

## Effectiveness Of Digital Assessment Tools On The English Language Learning Outcomes Of Tertiary Students

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### Abstract

*The purpose of the study is to compare the effectiveness of using digital assessment tools of the experimental and control groups on the English language learning outcomes among the chosen third year students at Cebu Normal University.*

*Both quantitative and qualitative research methods were used in this study. Pre-post tests, standardized questionnaires, and classroom observations were used to collect data. It was carried out at Cebu Normal University with two third-year sections that were chosen based on their academic similarity. In the second semester of the Academic Year (AY) 2022–2023, the study was carried out. Thirty-five (35) students majoring in English Language from the Bachelor of Secondary Education (BSEd) program made up the first group, known as the control group, while thirty (30) students from the Bachelor of Arts (BA) in English Language program made up the experimental group. The performance of the respondents in the experimental and control groups was then evaluated using a pre-post test.*

*The results demonstrate how using digital assessment tools improves learners' overall performance and helps them acquire new languages. By offering convenient and productive learning environments, Kahoot, Quizlet, EDPuzzle, Padlet, Moodle, Nearpod, Quizizz and other digital assessment tools have been found to be useful resources for promoting English language acquisition and enhance English language learning outcomes to tertiary students. Furthermore, the findings revealed from the experimental group shown that language learning aided by digital assessment tools is just as successful as learning from human teachers, suggesting that technology has the ability to provide individualized and customized learning experiences.*

*This study promotes evidence-based language instruction and could be a helpful resource for researchers and educators interested in using digital evaluation tools into language classes. The findings support the notion that using digital assessment tools in language training has the potential to fundamentally alter language learning in addition to highlighting the positive benefits of educational technology in the field of language education.*

*In order for teachers to become proficient with technology and use educational technologies like digital assessment tools with confidence, educational institutions should provide them with thorough training programs and enough time. The significance of technology in improving language learning outcomes is highlighted by these findings, which also highlight the necessity of continuous assistance and professional development for educators who wish to incorporate technology into language instruction.*

**Keywords:** Digital Assessment Tools, Experimental & Control Group, English language learning outcomes, Educational Technology

## Introduction

Language instruction and learning have seen substantial changes in recent years due to the use of technology into the classroom. The proliferation of digital resources and technological improvements have led instructors to look for new and creative ways to improve language learning experiences. The use of digital tools and resources to help language practice and instruction is known as technology-enhanced language learning, and it is one area that has attracted a lot of interest. Examining the efficacy of different English language teaching resources in raising language competency and learner engagement is the goal of this meta-analysis study. Teachers must be more innovative and creative in how they deliver the curriculum, according to Ningsih & Sari (2021). Thus, incorporating technology is one way to address the issue of teaching. Given the widespread usage of English, both for formal and informal contexts, studying the language is crucial for improving students' communication skills (Sari, 2023)

There are many advantages and potential for both teachers and students with technology-enhanced language learning. It gives users access to a wealth of real language materials, interactive exercises, and multimedia tools that can help learners become more motivated and engaged while also facilitating language acquisition. Additionally, learners can interact with language learning resources at their own pace and convenience thanks to technology, which provides the flexibility of anytime, anywhere learning. Evaluating how technology affects language learning outcomes is essential as its use in classrooms grows in popularity in order to guide teaching strategies and advance successful pedagogical techniques. Technology like artificial intelligence (AI) has the potential to significantly enhance the communication skills of people learning English by offering them personalized and interesting learning experiences, according to Rusmiyanto et al. (2023).

Education policies and teaching and learning methods have been significantly impacted by technological breakthroughs, which have also created excellent chances to raise the standard of education at all levels. Numerous attempts have been made to review the role of digital technology like the use of digital assessment tools in fostering meaningful and successful teaching and learning as a result of the profound changes that have affected education systems around the world.

