

UTILIZING DUOLINGO AS A TECHNOLOGICAL TOOL FOR ASSESSING STUDENTS' WRITING SKILLS IN EFL CONTEXT

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Abstract

As a result of the development of the digital era, IT-based language instruction is continuously evolving. Consequently, the demand for appropriate technological tools for teaching and learning is rising since students are digital natives. IT-based language instruction is gradually replacing the traditional method of chalk and discussion in the classroom only due to its many benefits. However, there is a shortage of research on the implications and efficacy of these tools for assessing students' learning processes, particularly concerning writing. This research seeks to provide a report on using the application to evaluate students' writing abilities. This study utilizes Duolingo as the technological tool used in the EFL context. The respondents were 32 students from Universitas AKI. This study used survey questionnaires, observation inventories, and semi-structured interviews. The findings were examined using frequency and thematic content analysis. The primary results of this study indicate that respondent attitudes toward Duolingo are favourable, in addition to highlighting the benefits of implementing Duolingo in the classroom. This study also identifies some potential drawbacks. The two main issues during the intervention were network and technical issues. This study's implication is pertinent to the new pedagogical aid in writing assessments.

Keywords – Assessment, EFL, Duolingo, Technological Tool, Writing

Introduction

Assessment enables the instructor to measure the progress of students. Assessment is an integral element of the learning process to which educators, curriculum designers, and language practitioners must devote sufficient attention (Nevisi & Hosseinpur, 2022, p. 257). Assessing language skills in the digital age necessitates the integration of technology, as students today are digital natives. Learning development in the digital age needs to be balanced with an assessment model that can change to the development of the global age so that it

can be used and fits the needs of students on and raised with technology (Farisia, 2021, p. 1912). The availability of a digital assessment system will facilitate the evaluation of student character during the learning process (Asrial et al., 2022, p. 558). Therefore, many language skills and IT-based language instruction components must be utilized. Among the four language skills, writing is regarded as the most difficult to master for EFL students (Fauzan, 2014, p. 1). Writing skill is essential since it aids in strengthening vocabulary, grammar, thinking skill, planning, editing, revising,

and other elements in writing. Students can use their writing skills to communicate their ideas, emotions, and thoughts to others on any social media platform.

In the sphere of education, technology is gradually gaining importance in classroom teaching and learning. Today, many educational institutions attempt to encourage their teachers or instructors to use technology, particularly the Internet and the World Wide Web, in their language lessons (Janfaza et al., 2014, p. 75). Since most people today have some experience with online technology, this opportunity can be exploited to aid students in the learning process (Febianti et al., 2019, p. 53). It gradually develops the old teaching methods and techniques, which are primarily teacher-centred and can sometimes be demotivating, particularly for higher education students still mastering languages such as English. In language classes, writing lessons can often be tedious and discouraging for students. Instructing students to write effectively in traditional teaching and learning processes is more teacher-centred than student-centred. Teachers discuss various topics and then teach students to compose essays based on the discussion.

Teachers provide students with feedback by grading their assignments. The urgent need in this field is the main reason for making a tool to measure language assessment skills (Ölmezer-Öztürk & Aydin, 2018, p. 13). Chen (2021, p. 364) states that the educational benefits of formative assessment are portable across contexts and cultures. It is necessary to incorporate assessments relevant to their function into the learning process. To provide students with the opportunity to better their learning process and master every competency they acquire (Yuliani et al., 2020, p. 111).

The study implied that scoring could fortify the effects of feedback by motivating high-achieving students to do their best in their writing assignments (Cho & Park, 2014, p. 105). Aligned with the components of 21st-century education, technology in education has positively affected assessing students' skills.

Several studies are related to teaching and assessing language skills in education through technology. Most publications reported a positive effect of technology-enhanced language learning practices on student motivation and progress (Vassiliou et al., 2023, p. 60). Despite the evident obstacles, students must master the skill of writing through various approaches and strategies like mobile learning (Linuwih & Winardi, 2020, p. 282). Heryandi (2020, p. 49) stated that to assign homework, organize lessons, and motivate students effectively, English teachers need to adopt web-based applications as a system and set of tools. Moreover, teachers need to be able to place their function as facilitators to develop more engagements with the student and stimulate the student to be more autonomous in learning because online learning is complex for teachers and students (Sariani et al., 2021, p. 528). Malvado et al. (2021, p. 9) showed that students' use of Quizizz, a technologically based assessment tool, leads to improved writing skills. Consequently, instructors have begun integrating technology into their classroom teaching and assessment activities.

