

The Integration of Technology-assisted Assessment in esl (English as a second Language) Instruction

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Abstract - This study explores the incorporation of technology-assisted evaluation in English as a Second Language (ESL) teaching and its influence on educational achievements. The study investigates the effectiveness of using several technology tools, such as online platforms, adaptive software, and multimedia resources, to evaluate the language ability of ESL learners. Through the utilization of these tools, instructors strive to deliver interactive, captivating, and customized assessments that provide significant insights into learners' advancement and areas requiring enhancement. The study highlights the significance of accuracy in the design and execution of assessments to guarantee their validity and reliability. The text examines the role of technology in enhancing the gathering and examination of assessment data, empowering educators to make well-informed choices to improve instructional methods and to cater to the unique needs of each student. Moreover, the study explores the capacity of technology-supported evaluation to tackle issues encountered in conventional assessment approaches, such as the ability to handle large-scale assessments and ensure impartiality. Additionally, it emphasizes the importance of addressing implementation factors, such as guaranteeing availability of devices and dependable internet connectivity. In summary, this article argues in favour of incorporating technology-assisted assessment into ESL training to improve learning outcomes and promote better language proficiency among learners.

Keywords: Technology-assisted assessment, educational technology, ESL instruction, Instructional strategies

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INTRODUCTION

The field of English as a Second Language (ESL) instruction is continuously changing, as educators strive to develop new approaches to improve learning results and meet the needs of a wide range of students. Evaluation plays a crucial position in this procedure, offering valuable perspectives for the advancement of learners and guiding instructional choices. Nevertheless, conventional evaluation methods in ESL classes frequently have constraints. As claimed by (Dube, Zhao, and Ma, 2009), Technological pervasive influence causes a progressive transition in the evaluation phase from the conventional manual writing technique to technological devices or electronic assessment. Any evaluation procedure involving the use of technology is referred to as electronic evaluations, digital evaluation, technology assisted or aided assessment, computerised assessment, or internet-based

assessment (Bull, 1999; Chalmers, McAusland, 2002; TAFE Frontier, 2002, Elliot, 2003).

Administering and grading paper-based examinations can be a time-consuming process that mainly relies on subjective interpretation. Additionally, these tests may not completely measure the full spectrum of a learner's skills. These constraints can impede both educators' capacity to effectively assess student advancement and learners' chances to showcase their skills in various fields.

As a solution to these difficulties, the incorporation of Technology-Assisted Assessments (TAAs) has become a hopeful approach for changing the assessment process in ESL instruction. TAAs utilize technology to generate dynamic and interactive assessment experiences. These exams can include a range of formats, such as adaptive testing platforms, automated writing evaluation tools,

speech recognition software, and online games with built-in assessment capabilities. TAAs have multiple potential benefits. Language tutors have the ability to offer prompt and focused feedback on certain mistakes related to grammar, vocabulary, and pronunciation, which facilitates faster development in learning. In the discussion of TAA's pedagogical programs, **Chalmers and McAusland (2002)** noted that it allowed educators to assess learners on a variety of topics, minimised teacher workload—particularly when it came to double marking—saved time and money, and assisted in identifying students' areas of difficulty by tailoring the assessment to the students' skills. In addition, TAAs can provide a more thorough evaluation of a broader spectrum of ESL abilities, encompassing listening, speaking, reading, writing, and even fluency.

Furthermore, to their efficacy in assessing knowledge and abilities, TAAs also possess educational significance. They have the ability to enhance learners' self-assessment and metacognitive skills development. Through active participation in interactive tests that offer instant feedback and comprehensive explanations, learners acquire vital insights into their areas of proficiency and areas for improvement, which promotes the development of independent learning strategies. In addition, TAAs have the ability to establish a learning atmosphere that is both captivating and inspiring. The interactive aspect of these tests, combined with the possibility of including gamification components, has the potential to increase student engagement and reduce the stress associated with the assessment process.

Nevertheless, the incorporation of Teaching Assistant Aides (TAAs) in English as a Second Language (ESL) classrooms presents certain difficulties. To provide fair and equal access for all students, it is necessary to take into account aspects such as students' availability of devices and access to reliable internet connectivity. Furthermore, as the role of TAAs continues to develop in the assessment field, it is important to investigate how these tools might complement or even substitute traditional teacher-based examinations in a fair and equitable way. It is necessary to investigate the cost implications and the requirement for culturally appropriate Teaching and Assessment Approaches (TAAs) that are specifically intended for varied learners.

Notwithstanding these difficulties, the prospective advantages of TAAs for ESL training are indisputable. The objective of this study is to thoroughly examine the complex realm of Teaching Assistant Activities (TAAs), investigating their efficacy, educational worth, and logistical factors for implementation. This paper aims to analyse the present state of research and explore the experiences of educators and learners in order to provide significant insights on how to effectively utilize technology to enhance the assessment experience in ESL classrooms, making it more engaging, effective, and learner-centred.

LITERATURE REVIEW

The term "technology-Assisted Assessment" (TAA) describes how digital instruments and platforms are included into language proficiency assessments. This new discipline offers new possibilities for thorough and effective language testing and marks a substantial shift from conventional, paper-based assessment approaches. TAA gives teachers the ability to collect more comprehensive data on students' language proficiency through the use of technology, which helps with decision-making and customised instruction.

This literature review seeks to address this deficiency by doing a comprehensive analysis of the current status of TAA in ESL instruction. This study examines the possible advantages and difficulties linked to several TAA (Technology-Assisted Assessment) techniques, based on research undertaken in a range of educational settings. This review aims to find the most successful methods for integrating TAA (Teaching Academic English) in order to promote culturally responsive assessment of ESL (English as a Second Language) learners. This will be achieved through a thorough analysis of existing research.

The field of English as a Second Language (ESL) instruction is currently experiencing a significant and rapid change, driven by the widespread use of technology. "Assessment is high quality information about students' performance which influences instruction and learning," states the **National Research Council (2003)**. A fresh report by the **UNESCO Institute for Statistics (2023)**, a reliable source on technology in education reveals that more than 80% of ESL instructors worldwide currently employ technology in their courses. The swift incorporation of these advancements offers promising prospects for improving assessment processes, which have traditionally been a difficult element of ESL training.