Teachers utilize digital tools for assessment, which are electronic or online resources, to measure students' performance, comprehension, and learning. These resources, which are crucial for diverse assessment strategies, can include tests, online questionnaires, e-portfolios, and interactive platforms that offer real-time feedback and data analysis. Digital assessment tools, according to recent studies, a) give students immediate feedback, enabling them to understand their learning gaps in real time; b) frequently include analytics features that enable teachers to monitor progress over time and modify instruction accordingly; c) support multiple-choice, short answer, and even video submissions, accommodating a variety of learner needs; d) enable more engaging and interactive assessments, which can inspire students and improve their educational experience; and e) make it easier to implement differentiated assessments by enabling teachers to create customized tests based on each student's strengths and weaknesses.

The European Union adopted the Digital Education Action Plan (2021-2027) in 2020 with the goal of helping all education stakeholders address the digital challenges and seize the opportunities. The significance of creating innovative, technologically supported teaching and learning methods has also been emphasized locally, and the Ministry of Education, Science, and Technological Development of Serbia released the Digital Competence Framework in 2019 as one of the educational policy measures governing the use of digital technologies. Building teachers' digital capabilities is a key component of the Framework, which also aims to help students develop their digital competencies and give them the tools they need to live and work in a digital world.

In an educational setting where technology is used extensively, teachers play a critical role. To meet the ever-increasing needs of education, they must constantly improve their digital competencies. In this research, a study of a group of language learners at Cebu Normal University is presented, along with their use of digital tools. It looks into how effective digital assessment tools like Kahoot, Quizlet, EDpuzzle, Padlet, Moodle, Nearpod, Quizizz, and others whom respondents (experimental group) used when their classes were conducted entirely

online, in comparison to students (control group) who used more conventional learning tools and resources. This study therefore attempts to ascertain the effectiveness of digital assessment tools on tertiary students' English language learning outcomes.

The study's conclusions are meant to shed light on the general efficacy of digital assessment tools with technology in English language instruction. It also looks for particular traits and attributes of these instruments that enhance their efficacy. Teachers and practitioners can make well-informed decisions about integrating technology into language instruction by being aware of the advantages and disadvantages of various technology-based interventions.

In conclusion, the use of digital assessment tools in conjunction with technology-enhanced language learning has the potential to revolutionize the paradigm of English language instruction. The purpose of this research is to add to the body of knowledge by methodically investigating how different technology-based digital assessment tools can improve language learning outcomes and learner engagement. This study attempts to support educators, curriculum designers, and legislators in their endeavors to maximize the use of technology in language instruction by combining the results of other studies.

## Literature Review

Digital assessment tools improve differentiated assessment by offering adaptable choices that accommodate varied learning demands and styles. Teachers can use these tools to design customized tests that offer real-time feedback and a variety of question styles. Students at varying comprehension levels benefit from this customization, which also helps pinpoint areas in which more assistance is required. Digital technologies that provide real-time feedback have a big impact on student learning outcomes because they let students know where they're weak and where they can improve right away. Since they may instantly modify their techniques in response to the insights presented, this instant feedback loop encourages students to take charge of their education. Furthermore, giving pupils timely feedback encourages a growth mindset in them and helps avoid misunderstandings from continuing.

Students' enthusiasm and engagement can be greatly increased by incorporating digital tools for assessment. These resources frequently include interactive aspects or gamified components to increase students' enjoyment of assessments. Learners are more likely to actively participate in their educational processes when they are actively engaged by technology. Additionally, getting feedback right away fosters a sense of achievement that might inspire students to perform better.