As pedagogical instruments in the classroom, technological tools, such as e-mail and online learning platforms, are no longer uncommon. Technology development provides a program of convenience, adaptability, and interactivity amongst users, which is an advantage in the face of modern technology, particularly with E-Learning

(Asmara, 2021, p. 60). Teachers should catch up with technological changes by mastering new teaching techniques to help students derive the most significant potential value from e-mail (Almashham, 2021, p. 156). In addition, technological tools provide a platform on which a learning network can be constructed, students can collaborate, and instructors can share information to encourage student learning. Since technological tools are not explicitly designed for educational purposes, students may feel lost or uncertain of how to operate these sites when used for any learning activity. However, Different learning tools have been adopted for diverse learning objectives. For instance, when teaching writing skills, several learning tools are used to develop specific aspects of writing skills (Hadi et al., 2021, p. 228). Similarly, we need technological tools published in language learning to create better education.

Duolingo, a technological tool, is a free web application that allows teachers and students to construct language enhancement. Some researchers researched Duolingo as a language learning tool (Ajisoko, 2020; Loewen et al., 2019; Munday, 2016). Duolingo functions similarly to game apps. Duolingo does not feature a plot, but the recognizable owl is a persistent and motivating fantasy figure (Govender & Arnedo-Moreno, 2021, p. 9). The popularity of Duolingo and other language-learning apps is rising among users of all ages (Puebla et al., 2022, p. 170). It is also a versatile pedagogical tool that enables instructors to control the students and is accessible from any Internet-connected device, such as mobile phones and computers. Duolingo is not as rigid as other forum-based platforms because it is a reliable and appropriate online learning platform that allows users to contribute and learn from one another.

Although it is doubtful that we will ever dispense with human language teachers, language learners no longer require live instructors, as the DuoLingo example demonstrates (Kelly-Holmes, 2019, p. 36). Teachers can construct Duolingo questions to assess students' lesson comprehension and then assign students to respond. Numerous studies have provided positive feedback on Duolingo, and its features are suitable for use as pedagogical aids in language learning and assessment. Assistive tutors such as Duolingo, which aim to boost student progress through personalized guidance and rapid feedback, are examples of how deep learning systems are already becoming significant in educational situations (Webb et al., 2021, p. 2119). Teachers can construct Duolingo questions to assess students' lesson comprehension and then assign students to respond. Numerous studies have provided positive feedback on Duolingo, and its features are suitable for use as pedagogical aids in language learning and assessment. Luo (2023, p. 8) argued that Duolingo, a typical gamified FLL program that supports autonomous learning, was mainly used outside the classroom. All participants in the study above have the ability and opportunity to contribute and compete with one another. In this study, Duolingo focuses on students writing skill enhancement, which is still limited in any publications.

Research Methodology

In this investigation, a mixed-methods research design was utilized. Survey questionnaires, observation inventories, and semi-structured interviews were used to collect quantitative and qualitative data. This study was done on thirty-two Universitas AKI students from different classes (See Figure 1). The collected data were analyzed to determine students' perceptions of Duolingo as a writing assessment or evaluation tool. The

Duolingo observation has been used from
May to June 2023 (3 months).

Results

The respondents were selected from the most active students in Duolingo who followed their lecturer in this application (Figure 1). After distributing the research instruments, respondents were required to complete the survey

questionnaire about using Duolingo as a writing assessment tool. The results of the survey questionnaires are presented in Table 1.