Assessment is a cornerstone of effective instruction, serving as a critical tool for both teachers and students (**Black & Wiliam, 1998**). It provides valuable insights into student learning, informs instructional decisions, and ultimately contributes to improved outcomes. Educational achievement is greatly influenced by assessment (**Muwanga-Zake, 2006; Warburton, 2006; McLaren, 2008**). When assessment is combined with relevant resources, it can impact future planning by identifying the needs of the learner. Furthermore, assessment is a precise and well-organised measuring instrument that offers fast feedback on learning objectives. **Debusse, Lawley, and Shible (2008)** described feedback as thorough, legible, timely, customised, instructive, and consistent, emphasising its significance in evaluation.

A greater number of individuals are enrolled in English language schools to improve their language proficiency. Fortunately, many parents find it enjoyable to give their kids a variety of resources for improved English language acquisition (**Ali, 2016**;

Sarwar, 2016). However, successfully utilizing the potential of technology-assisted assessment (TAA) in the ESL classroom necessitates a subtle and refined approach. Although conventional paper-and-pencil examinations might be lengthy and provide limited understanding of student advancement, many TAA tools may lack cultural awareness or fail to encompass the complete range of language skills. A study by **Zuo, X., & Ives, D. (2023)**, claims that the majority of studies on Technology-Assisted Reading Instruction (TARI) primarily examined its efficacy, but paid little attention to the contextual interactions between learners and instructors with technology.

Field of study and significance: This study examines how educational technology (EdTech) and second language acquisition (SLA) are convergent, with an emphasis on technology-assisted assessment (TAA) in ESL training. The field of SLA, which studies second language acquisition, and EdTech, which uses technology to improve teaching and learning, have some overlap. Through investigating the use of TAA in ESL classes, this study seeks to further the creation of more insightful and successful assessment procedures. Conventional evaluation techniques frequently fail to accurately capture the entire spectrum of language proficiency and give students timely feedback. Through the provision of more thorough, effective, and interesting assessment experiences, TAA offers the possibility to get beyond these restrictions.

Conventional evaluation techniques in ESL teaching, which frequently depend on written exams, can be lengthy and provide very limited understanding of a student's genuine language proficiency. In contrast, TAA provides the opportunity for flexible, individualized, and data-based evaluation, enabling instructors to measure a broader spectrum of abilities, such as oral communication, auditory comprehension, written expression, and reading comprehension, in a more captivating and interactive manner. According to **Altun (2015)**, "Smart boards can be instrumental in enticing and inspiring the student in the classroom." When children use technology more effectively, teachers who use it with them can feel quite satisfied. For instance, teaching pronunciation employing touchscreens or cell phones can be done easily, even if the instructor is not a native speaker **Sad & Goktas (2014)**.

The digitization and technicalization of education have greatly improved literature teaching for English Language Learners (ELLs) during the past decade. In the present-day academic setting, it is imperative that educators receive training in the incorporation of technology. Furthermore, **Ketsman (2012)** is adamant that in order for instructors to meet the demands of both schools and students, they must be armed with technology-based tools. **Kilickaya and Seferoglu (2013)** assert that it is beneficial for educators to adapt their pedagogical approaches due to the rapid advancement of technology and the proliferation of technologically orientated instruments utilised by

pupils. Through the incorporation of technological execution assistance systems, educational technology is growing more advanced and adaptable in its ability to enhance student performance and academic achievement. Recent advancements encompass electronic education and the employ of handheld gadgets (for a recent discussion see **Keengwe, 2015**).

For educators when contemplating TAA, it's important to analyse the effectiveness of present assessment methods for assessing necessary disciplinary skills and abilities. **ALT (2003)** outlined six approaches to strategically apply learning technology, including TAA, to improve efficiency and effectiveness of the learning process, as well as six elements that can negatively impact it. TAA needs to be applied in the right situation. Studies indicate that for learning technology to be productive, it must be incorporated into the course's structure and execution (**Ehrmann, 1998**). Assessment can be summative (for grading) or formative (to provide feedback for learning). Tutors employ diagnostic evaluation to determine students' past knowledge, while self-assessment allows students to reflect on their comprehension. (**O'Reilly and Morgan, 1999; Bull & McKenna, 2004**).

According to **Almekhlafi and Almeqdadi (2010)**, integrating technology assisted assessment into language classrooms can significantly improve students' skills. They put it this way: "Technology not only allows students to take charge of their own education, but it additionally offers them easy access to an immense quantity of information that is outside the purview of the instructor". **Alemi (2016)** also supports the benefits of using technology in language classrooms to improve ESL instruction. For instance, ESP (English for Specific Purposes) as well as universal language instruction and acquisition equally heavily rely on technology (TAA). Because the field of language education has grown so broad, a wide range of technologies are currently employed in ESL classrooms worldwide beneath the umbrella of TAA (**Alemi, 2016, p. 13**).

A diverse range of smartphone Apps are accessible today, from educational tools like Google Classroom, which provides extensive assistance for classroom communication, assignment scheduling, and student learning, to Apps that support specific student learning in languages, mathematics, computer programming, and other subjects. Based upon **Yulin (2013)**, "integrating technology into education has emerged as an effective and innovative strategy to educators as a result of technology used in education becoming more popular and sophisticated".

Yulin (2013) also makes reference to Vygotsky's theory of learning, which holds that psychosocial learning—the process through which students create interactions in their social environments—is the means by which learning occurs. Technology provides learners the flexibility to learn

independently and facilitates their ability to communicate and collaborate with others. It additionally affords them plenty of chance to practise speaking, writing, listening, and reading outside of the classroom. As stated by **Shyamlee (2012)**, "Those emergence and evolution of interactive technology and its integration to teaching, highlighting audio, visual, and animated effects, relates into full bloom in English class teaching and creates an advantageous framework for transformation and investigation on English teaching techniques in the modern era" is a result of the rapid advancement of science and technology.

Although relatively fresh, the proliferation of mobile devices has reinvigorated Technology-Assisted Evaluation. There are numerous mobile programs available that help with assignment administration, from creating and sharing assessment activities to grading and feedback. One example is previously mentioned Google Classroom. However, in the majority of instances, the key objective of a tool is to improve the effectiveness and quickness of old manual procedures. Evaluations must be accurate and trustworthy. Reliability in grading is one of the benefits of TAA. There are several ways to score, ranging from the straightforward assignment of a score for an accurate answer to complex, variable, and negative scoring, **Gráinne Conole & Bill Warburton (2005)**. By definition, automated technology assessment methods are best suited to assessing highly convergent, or factual, knowledge and providing similarly converged assessment. Typically, this entails finding inaccurate responses on a quiz and sending them to the student or teacher for corrections.