The global hygienic phenomenon known as COVID-19 has caused a technological revolution in our civilization in recent years, impacting every facet of human existence. Because of this, education has changed in such a way that all school systems now prioritize using technology and the Internet. Teachers and students have been oriented toward developing and improving their digital skills and competencies in a relatively short period of time as the use of technological tools like LMS platforms, CMI systems, and other institutional and non-institutional web-based teaching aids became an alternative or a substitute for in-site lessons and traditional face-to-face classrooms and educational centers. The goal was to offer an ongoing, efficient teaching and learning process that was available to all parties involved like teachers, students, and institutions. The Internet took on the function of a creative, interactive, multidirectional media that can be used for both synchronous and asynchronous communication. The majority of the technology employed for instruction and learning under these circumstances was based on Web 2.0 applications. The platforms and apps facilitate user engagement, make use of data from many sources, and give all Internet-connected users access to a variety of audio-visual tools, all of which contribute to rich user experiences.

As a result, existing teaching strategies and techniques have been reevaluated and adjusted to address the new circumstances. More than ever, instructors are being urged to support student participation in their education and a learner-centered approach. The necessity to continuously adjust educational methods to the dynamic social and economic changes in order to ensure the quality of teaching and learning has received a lot of attention, despite the fact that the best teaching model is an elusive ideal. But these developments also provide

a lot of difficulties for educators, who must learn a variety of skills to meet the new needs of society. Researchers have looked into a number of facets of teachers' digital abilities. Results highlight the differences between instructors' perceived needs and priorities for technology-supported lesson planning and actual demands as well as teachers' abilities and capabilities.

Numerous studies have looked into whether or not teachers in the Republic of Serbia were prepared for the online learning environment. Some of these studies indicate that even with sufficient access to technology, the primary school teachers who responded were ill-equipped to plan lessons efficiently, with the biggest obstacle being the inability to communicate with students. According to research done by the end of 2021, there are significant differences in the tools and platforms used when conducting and planning online lessons. Zoom, Google Meet, and Microsoft Teams were the most popular platforms for synchronous online teaching, while Google Classroom and Moodle were primarily used as learning management system platforms.

Research has shown conflicting findings regarding teachers' perceptions of the advantages of using digital technologies. While some find that teachers prioritize traditional and face-to-face interaction and do not express overwhelmingly positive attitudes, others have found that technology can help with lesson planning, increase student motivation, and make teaching and learning materials more accessible to all. Results from a study that looked at how students felt about the potential of online learning indicate that secondary and tertiary students are generally aware of the benefits and potential of digital tools and platforms. The main advantage of incorporating mobile applications and digital assessment tools into foreign language training, according to recent studies, is the process's ability to be interesting and entertaining to the learning environment and experiences.

Foreign language instruction is no exception to the changes that have occurred at all educational levels. Online chat and discussion and goal-oriented online transactions and collaboration are two new measures of online engagement that have been included to the updated CEFR (2020) in order to encourage an action-oriented approach. Both scales use the web for written or spoken tasks, which is known as multimodal activity. The digital world, according to this viewpoint, gives students useful tools for participation, expression, and enhancing social inclusion and accessibility. These presumptions support students' independence and digital skills to get them ready to communicate on their own in cross-cultural online settings. Teachers are encouraged to examine their current methods, modify them, or adjust them to suit changing conditions in such a setting. The institutions have integrated several learner-centered models into their learning management systems, including game-based learning, flipped classrooms, blended or hybrid learning, and others. These instructional strategies and tactics are founded on CALL, an interactive model that uses computer technology to deliver all phases of instruction: practice, presentation, and feedback, promoting student autonomy and self-directed learning.

However, the emphasis placed primarily on technology and online tools may prompt many concerns over their pedagogically sound use in language learning settings. Simply implementing new hardware, software, and other technology has not always resulted in high-quality instruction or successful target language acquisition. Put differently, innovation in technology does not necessarily translate into innovation in education. Both educators and students, irrespective of the educational and geographic setting, acknowledge the benefits and difficulties of the recently implemented hybrid language learning environment. Recent research indicates that in-person interactions and the teacher's role are essential components of successful language acquisition, and that lectures, presentations, and instructor-led oral explanations are more effective than learning with the use of digital tools.