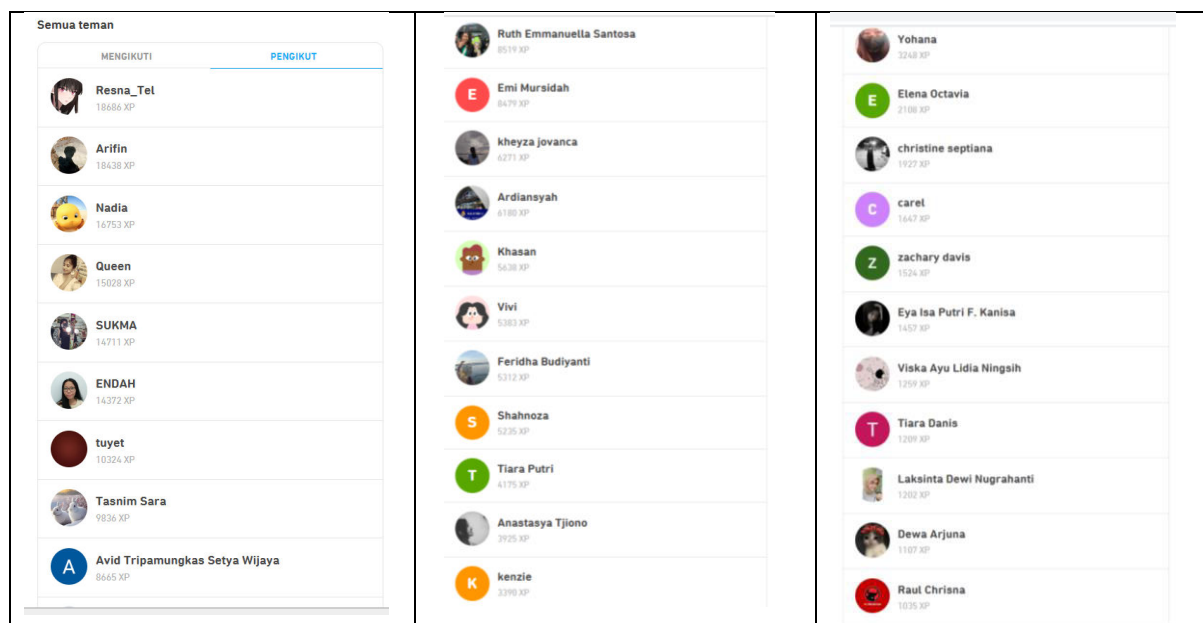


Figure 1. Selected respondents from the students of Universitas AKI (data taken from <https://www.duolingo.com/profile/Didit57>)

Table 1. Results of the survey questionnaires

No	Statements	Disagree	Neutral	Agree
1	I find Duolingo's platform for writing skills to be exciting.	3.1%	43.8%	53.1%
2	Duolingo is simple to use in the classroom and anywhere.	0%	9.4%	90.6%
3	I like using Duolingo for my writing evaluations.	9.4%	21.9%	46.9%
4	Duolingo enables me to assess the development of my writing.	6.3%	34.4%	59.4%
5	Duolingo enables me to motivate myself to have better writing grammatically.	9.4%	34.4%	68.8%
6	Duolingo is simpler to use for writing evaluations than traditional methods.	3.1%	46.9%	50%
7	I will continue to use Duolingo to evaluate my writing skills.	9.4%	34.4	56.3%

As shown in Table 1, Items 1, 2, 4, 5 and 6 of the survey questionnaire elicited the respondents' general perspective on the use of Duolingo in some parts of writing skills enhancement

with more than 50%. Then, 46.9% of students like using Duolingo for their writing practices and evaluation. Duolingo was simple to use in the classroom and anywhere, with 50% of all

respondents. Respondents generally exhibited favourable attitudes toward using Duolingo, as some disagreed with the questionnaire's 1, 3, 4, 5, and 6 statements and all neutral statements with less than 50% for each statement. However, the findings for Items 3, 6 and 7 were intriguing. Some respondents were opposed to the two statements. The results for Item 3 revealed that 9.4% of respondents disagreed with the following statement: "I like using Duolingo for my writing evaluations." In addition, 9.4% of respondents disagreed that Duolingo is

simpler to use for writing evaluations than traditional methods and will continue to use Duolingo. However, most respondents still concurred that Duolingo helped them review the students' writing progress.

The researcher also utilized observation checklists to observe and document students' behaviour during the intervention. The results of the observation protocols are displayed in Table 2.

Table 2. Observation checklists

No	Statements	No	Yes
1	The students think that it simple to use Duolingo	3.1%	96.9%
2	The students are fascinated with using Duolingo for writing evaluations	25%	75%
3	The students feel that Duolingo appropriate and practical for use in writing evaluations	12.5%	87.5%
4	The use of Duolingo inspires the students to write better	9.4%	90.6%
5	The students will contemplate using Duolingo for future writing skill enhancement.	44.7%	56.3%

Regarding item No. 1, 96.9% of respondents concurred that using Duolingo to evaluate writing was simpler than conventional evaluation methods. The results revealed that students preferred to improve their writing skills using technological tools, such as Duolingo, rather than traditional methods. Finally, 91.4% of respondents concurred with Item No. 5: "I will continue to use Duolingo to evaluate students' writing skills." This lowest yes percentage indicated that students still desired to utilize Duolingo as a writing skill enhancement. The five statements in the survey questionnaire told that the students had positive and constructive experiences using Duolingo for writing enhancement and that they (56.3%) were interested in using Duolingo again to evaluate their students' writing abilities. In contrast, it was surprisingly found that 44.7% of students had different behaviour. The rest of the students would not continue using

Duolingo in the future. However, many respondents still gave a positive attitude toward Duolingo.

Table 2, Items 1, 2, 3, and 4 of the observation checklist revealed that all respondents found that they always loved using Duolingo for writing evaluation, demonstrated interest and motivation in using Duolingo, and participated actively during the implementation stage. Furthermore, 44.7% of respondents reported that they would not be interested anymore. It demonstrated that Duolingo was not attractive enough to be used longer. Based on the interview, Duolingo was entertaining in the first month. They started to be bored in the following weeks. It happened due to several factors, namely; (1) they were free users (not using pro features or called Duolingo super), so their opportunities to continue learning were limited because they had to watch video ads or wait for a few more hours to be able to continue learning, (2)

the algorithm was still unsatisfactory, many questions that have been worked on appear again in subsequent questions so that this makes them bored (repetitive questions), and (3) lack of context and authenticity: Duolingo's focus on isolated sentences and phrases may not adequately prepare learners for real-world writing tasks that require contextual understanding and authentic language usage because the questions were too rigid.