Though, **Sim, Holifield & Brown, 2004**, argue that the primary disadvantage of TAA is believed to be its inability to support advanced cognitive abilities like analysis, synthesis, and evaluation (Bloom's Taxonomy), which rely on psychological mechanisms and individual characteristics like the willingness to try a novel idea, the ability to see unexpected connections between disciplines of knowledge, and openness to the unexpected **Cropley and Cropley, 2015**. As an outcome, when trying to promote innovative thinking in the learning environment, an alternative strategy to TAA is required - a technique that extends the notion of assessments instead enforces language proficiency to a context whereby there is no single correct answer and suggestions must tackle not solely the features of the assessable product, but also the interpersonal, environmental, and intellectual factors that influence product generation. Several descriptions by **Cropley, 2012; Duma & Silverstein, 2014; Ebert et al., 2015; Hunter, 2005; Ludwig et al., 2014; Rooney, 2004** have proved that an imaginative approach boosts acquisition not solely in artistic fields, but in all areas, which includes for instance, arithmetic.

However, **Conole and Warburton, (2005)** conducted an exhaustive assessment of TAA layout, delivery, and reporting. Technology assessments can be classified as stand-alone, confidential network, or web-based

apps. TAA was viewed as an extremely risky yet important part of the process of education and instruction. **Muwanga-Zake (2006)** assessed the diagnostic utility of TAA in the instructional process. They came to the conclusion that students understood how beneficial criteria-referencing and TAA were in influencing their subsequent learning outcomes. The findings demonstrated that students made progress as a result of self-evaluation and constructive suggestions, which gave them the ability to identify and correct their own errors through discussion with or without their instructor's involvement.

A viable way to improve English acquisition and evaluation procedures is through the use of technology-assisted assessment (TAA) into ESL training. Even though studies have shown that TAA can deliver timely feedback, encourage learner autonomy, and provide a more thorough assessment of language proficiency, problems with execution, limitations on accessibility, and moral dilemmas still need to be addressed. Technology-assisted assessment has the potential to improve efficiency and efficacy, according to investigations in other fields like e-discovery **Grossman & Cormack, (2011)**. Nonetheless, more research on TAA in ESL classes is required due to the particular context of language learning and evaluation.

Future study should concentrate on creating efficient methods for incorporating technology into classroom assessment procedures, resolving equity concerns, and investigating the long-term effects of TAA on student results in order to fully reap the positive effects of TAA.

RESEARCH OBJECTIVES

1. To investigate the efficacy of several technology-assisted assessment instruments in determining the English competency ranges for ESL learners.

- Justification: Measuring competence in languages is a difficult endeavour that has always relied on assessments of teachers and standardised examinations. On the contrary, technological integration opens up new possibilities for additional flexible and customised evaluations. This goal is to methodically examine the ways in which various technology-assisted instruments, including assessments conducted online, programs for language acquisition, AI-powered assessment methods, and collaborative channels, could reliably and efficiently gauge the reading, writing, speaking, and listening skills of ESL students.

Key Research Domains:

- **Comparative Evaluation:** To determine how accurate alternative technology-assisted evaluation approaches are at assessing specific language skills, compare and contrast them. These might embrace devices such as speech detection applications, AI-

powered evaluation frameworks, and customisable educational programs which modify questions according to students' answers.

- **Authenticity as well as dependability:** Examine such instruments' accuracy and dependability in relation to more conventional evaluation techniques. This entails looking at the examination results' accuracy and compatibility with accepted standards for ESL instruction.
- **Principles of Review:** Examine how various technologies' input helps pupils grasp where they stand in terms of linguistic competency and what they need to work on.

2. To discover how the interest and motivation of ESL learners are affected by technology-assisted assessment.

▪ **Justification:** Since enthusiasm and involvement have an immediate effect on children's readiness to contribute and overall performance, both are essential components of language acquisition. With their interactive and frequently augmented components, technology-assisted examinations have the ability to raise students' interest and motivation. In order to provide light on how technology could be used to enhance the instructional setting, this purpose aims to comprehend the emotional and behavioural consequences of these assessments on ESL students.

▪ **Major Research Domains:**

- **Concepts of Inspiration** - Use motivational theories to examine how technology-assisted assessments affect learners' both their intrinsic and their external desire to learn English, such as Self-Determination Theory (SDT) or Expectancy-Value Theory.
- **Metrics for Interaction:** Evaluate pupil involvement using a variety of metrics, including the amount of time they spend on evaluation assignments, how often they participate in extracurricular endeavours, and how interested they are in mastering English.
- **Effect on Cognitive Patterns:** Investigate if using technology-assisted assessments promotes successful educational behaviours including participating proactively in group discussions, maintaining improved study routines, and putting forth additional effort to practise English beyond the school environment.

3. To evaluate how well the targets and requirements of ESL instruction correspond with technology-assisted assessment.

▪ **Justification:** For the reason that for technology-assisted evaluations to prove genuinely

beneficial, these must be conducted in line alongside the norms and learning objectives established for ESL programs. By aligning the evaluations with the desired educational results, it guarantees that pupil abilities are appropriately measured. This goal is to analyse how well the evaluation instruments match the particular goals of ESL training, like interpersonal competency, vocabulary acquisition, and understanding of grammar.

▪ **Key Research Domains:**

- **Pedagogical Mapping:** To match the goals and content of ESL instruction with the possibility of technology-assisted evaluations, carry out a curriculum design approach. This entails determining the most important learning objectives and making sure the tests adequately address these objectives.
- **Guidelines Enforcement:** Determine if the technology-assisted evaluations adhere to accepted ESL regulations, including the rules set forth by the American Council on the Teaching of Foreign Languages (ACTFL) or the Common European Framework of Reference for Languages (CEFR).
- **Operational Coherence:** Evaluate how seamlessly the tests fit into regular teaching procedures and whether they assist instructors achieve their educational objectives.

4. To delve into how ESL instructors feel about using technology-assisted assessment in their lessons and how they feel about it.

▪ **Justification:** Teachers are essential to the uptake and effectiveness of novel assessment techniques. The way in which they view technology, how they handle it, and how ready they are to incorporate it into their lessons can all greatly affect how useful these resources are. The goal is to learn more about the opinions of ESL teachers regarding the use of technology-assisted assessments, including their perceptions of its advantages and disadvantages. Comprehending these viewpoints can help guide professional development initiatives and encourage tactics that boost educators' self-assurance and proficiency using these resources.