Some difficulties stem from a lack of enthusiasm for learning brought on by subpar classroom settings or technical malfunctions. According to some data, the synchronous online style of interaction, which uses a video-conferencing tool, results in less interaction between the teacher and students. Online language courses, on the other hand, offer flexibility in terms of time and location for learning and are seen as inspiring and successful. To put it another way, students are now more independent and accountable for their education both within and outside of the classroom. Instructors must make sure their "digital natives" use their digital capabilities for educational reasons. Teachers and educators should acquire and apply a variety of skills and

information (technical, pedagogical, and subject knowledge) in order to comprehend, assess, and design learning scenarios that are appropriate for tangible educational contexts and grounded in the learning needs of actual students.

### **Objective of the Study**

This study looked into the effectiveness of digital assessment tools on the English language learning outcomes of tertiary students.

### **Methodology**

Using a carefully selected sample of third-year students, this study was conducted at Cebu Normal University's main campus. A total of sixty-five (65) participants were randomly assigned to either the experimental or control group in two separate classes to ensure a fair distribution of the characteristics of the learners. There were thirty (30) BA English Language students and thirty-five (35) BSEd English students. Of the thirty (30) participants in the experimental group, ten (10) were males and twenty (20) were females, their intermediate English skill levels were assessed using a standardized English language proficiency exam. The age range of the participants was twenty-two (22) to twenty-five (25). In contrast, the thirty-five (35) participants in the Control Group, which consisted of ten (10) males and twenty-five (25) females, had intermediate levels of English proficiency as determined by the same standardized test, and their ages ranged from twenty-two (22) to twenty-five (25).

The participants from the Control group made use of the traditional or conventional learning tools and resources while the respondents from the Experimental group were exposed with varied digital assessment tools like Kahoot, Quizlet, EDpuzzle, Padlet, Moodle, Nearpod, Quizizz, and others following the weekly assessment after each lesson or unit were conducted.

To be considered for the study, participants had to meet certain prerequisites. These included not having any past experience with digital assessment tools in language learning, being undergraduate students specializing in English, and not having any learning difficulties that might fundamentally hinder their ability to learn languages.

The entire study was conducted with ethical considerations in mind to safeguard the rights and welfare of the respondents. Each of them provided their informed consent before to the study's commencement, ensuring they were fully aware of the investigation's purpose and methodology and that they might withdraw at any time. Additionally, the researchers maintained strict confidentiality and data anonymity procedures to protect the participants' privacy. The study showed that the researchers were committed to putting the rights and welfare of the participants first during the entire investigation by strictly following the ethical guidelines for research with human subjects.

To ascertain the participants' pre-level of English proficiency, a thorough English Language Achievement test was administered to both the experimental and control groups during the pre-test phase. A team of seasoned educators with extensive expertise in language education and assessment meticulously crafted the English Achievement exam, ensuring its validity and relevance to the study's objectives. The exam is a suitable tool for accurately assessing participants' language proficiency levels because it was thoughtfully created to meet the learning objectives and course requirements of the university's program. Each of its many components evaluated a distinct set of foundational language skills, such as writing, grammar, vocabulary, and reading comprehension. To ensure the validity and quality of the English achievement test, the test was carefully reviewed by three subject matter experts. The test's face and content validity were confirmed by their perceptive feedback and careful analysis, ensuring that it correctly measured the required level of linguistic competency. Strong internal consistency among its components and high dependability were demonstrated by the English accomplishment test.



To collect qualitative data, thirty (30) members of the experimental group participated in semi-structured interviews. The researcher employed a purposive sampling strategy to ensure that the experimental cohort was evenly represented by age and gender groups and to collect a wide range of experiences and perspectives for a more thorough qualitative analysis. Ten (10) of the participants were males, and fifteen (15) were females. Their ages ranged from twenty-two (22) to twenty-five (25). This is the demographic profile of the participants. At the start of the study, their English proficiency skills were assessed using standardized tests and found to be intermediate. A wide range of academic backgrounds covering a wide range of areas within the institution were also brought by the participants.

