit S. (2018). E-teaching in higher education: an essential prerequisite for E-learning. *J. New Approaches Educ. Res.* 7 93–97. 10.7821/naer.2018.7.298
- Hassan Taj, I., Ali, F., Sipra, M., & Ahmad, W. (2017). Effect of technology enhanced language learning on vocabulary acquisition of EFL learners. *International Journal of Applied Linguistics & English Literature*, 6(3).
- Karabatak, S., & Turhan, M. (2017). Effectiveness of web-based problem-based school administrator training program and its effect on participants' attitudes towards web-based learning. *Pegem Egitim ve Ogretim Dergisi= Pegem Journal of Education and Instruction*, 7(4), 663.
- Khojah, M., & Thomas, M. (2021). Smartphone-mediated EFL reading tasks: A study of female learners' motivation and behaviour in three Saudi Arabian classrooms. *AsianEFL Journal*, 25(2).
- Kilag, O. K. T., Engbino, V. A., Cuizon, J. B., Abendan, C. F. K., Pahayahay, D. Q., & Cerna, A. L. T. D. (2023). The Factors Affecting Filipino Grade 11–12 students' Pronunciation. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 3(6), 68-77.
- Kim, H., & Kwon, Y. (2012). Exploring smartphone applications for effective Mobile Assisted Language Learning. *Multimedia-Assisted Language Learning*, 16(1), 31–57. <https://doi.org/10.15702/mall.2012.15.1.31>
- Levy, M. (1997). *Computer-assisted language learning: Context and conceptualization*. Oxford University Press.
- Liu, X. X., Gong, S. Y., Zhang, H. P., Yu, Q. L., & Zhou, Z. J. (2021). Perceived teacher support and creative self-efficacy: The mediating roles of autonomous motivation and achievement emotions in Chinese junior high school students. *Thinking Skills and Creativity*, 39, 100752.
- Manire, E., Kilag, O. K., Cordova Jr, N., Tan, S. J., Poligrates, J., & Omaña, E. (2023). Artificial Intelligence and English Language Learning: A Systematic Review. *Excellencia: International Multi-disciplinary Journal of Education (2994-9521)*, 1(5), 485-497.



- Mammadov, S., Cross, T. L., & Olszewski-Kubilius, P. (2021). A look beyond aptitude: The relationship between personality traits, autonomous motivation, and academic achievement in gifted students. *Roeper Review*, 43(3), 161-172.
- McClendon C., Neugebauer R., King A. (2017). Grit, growth mindset, and deliberate practice in online learning. *J. Instr. Res.* 6 1–10. 10.9743/JIR.2017.2
- Rassaei, E. (2019). Tailoring mediation to learners' ZPD: Effects of dynamic and non-dynamic corrective feedback on L2 development. *The Language Learning Journal*, 47(5), 591-607.
- Sadeghi, K., & Dousti, M. (2013). The Effect of Length of Exposure to CALL Technology on Young Iranian EFL Learners' Grammar Gain. *English Language Teaching*, 6(2), 14-26.
- Spector, J. M., & Yuen, A. H. (2016). *Educational technology program and project evaluation*. Routledge.
- Uy, J., Kilag, O. K., Rabi, J. I. I., Poloyapoy, K. B., Balicoco, J. R., & Poloyapoy, B. N. (2023). Anime-Inspired English Learning: A Unique Approach. *Excellencia: International Multi-disciplinary Journal of Education* (2994-9521), 1(4), 197-209.
- Warschauer, M. (1996). Computer-assisted language learning: An introduction. *Multimedia language teaching*, 320.
- Wu, Q. (2015). Designing a smartphone app to teach English (L2) vocabulary. *Computers & Education*, 85, 170-179.
- Yadav, A., Sands, P., Good, J., & Lishinki, A. (2018). Computer Science and Computational Thinking in the Curriculum: Research and Practice (hal. 89–106).
- Zengin, Ö., & Meral, A. K. S. U. (2017). A review study on the integration of technology into foreign language education in Turkey. *Ankara University Journal of Faculty of Educational Sciences (JFES)*, 50(2), 79-104.
- Zhou, W. (2012). *Moderating and mediating effects of shared leadership on the relationship between entrepreneurial team diversity and performance*. City University of New York.