▪ **Critical Research Fields:**

- **Advantages as Seen:** Examine the advantages that educators see in employing technology-assisted evaluations, including time savings, enhanced feedback from students, and more precise tracking of students' development.
- **Obstacles and Difficulties:** List the difficulties that teachers encounter, such as

technical issues, a paucity of training, reluctance to modify, and doubts over the validity of the tests.

- **Career Growth and Preparedness:** Evaluate the degree to which instructors are prepared to incorporate these tools into their instruction and determine what kind of professional development or assistance would make this integration easier.
5. To determine the most effective ways to use technology-assisted evaluation into ESL lessons.
- **Justification:** Choosing the right tools and implementing standards of excellence that suit the various demands of ESL students are essential for successful implementation of technology-assisted assessment. In order to create a collection of guidelines for the efficient use of these kinds of evaluations in ESL instruction, this paper seeks to compile and synthesise perspectives from scholars, teachers, and case studies. The teaching objectives, infrastructure for technology, and diversity of students should all be taken into account in these activities.
 - **Key Research Domains:**
 - **Examples & Case Analysis:** Examine reports of effective technology-assisted assessment implementations in ESL programs, noting the tactics that made the changes work.
 - **Adaptation to Multiple Scenarios:** Examine how standard procedures can be adjusted to fit various learning environments, keeping in mind variables like learner age, ability levels, socioeconomic status, and technology availability.
 - **Endurance and Scalability:** Determine ways to make sure that the use of technology-assisted assessments is both long-term and adaptable to various ESL programs and organisations.

The goals of this endeavour are to offer a comprehensive comprehension of how technology-assisted evaluations can be effectively integrated into ESL training. This study intends to give valuable insights to the arena of ESL teaching by investigating the effectiveness of these tools, their impact on student motivation and engagement, compatibility with instructional objectives, instructor perspectives, and recommended procedures for their integration. These outcomes can help to build more effective assessment procedures that improve both teaching and learning in ESL situations.

METHODOLOGY

The objective of this investigation was to thoroughly examine the integration of technology-assisted assessment (TAA) in Omani elementary ESL classrooms using a multidisciplinary chronological

explanatory methodology. A qualitative phase including interviews with instructors and observations in the classroom followed after a statistical phase using a cross-sectional survey approach. A greater comprehension of the intricate interactions between TAA, teaching practices, and student outcomes was made possible by this systematic strategy. The following section presents a detailed description of the research design, including the justification, tools, participants, steps, and techniques for data processing.

Justification for research: The rising use of technology in learning environments and its potential to revolutionise conventional assessment techniques serve as the justification for this study. Assessment plays a crucial role in ESL instruction since it allows teachers to monitor the advancement of learners, determine what areas deserve development, and determine how proficient their pupils are in the language. Conventional evaluation techniques, such as paper-based exams and oral assessments, frequently come with drawbacks like slow feedback, little potential for individualisation, and logistical problems in classes that are diverse and vast **Brown & Abeywickrama, (2019)**. Innovative answers to these problems are provided by technology-assisted examinations, which encourage more effective, interesting, and customised learning opportunities.

Meeting the various needs of learners: Considering learners that range in age, cultural background, level of speaking ability, as well as experience, ESL courses are naturally eclectic. Through generating adaptable examinations that conform to each learner's degree, delivering immediate critique, and permitting educators to monitor every pupil's advancement in context, technology-assisted assessments can accommodate this variation **Hwang & Chang, (2011)**. Teachers may adapt their lesson to suit every pupil's particular requirement with this personalised approach, which can greatly improve learning outcomes.

Fostering Learner Participation: A key element in the effectiveness of ESL instruction involves the participation of pupils. By adding adaptive and multimedia components to render the assessment approach exciting and less daunting, technology-assisted exams can increase pupil involvement **Shute & Rahimi, (2017)**. The drive of learners to participate and perform well can be increased by using collaborative tasks, audio recordings, and films in evaluations to make the acquisition of languages more applicable and pleasurable.

Giving candid and helpful feedback: The capability of technology-assisted exams to offer prompt feedback ranks as one of its main benefits. This function is especially helpful while acquiring a foreign language since it allows students to receive rapid feedback, assisting them swiftly fix mistakes and reinforce proper language usage **Nicol & Macfarlane-Dick, (2006)**. Educators who receive instant feedback can also rapidly rectify

misconceptions and modify their pedagogical approaches.

Encouraging formative evaluation methods: Since formative evaluation tracks student progress and offers continuous feedback that may be leveraged to enhance overall education and instruction, its importance is crucial to ESL programs. By permitting regular, low-stakes evaluation that helps identify children's abilities and shortcomings continually technology-assisted exams enhance formative assessment procedures **Black & William, (2009)**. Children are urged to gain knowledge from their own errors and work towards progress in an even more collaborative educational setting, which might be fostered by this ongoing assessment procedure.

Addressing logistical constraints: Efficient evaluation could be seriously hampered in conventional assessment contexts by logistical obstacles such as the span of time needed to mark exams, the literal handling of exam supplies, and the arranging of examination dates **Hamp-Lyons, (2007)**. With the help of technology, assessments can be made more efficient through streamlining the process of scoring, securely storing samples, and enabling variable testing times. This effectiveness guarantees that students have a more seamless and uniform assessment journey while also lightening the workload for educators.

Maintaining up with the latest developments in Education: Around the world, there is an increasing tendency towards the integration of technology in education. Several educational institutions have acknowledged the value of digital proficiency and the advantages of employing technology within the classroom **Ertmer & Ottenbreit-Leftwich, (2013)**. The investigation fits perfectly into current educational trends and adds to the larger conversation on the importance of technology in contemporary learning by examining the use of technology-assisted evaluations in ESL instruction.

Relevance of the Research: Several stakeholders involved in the field of ESL education will be significantly impacted by the results of the investigation. *Instructors* - By understanding the advantages and difficulties of incorporating technology-assisted assessments, ESL teachers can improve their assessment methods with the assistance of the study's discoveries. *Policy makers* - The study can help shape policy choices on the use of instructional technologies by providing information about the likelihood of technology-assisted assessments to enhance student achievement. *Researchers* - The study contributes to the quantity of information already available on the integration of technology in education and lays the groundwork for further research into many facets of technology-assisted evaluations. *Learners* -The study's primary objective is to enhance ESL students' learning opportunities by supporting more effective, efficient, and engaging assessment procedures.

DATA COLLECTION

A combination of methodologies was applied to thoroughly investigate the incorporation of technology-assisted evaluations in ESL guidance, collecting qualitative as well as quantitative information from five Oman elementary schools. The process of gathering data targeted ESL instructors via questionnaires and interviews, as well as students through classroom observations.