In contrast, respondents thought that Duolingo boosted student motivation during the writing evaluation. They also discussed using Duolingo for future writing assessments. Duolingo was chosen for various reasons, including being an intriguing and simple instrument for writing assessments. Despite a few faults or issues encountered during the deployment stage, the data obtained from the interviews revealed that Duolingo successfully caught some students' interest in writing assessments. They were greatly assisted because they knew the mistakes or errors they used to do in the past (grammatical errors). With such a drill, their skills were enhanced so that those mistakes would not be repeated. Some of them would continue using Duolingo since it had competition features from all students worldwide. It triggered them to be much better.

Discussion

The findings of the survey surveys, observation checklists, and semi-structured interviews revealed that the research participants greatly appreciated the usage of Duolingo as a platform for writing enhancement. Duolingo was easy to use for the majority of respondents. Duolingo has become the trend in the last decades as one of the current relevant instructional mobile games or applications (Ng et al., 2020, p. 4). Over 300 million user accounts exist on Duolingo, one of the most popular

language-learning apps in the world (Loewen et al., 2020, p. 211). Most participants felt that the Duolingo program facilitated the learning process.

The gamification qualities, simplicity of use, pervasiveness, and self-learning capabilities had a stimulating influence on the learning process. They contributed to the desire to continue using the program and to promote it to others (Gafni et al., 2017, pp. 301-302). When examined utilizing Duolingo, the students of the responders were also motivated and had a good time. Duolingo's simplistic approach to gamification may be helpful for recruiting but not for long-term retention (Miller & Cooper, 2021, p. 5). As a result, students could relax and enjoy the writing assessment process. The use of Duolingo improved students' attitudes toward the language learning process. It was discovered that the students gave their all to accomplish their Duolingo assessments. The Duolingo technique is organized into Levels, comprised of Units, including Lessons and a succession of Concepts or words to learn the language (Sebastián et al., 2021, p. 36286). Furthermore, this association may explain why most respondents believed that using Duolingo for writing assessment was easier than using traditional methods for assessment, as students enjoyed and showed interest in the writing evaluation.

Regarding its suitability as an evaluation tool, most respondents believed Duolingo could be utilized in writing assessments. Duolingo facilitates learning via play by awarding users points and rankings as they finish classes without losing progress points. This point and rating system promotes user competitiveness (Alexandre et al., 2023, p. 4). The user completes minor tasks involving listening, writing, reading, and translating in the target language, earning or losing points based on the accuracy (Sorrentino & Spano, 2019, p. 23050). As

a result, because progress reviews and feedback can be gained through this online learning platform, Duolingo has the potential to be an assessment tool for writing skills. However, specific questions were raised about the deployment of Duolingo. The semi-structured interview revealed three significant issues of Duolingo's drawbacks (see the results). However, Duolingo is a versatile online pedagogical tool that may have weaknesses. Duolingo needs to be more contextual in the future and engage the student's motivation. The results of the observation checklists revealed that some students become would not continue the use of Duolingo because of those three significant weaknesses. Thus, this study emphasized the importance of straightforward simulation and sufficient time to promote active engagement and successful exchange of ideas among students while using technological tools such as Duolingo.

Conclusions

Most respondents supported using Duolingo as a platform for language evaluation, especially writing evaluations. The collected data from survey questionnaires, observation checklists, and semi-structured interviews indicated that most respondents found the application user-friendly, engaging, practical, and appropriate for writing assessments. When students were evaluated using Duolingo, they were also motivated and had fun. The use of Duolingo also enabled the students to assess the writing progress of their skills and provide feedback on their writing. Through the incorporation of Duolingo, students could be exposed to and gain experience using online learning platforms, as one of the implications of this study. They could benefit from the application because it allowed them to practice their writing skills. Students had the opportunity to practice and experience

evaluation through online learning platforms due to the incorporation of Duolingo into the writing assessment process. This research was significant in advancing the teaching profession of teachers, as they may have discovered Duolingo as a new instrument, resource, and method that could be advantageous in enhancing their teaching practices, particularly in learning assessment. However, there are still drawbacks related to the use of Duolingo. Future research on Duolingo could implement this study with various types of respondents, such as elementary or junior high school students, to obtain a variety of Duolingo perspectives. Future research might also investigate the impact of Duolingo on evaluating other language abilities or language skills integration.

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