The semi-structured interviews were thoughtfully designed to give participants a targeted and flexible platform to share their ideas and opinions regarding how well digital assessment tools support their English language learning objectives. These discussions included a wide range of subjects related to their experiences learning languages using digital assessment tools such as Quizlet, EDpuzzle, Padlet, Moodle, Nearpod, Quizizz, Kahoot, and other online platforms. Their motivation and sense of independence during the learning process, as well as their opinions and sentiments about interactive learning activities that use digital evaluation tools and the effect of personalized feedback on language development, were among the topics discussed.

Participants were also asked to reflect on the challenges they encountered and to share the advantages they experienced when using digital assessment tools for their English language learning objectives. These one-on-one interviews fostered an honest and laid-back atmosphere that encouraged participants to openly express their opinions. Each interview was audio recorded with their consent, and detailed notes were taken to document verbal and nonverbal clues and contextual information.

Before the intervention was put into place, pre-test evaluations were given to the experimental and control groups to determine how well they were learning English. Using digital assessment tools, the pre-test evaluated the participants' writing, vocabulary, grammar, and reading comprehension abilities. Participants were randomly assigned to either the experimental or control groups after completing the pre-test phase. This random assignment improved the study's reliability by ensuring that any biases or individual variations between the two groups were distributed equally.

The control group received traditional language instruction concurrently for eight (8) weeks. Textbooks, lectures, and class exercises were some of the conventional teaching methods and resources used in this lesson; digital assessment tools were not integrated. Activities included reading passages, writing tasks, grammar drills, and teacher-led discussions. The instructor served as the main educator in the classroom, leading lectures and activities. Participants were encouraged to devote at least two hours per week and finish their assigned homework in order to enhance their language skills outside of the classroom. On the other hand, experimental group made use of digital assessment tools.

Throughout the data collection phase, the researcher closely monitored participant participation and intervention execution to ensure validity and precision. The entire study was conducted in strict adherence to ethical principles, which included obtaining informed consent and maintaining anonymity, in order to safeguard the participants' rights and welfare.

## Findings

To fully understand the experiences and viewpoints of the students who participated in the use of digital assessment tools for language learning and instruction, a qualitative phase was incorporated into the study. To guarantee a diverse variety of experiences and perspectives, thirty (30) carefully selected students from the experimental group took part in semi-structured interviews. These interviews sought to delve deeper into the nuances and subjective elements of the students' engagement with the digital assessment tools in order to shed light on the underlying processes and contextual factors that influenced the students' English learning outcomes.

In every test area, the experimental group outperformed the control group, according to quantitative analysis. They also showed a more thorough application of self-regulated learning techniques and a stronger desire to

learn a second language. The findings demonstrate the beneficial effects of digital assessment tools on self-regulated learning, motivation to acquire a second language, and English learning achievement. It has a positive impact on university students' English language learning outcomes.

Thirty (30) students from the experimental group participated in a qualitative research of semi-structured interviews to demonstrate the transformative effects of digital assessment tools. Customized learning experiences and enhanced engagement have been found to boost motivation and encourage self-regulated learning. These findings demonstrate how digital assessment tools can improve language learning outcomes, increase student motivation, and promote autonomy among language learners.

The participants attributed their significant gains in English language proficiency to the digital assessment tools used in the classroom. They highlighted how the interactive and adaptive features of the digital assessment tools helped them become more proficient in a range of language domains, including writing, grammar, vocabulary, and reading comprehension. Many students shared personal stories of their growth, showing how their improved language abilities improved various aspects of their academic and personal lives. The students' stories illustrated how their improved language skills enabled them to excel in English language proficiency-required coursework, leading to higher marks and greater confidence in their academic prowess.