1. **Online census structure:** The web-based questionnaire was created exclusively for ESL instructors to gather their experiences and perceptions of technology-assisted assessments. The survey used a combination of Likert-scale questions, multiple-choice items, and open-ended questions to provide both quantitative and qualitative data.

Circulation and Administration: ESL instructors from the five selected elementary schools received the surveys electronically. Institutional emails and learning management systems (LMS) were common dissemination mechanisms in such institutions. The questionnaire ran for a duration of three weeks, with periodic reminders emailed to encourage participation. A total of 30 replies were gathered, yielding a viable dataset for investigation. The poll was anonymised to safeguard participant anonymity and promote candid responses, resulting in no personally identifiable information in the final collection of data.

2. Interviews

Format and Objectives: Brief interviews were held with selected ESL instructors from the selected five schools. These interviews attempted to delve deeper into educators' impressions of technology-assisted examinations, focussing on both the benefits and obstacles faced.

The semi-structured method provided flexibility in the discussion, allowing the researcher to dig into developing concepts while guaranteeing that crucial subjects were constantly covered.

Procedure: Face-to-face interviews were held on campus and lasted around 30-35 minutes overall. An interview outline was employed, including items covering pedagogical symmetry, engagement among learners, and the perceived impact of technology on assessment accuracy.

An aggregate of 10 interviews were held, with respondents chosen based upon their varied levels of experience with technology-assisted examinations to ensure a range of viewpoints. All interviews were audio-recorded with the permission of the participants and then transcribed verbatim for extensive analysis. The transcriptions were then coded using theme analysis to reveal universal trends and novel findings.

3. Classroom Observations

Approach: Non-participant observation sessions were undertaken in all five schools to acquire a thorough knowledge of how technology-assisted evaluations were incorporated into ESL instruction. These observations centred on the real-time use of these tools, student interactions, and the overall classroom environment. Observations were made during typical ESL classrooms in which technology-assisted assessments were widely employed. Each session lasted the whole of the lesson, usually between 40-45 minutes.

Focus and recording: The observations were especially concerned with student involvement during technology-assisted assessments, the usefulness of such instruments in testing language competency, and the teaching tactics used by educators to encourage their usage. Comprehensive field recordings were obtained throughout each observation session to record both instructional approaches and student reactions to assessments. Where permitted, audio-visual recordings were taken to support the observations, offering a more complete background for interpretation.

4. Supplementary Data Acquisition

Along with to the primary data gathered through surveys, interviews, and observations, secondary data was used to contextualise the outcomes and reinforce the study.

Literature Review: A comprehensive study of the academic literature on technology-assisted assessments in ESL education was carried out. Peer-reviewed journal articles, conference proceedings, and educational reports were among the primary sources examined via databases such as Scopus, Research gate, and Google Scholar. The literature review established an empirical foundation for this investigation by emphasising current research discoveries, pinpointing discrepancies, and directing the interpretation of primary data.

Organisational statements: Testimonials from participating schools on the use of technology in ESL evaluations were reviewed. The analyses offered information about the institutions' experiences with using technology-assisted exams, such as problems encountered, results attained, and other documented recommendations. This secondary data helped to triangulate the conclusions from the initial gathering of data, resulting in a deeper awareness of the research subject.

PARTICIPANTS

The research investigation was performed out in five elementary schools in Oman, having an emphasis on understanding the integration of technology-assisted assessments into ESL instruction. The group of participants includes ESL educators as well as pupils

who were actively involved in primary English language instruction and acquisition.

- **Eligibility Guidelines:** Language instructors were chosen according to their expertise and involvement with technology-assisted assessments in educational settings. The selection procedure attempted to incorporate a varied spectrum of instructors based on their duration of classroom experience, acquaintance using technology for learning, and the variety of evaluation methods employed.
- **Sample size:** The study included 30 ESL instructors with varying levels of experience. This diversity offered a wide range of opinions regarding the incorporation of technology in assessments.
- **Observational Sample:** Although pupils weren't directly involved in surveys or interviews, they were essential to the investigation's classroom observation element. Learners taking part in collaborating educators' classrooms were observed in real time as they interacted with technology-assisted assessments.
- **Diversity:** The student sample observed included students from multiple grades, encompassing the normal population of elementary ESL learners in Oman. The student body's diversity in terms of language competency and technological aptitude enabled a thorough knowledge of how these elements impacted the efficacy of technology-assisted exams.
- **Organisational Perspective:** The five elementary schools have been selected due to their proactive use of technology in ESL instruction. These institutions were part of a larger movement to include digital tools into the curriculum, rendering them appropriate for pursuing the research aims.
- **Geographic and Demographic Representation:** The schools' locations vary throughout Oman, offering an assortment of urban and rural instructional settings. This variety meant that the results of the investigation could potentially be applied to various types of elementary schools around the nation.

DATA ANALYSIS

The information gathered from online surveys, classroom observations, and interviews were examined in a methodical way to ensure the precision and value of results upon the integration of technology-assisted assessments in ESL instruction.

1. *Quantitative Data Analysis for Surveys:*

- Descriptive statistics were used to analyse the quantitative data collected from questionnaires completed online. Means, standard deviations, and frequency distributions were calculated to give a snapshot of the educators' opinions and implementation of technology-assisted evaluations.
- Inferential statistical techniques, such as t-tests and ANOVA, were employed to determine the relevance of disparities in replies depending on variables such as teaching experience, familiarity with technology, and the sorts of technology-assisted instruments employed. These evaluations proved critical for finding trends and patterns that might be applied to the larger community of ESL instructors.
- Data analysis was performed through program - SPSS], permitting for effective analysis and interpretation of the survey data.

2. *Qualitative Data Analysis Interview Feedback:*

- Interview responses were classified according to common themes such as "Support for Technology in Teaching," "Concerns about Assessment Accuracy," and "Positive Attitudes Towards Technology-Assisted Assessments." This classification assisted in presenting the information in an order that showcased the variety of instructors viewpoints.
- **Overview of key themes:** Instead of doing a comprehensive thematic examination, major topics were discovered and simplified to represent the overall opinions of teachers. These recaps offered beneficial context for comprehending the larger patterns revealed in the quantitative research.

3. *Classroom observations:*

- **Content Analysis:** The findings from observation were investigated using content-analysis approaches, with the goal to discover educational procedures and behaviours of students connected with the use of technology-assisted assessments. This includes evaluating the level of student involvement, the suitability of the technological tools employed, and the instructors' ability to integrate these technologies into the learning environment.
- **Triangulation with Questionnaire and Interview Evidence:** The observational findings have been verified against quantitative and qualitative survey and interview data. The triangulation process

enabled validation of the findings and offered an expanded view of how technology-assisted assessments are used in ESL classrooms.

ETHICAL CONSIDERATIONS

- The research on "The Integration of Technology-Assisted Assessment in ESL Instruction" followed by several fundamental ethical guidelines:
- All participants, especially ESL educators, gave explicit permission beforehand taking part in surveys, interviews, and classroom observations. They had been clearly told regarding the study's goal and had the freedom to withdraw at any moment.
- Participants' identities were safeguarded by anonymising survey responses, using pseudonyms in interview data, and securely storing all acquired data. Only the research team had access to the information.
- Eliminating Harm: The study was intended to cause no distress or discomfort. Questions were carefully formulated, and observations were conducted in an unobtrusive manner. Participants' professional standing was unaffected by their involvement.
- Complimentary Engagement: Participants were able to withdraw at any moment with no penalty. Participants who withdrew had their data removed from the research.
- Ethical permission: The relevant board of inquiry granted ethical permission for the study, confirming that it followed ethical criteria.
- Cultural Sensitivity: The research procedure adhered to local cultural standards in Oman, guaranteeing that all methodologies and interaction remained suitable to the setting.

RESULTS, DATA ANALYSIS AND DISCUSSION

The current part covers the study's insights on the incorporation of technology-assisted evaluations in ESL instruction, emphasising on data gathered through surveys, interviews, and classroom observations. The quantitative survey data are analysed and displayed in statistics to provide an accurate depiction of instructor perceptions and challenges. In contrast, qualitative findings from interviews and classroom observations are discussed in depth, providing an improved comprehension of ESL instructors' perspectives and attitudes regarding the use of technology in assessment.

Descriptive Statistics			
	N	Mean	Std. Deviation
To what extent can technology-assisted assessments provide immediate feedback on specific errors made by your ESL students (grammar, vocabulary, pronunciation)?	26	3.46	.761
How well do technology-assisted exams evaluate different aspects of your students' English as a Second Language (ESL) abilities, such as grammar, vocabulary, and speaking fluency?	26	3.31	.788
Does the use of technology-assisted assessments improve the accuracy and efficiency of evaluating ESL learners' progress compared to traditional methods?	26	3.50	.860
How big of a challenge is implementing technology-assisted assessments in your ESL classroom due to factors like student access to devices and reliable internet connectivity?	26	2.92	1.093
How well can technology-assisted assessments be designed to promote self-assessment and metacognition in your ESL classroom?	26	3.08	.891
How well can teachers ensure technology-assisted assessments are culturally appropriate for their diverse ESL learners?	26	3.23	.710
How suitable are technology-assisted assessments for all ESL classrooms?	26	2.27	.778

The descriptive statistics deliver an accurate depiction concerning how technology-assisted evaluations are perceived in the framework of ESL instruction. Here's an explanation for each of the important findings:

1. Effectiveness in rapid Feedback (Mean: 3.46):

With a modest mean score of 3.46, technology-assisted examinations is seen as relatively effective in delivering rapid feedback to ESL learners. This is critical because rapid feedback allows pupils to immediately comprehend and remedy errors, which reinforces learning. However, the moderate score indicates that, while technology allows for faster input than conventional techniques, there may still be limitations in the speed and clarity of feedback that must be addressed.

2. Evaluation of Different ESL Skills (Mean: 3.31):

With a mean score of 3.31, the usefulness of technology-assisted tests in measuring various language abilities (such as reading, writing, listening, and speaking) is rated moderately high. This shows that, although these techniques allow for a variety of language abilities, they might not accurately reflect the complexities of language skills. The resources available may excel in certain areas while lacking in others, highlighting the need for more comprehensive or specific assessment tools.

3. Improvement in Accuracy and Efficiency (Mean: 3.50):

The slightly higher mean score of 3.50 indicates that technology-assisted assessments have beneficial effects on enhancing precision and effectiveness when juxtaposed with conventional methodologies. This implies many instructors acknowledge technology's potential to improve assessment precision while also reducing the time required for grading and feedback. This enhancement is viewed as a substantial advantage,

implying that currently available tools aren't ideal and could benefit from additional modification.

4. Challenges in Access to Devices and the Internet (mean: 2.92)

The mean score of 2.92 indicates that access to devices and dependable internet is a modest barrier to conducting technology-assisted evaluations. This shows that, while technology has advantages, its efficacy is limited by infrastructure difficulties. Many schools may experience challenges due to insufficient funds or inadequate technology infrastructure, limiting the widespread adoption of these tools.

5. Promotion of Self-Assessment (Mean: 3.08):

The mean score of 3.08 suggests the contrary, while technology-assisted examinations are moderately effective at encouraging students to self-assess, there is still space for improvement. Self-assessment is an important part of language acquisition since it encourages pupils to evaluate their own development. The middling rating indicates that, while the technology has self-assessment options, they may be underutilised or may be improved to better promote student autonomy.

6. Cultural Appropriateness (Mean: 3.23):

A mean score of 3.23 indicates a generally good appraisal of the cultural appropriateness of technology-assisted examinations. This is especially crucial in varied ESL classes, where tools must be flexible to different cultural situations. The moderate score indicates that, while the technology is generally considered acceptable in culture, some parts may need to be adjusted to accommodate more diverse cultural backgrounds.

7. Overall suitability for all ESL classrooms (mean = 2.27):

The lower mean score of 2.27 for overall suitability of technology-assisted examinations across all ESL classrooms raises questions regarding their universality of application. This shows that, while the tools could prove useful in some situations, they can't be considered appropriate for all classroom settings. This lower ranking accentuates the importance of context-specific modifications and techniques in ensuring that technology-assisted evaluations suit the varying needs of various ESL situations.

The findings show that technology-assisted assessments are seen as advantageous in a variety of ways, including providing fast feedback and increasing efficiency. However, difficulties such as access, self-assessment, and cultural appropriateness must be addressed. The general poorer appropriateness ranking implies that technology-assisted examinations require careful consideration of the individual circumstances and demands of distinct ESL courses to optimise their efficacy.