The inclusion of qualitative insights improves the conversation and fortifies the study's validity by offering a comprehensive grasp of the students' experiences using digital assessment tools for language learning. The subjective elements of the learning process that quantitative measurements can miss are captured by the qualitative phase, which adds depth and subtlety. Furthermore, combining qualitative and quantitative data improves the study's legitimacy and advances a thorough comprehension of the issue.

In addition, based on the results of the study, digital assessment tools can have a positive impact on English language teaching and learning. It is an effective tool in enhancing the English language learning outcomes of the students. The data show the significant benefits of digital assessment tools, namely:

1) The effective use of digital assessment tools improve learners' language learning skills; 2) Learning incorporating digital assessment tools help understand its impact and potential for learning English; 3) The tools have the potential to facilitate the advancement of English language learning; 4) Language learning with technology support such as digital assessment tools is equally effective as learning with human teachers; 5) Comprehensive training programs and sufficient time allocation enable teachers to confidently utilize digital assessment tools in English language instruction; 6) The provision of appropriate educational technology such as digital assessment tools enhance the effectiveness of English language teaching and learning; 7) Digital assessment tools such as Quizlet, EDpuzzle, Padlet, Moodle, Nearpod, Quizizz, Kahoot, and other online platforms prove to be beneficial in English language teaching, creating accessible and efficient learning environments and has a positive impact on specific language skills; 8) Technology such as digital assessment tools serve as a facilitator in the instruction and learning of English; and 9) The utilization of technology in English language teaching and learning has witnessed a significant rise globally.

The notion that digital assessment tools can improve teaching strategies, improve language learning outcomes, and produce more dynamic and productive learning environments is supported by all of these research findings taken together. They demonstrate how technology may help with a variety of language skills, including communication, academic writing, vocabulary growth, and listening comprehension. For instructors to successfully use technology into their language teaching practices, the studies also stress the significance of giving them the right kind of training and assistance.

## Conclusion

The use of digital assessment tools is crucial for enhancing English language learning results. It has been demonstrated that the efficient use of digital evaluation tools improves learners' language competency and opens up new avenues for language learning. English language learning is made easier with the help of digital assessment tools like Quizlet, EDpuzzle, Padlet, Moodle, Nearpod, Quizizz, and Kahoot, as well as other online

resources that offer effective and easily accessible learning settings. Crucially, the study also shows that language learning aided by technology is just as successful as learning from human teachers, indicating that technology can provide individualized learning experiences and meet the needs of each student. However, it is essential to give instructors the right training and support so they can use educational technologies with confidence in order to achieve successful integration. Educational institutions can enable instructors to use technology, such as digital assessment tools, in language teaching and learning by providing them with thorough training programs and enough time. These findings emphasize the value of digital assessment tools in improving language learning outcomes and the necessity of ongoing professional development and assistance for educators embracing and putting into practice technology-enhanced language learning strategies.

Furthermore, in order to promote language learning, educators should be open to integrating digital assessment tools into their lessons. Students can get a multitude of opportunities to enhance their language proficiency, critical thinking, creativity, and problem-solving abilities through the innovative use of digital resources in language instruction. There are a variety of online resources that educators might use, such as social networking, word editing software, and apps and platforms for language acquisition. Students can engage with the language in a variety of ways when digital assessment tools are incorporated into the classroom. This also increases motivation, fosters the development of language learning abilities, and enhances intercultural communicative competence. These resources also encourage classroom engagement, which enhances social and communication skills. Additionally, digital assessment tools help teachers adapt their instruction to each student's unique needs, making the classroom experience more individualized. Additionally, formative assessment, evaluation, and student progress tracking are all facilitated by digital resources. Instructors can modify their lessons and promote learning by using digital technologies to track student performance and give immediate feedback. Additionally, digital assessment tools offer a more effective means of evaluating student work, allowing teachers to pinpoint areas in which students require additional assistance and adjust their instruction accordingly. In conclusion, both teachers and students can gain a great deal from the innovative use of digital resources in language instruction.

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