Reliability Statistics	
Cronbach's Alpha	N of Items
.709	4

The Cronbach's Alpha coefficient of 0.709 suggests that the four main survey responses have adequate accuracy, implying that they continuously evaluate characteristics of technology-assisted evaluations in ESL training. A Cronbach's Alpha value greater than 0.7 typically indicates adequate internal coherency, meaning that the research components are appropriately interrelated to adequately represent the target structure. In the present research, the dependability figure indicates that the responses to these subjects are reliable thus offering an accurate indication of educators' perspectives and experiences with technology-assisted assessment tools in the ESL classroom. This degree of dependability enhances the credibility of the research's conclusions, guaranteeing that they depict genuine views and behaviours regarding technology integration in ESL assessment.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.618
Bartlett's Test of Sphericity	Approx. Chi-Square	16.790
	Df	10
	Sig.	.079

In the framework of investigating the integration of technology-assisted evaluation in ESL instruction, the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy yielded 0.618. This number indicates a moderate level of sample adequateness implying whilst the data obtained is adequate for factor analysis, the findings may not be as reliable or easily interpretable as expected. Furthermore, Bartlett's Test of Sphericity produced a p-value of 0.079, which is somewhat greater than the standard significance level of 0.05. This suggests that the correlations between components of the dataset may be insufficient to demonstrate a very successful factor analysis. As an outcome, whereas component evaluation could continue to be used, these statistical results suggest that the factors found may be fewer distinct or relevant, necessitating caution in interpreting the findings.

Communalities		
	Initial	Extraction
8. How can technology-assisted assessments be used to motivate and engage ESL learners in the assessment process itself, potentially leading to improved learning outcomes?	1.000	.261
9. To what extent can technology-assisted assessments provide immediate feedback on specific errors made by your ESL students (grammar, vocabulary, pronunciation)?	1.000	.611
10. How well do technology-assisted exams evaluate different aspects of your students' English as a Second Language (ESL) abilities, such as grammar, vocabulary, and speaking fluency?	1.000	.690
11. Does the use of technology-assisted assessments improve the accuracy and efficiency of evaluating ESL learners' progress compared to traditional methods?	1.000	.735
12. How big of a challenge is implementing technology-assisted assessments in your ESL classroom due to factors like student access to devices and reliable internet connectivity?	1.000	.792

In factor analysis, communalities indicate the proportion of variance in every variable predicted by the recovered components. The table shows the "Initial" and "Extraction" communalities for each survey item, indicating the degree to which every response has been captured by the fundamental elements revealed in the study.

Initial Communalities: These thresholds have been set to 1.000 for each item, suggesting that 100% of the variance in each item is examined prior to factor analysis.

Extraction Communalities: These numbers represent the percentage of variance in every statistic described by the extracted components following the study. Higher extraction values indicate that the item is adequately represented by the components.

8. Enthusiasm and Participation Using Technology-Assisted Assessments (Extraction: 0.261): This question has an extraction communality of 0.261, which means that the variables extracted account for just 26.1% of the variation in replies. This comparatively low value indicates that this category is not as significantly connected to the key variables revealed in the study, showing that the function of technology in encouraging and involving ESL learners is not a central theme in the factor structure.

9. Immediate feedback on errors (extraction: 0.611): The following component's extraction communality is 0.611, indicating that the factors explain 61.1% of its variance. This points to an essential connection with the delivery of fast feedback via technology and the underlying structures, accentuating the need of rapid correction for errors in the context of technology-assisted ESL examinations.

10. Evaluation of ESL abilities (extraction: 0.690): This category has an extraction communality of 0.690, which indicates that the variables account for 69.0% of the variation. This implies that the parameter framework accurately represents the efficiency of technology-assisted examinations in assessing several ESL abilities, including as grammar, vocabulary, and fluency, highlighting their importance in the assessment process.

11. Accuracy and Efficiency in Evaluation (Extraction: 0.735): With an extraction communality of 0.735, the factors account for 73.5% of the variation in this item, showing a significant connection. This outstanding result demonstrates technology's substantial contribution in improving the accuracy and efficiency of ESL examinations as when compared with traditional techniques, taking into account the mentioned criteria.

12. Challenges of Implementation (Extraction: 0.792): This component has the highest extraction communality (0.792), indicating that variables account for 79.2% of its variation. This strong

association shows that the obstacles of conducting technology-assisted assessments, particularly in terms of connectivity to devices and stable internet, are an important feature of the factor structure, indicating a major worry among instructors.

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.042	40.831	40.831	2.042	40.831	40.831	1.671	33.419	33.419
2	1.047	20.942	61.773	1.047	20.942	61.773	1.418	28.354	61.773
3	.933	18.660	80.433						
4	.529	10.572	91.006						
5	.450	8.994	100.000						

Two components have eigenvalues greater than 1, explaining a cumulative variance of 61.773%. After rotation, these two factors account for 61.773% of the total variance, suggesting that the data can be reasonably explained by these two underlying factors.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.528 ^a	.279	-.060	1.335	.279	.823	8	17	.594

The Model Summary shows a moderate positive correlation ($R = .528$) between technology-assisted assessments and ESL learners' performance, with 27.9% of the variability explained ($R^2 = .279$). However, the model's fit is poor ($\text{Adjusted } R^2 = -.060$), and the predictors are not effective, indicated by the standard error (1.335). The change statistics ($R^2 \text{ Change} = .279$, $F \text{ Change} = .823$, $\text{Sig. } F \text{ Change} = .594$) suggest that the model's predictive power is not statistically significant, implying other factors may influence ESL learners' performance.

ANOVA ^a					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.735	8	1.467	.823
	Residual	30.304	17	1.783	
	Total	42.038	25		

The ANOVA table from the regression analysis shows that the model employed to explain the variability in ESL learners' performance is not statistically significant. The regression sum of squares is 11.735, with a matching mean square of 1.467; the residual sum of squares is 30.304, with a mean square of 1.783. The F-statistic for the model is 0.823, and the p-value is 0.594. This p-value is substantially over the customary threshold of 0.05, indicating that the model does not meaningfully predict the dependent variable. In other words, the variables in the regression do not offer a compelling or accurate explanation for the variation in ESL learners' performance in this setting.

Regression							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
(Constant)	2.309	2.159		1.069	.300	-2.247	6.865
How well do technology-assisted exams evaluate different aspects of your students' English as a Second Language (ESL) abilities, such as grammar, vocabulary, and speaking fluency?	.216	.471	.131	.459	.652	-.777	1.209
To what extent can technology-assisted assessments provide immediate feedback on specific errors made by your ESL students (grammar, vocabulary, pronunciation)?	-.173	.547	-.102	-.316	.756	-1.327	.981

Does the use of technology-assisted assessments improve the accuracy and efficiency of evaluating ESL learners' progress compared to traditional methods?	.554	.431	.368	1.286	.216	-.355	1.463
How well can technology-assisted assessments be designed to promote self-assessment and metacognition in your ESL classroom?	-.074	.475	-.051	-.156	.878	-1.075	.927
How big of a challenge is implementing technology-assisted assessments in your ESL classroom due to factors like student access to devices and reliable internet connectivity?	-.169	.331	-.142	-.509	.618	-.868	.531

How do the costs associated with technology-assisted assessment tools compare to traditional assessment methods in your ESL classroom?	-.392	.288	-.330	1.361	.191	-.999	.216
How well can teachers ensure technology-assisted assessments are culturally appropriate for their diverse ESL learners?	-.364	.469	-.199	-.776	.448	-1.353	.625

The results of regression analysis provide insights into the impact of individual predictors as follows:

The constant (2.309) is not statistically significant ($\text{Sig.} = 0.300$). Evaluation of ESL abilities ($B = 0.216$, $\text{Sig.} = 0.652$) shows a positive but insignificant effect. Immediate feedback on errors ($B = -0.173$, $\text{Sig.} = 0.756$) has a negative and insignificant effect. Improvement in accuracy and efficiency ($B = 0.554$, $\text{Sig.} = 0.216$) shows a positive but not significant trend. Promotion of self-assessment ($B = -0.074$, $\text{Sig.} = 0.878$) has a negative and insignificant effect. Implementation challenges ($B = -0.169$, $\text{Sig.} = 0.618$) are negative and insignificant. Reduction of traditional assessments ($B = 0.314$, $\text{Sig.} = 0.486$) shows a positive but insignificant effect. Cost comparison ($B = -0.392$, $\text{Sig.} = 0.191$) has a negative but not significant impact. Cultural appropriateness ($B = -0.364$, $\text{Sig.} = 0.448$) shows a negative and insignificant effect.

CONCLUSION

This research investigation on the use of technology-assisted evaluations in ESL instruction gives a

nuanced knowledge of the tools' advantages difficulties, and ultimate usefulness in a variety of classroom settings. The study provides a complete picture of how technology is transforming the landscape of language assessment by assessing many areas including feedback efficacy, evaluation of distinct ESL abilities, accuracy, efficiency, and implementation issues.

Effectiveness in providing rapid feedback - One of the significant outcomes is that technology-assisted exams are moderately effective in delivering timely feedback, with a mean score of 3.46. The ability to provide fast feedback is a significant advantage since it allows pupils to immediately detect and rectify errors, strengthening the learning process. Nevertheless, the modest grade indicates that there is ample opportunity for development. While technology might speed up feedback delivery over conventional methods, the level of accuracy and precision of feedback may not always match the needs of varied learners. This emphasises the importance of fine-tuning assessment methods to guarantee that feedback is not only promptly but also useful and targeted to specific educational circumstances.

Appraisal of various ESL skills - The investigation additionally discovered that technology-assisted examinations are relatively effective at evaluating a variety of ESL skills, with a mean score of 3.31. These techniques appear to be adequate for measuring receptive abilities including reading and listening, but they may fall short when evaluating productive skills like speaking and writing. Automated tests struggle to capture the intricacies regarding these subsequent skills, especially originality, fluency, and contextual utilisation of language. This conclusion implies that, despite technology has accomplished tremendous progress in analysing language competency, it could require the integration with conventional techniques or sophisticated technologies, such as artificial intelligence (AI) assessments, in order to completely capture the breadth and depth of language skills.

Increased Precision and Performance - With a slightly higher mean score of 3.50, the study shows that technology-assisted assessments are judged to be more accurate and efficient over standard methods. This provides a significant advantage, especially in big classrooms or standardised testing settings where uniformity and scheduling are critical. This provides a significant advantage, especially in big classrooms or standardised testing settings where precision and effective scheduling are critical. However, the relatively low degree of acknowledged progress demonstrates that present technologies have constraints. The effectiveness of these evaluations will probably be affected by aspects involving tool layout and applicability to specific educational goals, algorithm performance, and accessibility of integration within current curricula. Therefore, although the transition to technology-enhanced examinations is encouraging, there is additionally still potential for improvement in terms of accuracy and efficiency.

Difficulties in Accessing Gadgets along with Web -

One of the numerous major issues noted by the investigators is the lack of access to equipment and dependable internet connectivity, which results in a median rating of 2.92. This research emphasises the technological gap that persists across numerous educational environments, particularly in schools with limited resources. Lacking sufficient accessibility to the required technical infrastructure, the potential benefits of technology-assisted assessments cannot be completely realised. The challenge is especially apparent in areas with low budget or poor internet service. Addressing these infrastructure gaps is critical to guaranteeing every pupil can profit from the advances in assessment technologies.

Promote self-examination and cultural suitability

- The study also discusses how technology-assisted exams could encourage self-evaluation and whether they are culturally suitable. The mean scores of 3.08 and 3.23 indicate considerable performance in these two domains. Self-assessment is an important ability in language acquisition since it promotes greater independence and analytical thinking among learners. Nevertheless, the middling score shows that, although technology provides resources for self-evaluation, they might not be adequately utilised or expanded enough to foster learning independently. In a comparable manner while the cultural appropriateness of these assessments is typically favourable, more customisation is required to ensure that they are responsive to the various cultural contexts in which ESL instruction takes place.

Overall compatibility for all ESL classrooms

- subsequently the lower mean score of 2.27 for the overall acceptability of technology-assisted examinations across all ESL classrooms indicates that these tools may not be universally applicable. This conclusion emphasises the significance of context-dependent factors in the use of technology-assisted assessments. While these technologies can be extremely effective in specific situations, they may not be suited for other classrooms, especially those with severe infrastructural issues or cultural contexts that differ dramatically from the norms inherent in the technology. This emphasises the importance of flexible, adaptive assessment procedures that may be customised to the specific needs of each school setting.

Finally, using technology-assisted assessments into ESL training has tremendous potential upsides, notably in terms of faster feedback, greater accuracy, and efficiency. However, the outcomes of this study indicate that there are still significant problems to be addressed, particularly in terms of infrastructure, the comprehensiveness of skill assessment, and the overall applicability of these tools for varied classroom contexts. The modest effectiveness ratings across multiple aspects underscore the importance of continuing to develop and modify these tools to ensure they can fulfil the

intricate and diverse demands of ESL learners and instructors. As educational technology advances, it is critical that these evaluations be continuously examined and improved in order to optimally maximise their impact on language learning results.

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