

# An Analysis of Using Duolingo Application to Increase Students Writing Skills in Descriptive Text

# Ferdyansyah Bagus Adhitya<sup>1</sup>, Titi Rokhayati<sup>2</sup>, Ismawati Ike Nugraeni<sup>3</sup>

<sup>1,2,3</sup>Universitas Muhammadiyah Purworejo, Indonesia *E-mail: bagoesaditea@gmail.com, trokhayati@umpwr.ac.id* 

#### Article Info

#### Article History

Received: 2025-05-13 Revised: 2025-06-23 Published: 2025-07-02

## **Keywords:**

Duolingo; Descriptive Text; Classroom Action; Writing Skills.

#### **Abstract**

This study aims to describe the use of using Duolingo application to improve students' descriptive text writing skills in grade X of SMA Negeri 5 Purworejo. Common problems faced by students include limited vocabulary, grammatical errors, and low interest and motivation in writing. To address these challenges, this research employed a Classroom Action Research (CAR) method consisting of four phases: planning, acting, observing, and reflecting. The study involved 36 students and implemented Duolingo as a technology-based interactive learning medium. The results showed that the use of Duolingo had a positive improvement on students' writing performance. Improvements were observed in student participation, timely submission of assignments, and increased observation scores for both students and teachers. Duolingo supported students in understanding sentence structure, enriching vocabulary, and engaging more actively in the learning process. Furthermore, teachers were able to deliver lessons more creatively and systematically. This research recommends incorporating technology-based applications such as Duolingo as an alternative tool in English language learning, particularly for improving students' writing skills in a more effective and engaging way.

#### **Artikel Info**

#### Sejarah Artikel

Diterima: 2025-05-13 Direvisi: 2025-06-23 Dipublikasi: 2025-07-02

## Kata kunci:

Duolingo; Teks Deskriptif; Tindakan Kelas; Keterampilan Menulis.

#### **Abstrak**

Penelitian ini bertujuan untuk mendeskripsikan penggunaan aplikasi Duolingo untuk meningkatkan keterampilan menulis teks deskripsi siswa kelas X SMA Negeri 5 Purworejo. Masalah umum yang dihadapi siswa meliputi keterbatasan kosakata, kesalahan tata bahasa, serta minat dan motivasi menulis yang rendah. Untuk mengatasi tantangan tersebut, penelitian ini menggunakan metode Penelitian Tindakan Kelas (PTK) yang terdiri dari empat tahap: perencanaan, tindakan, pengamatan, dan refleksi. Penelitian ini melibatkan 36 siswa dan menerapkan Duolingo sebagai media pembelajaran interaktif berbasis teknologi. Hasil penelitian menunjukkan bahwa penggunaan Duolingo memberikan peningkatan positif pada kinerja menulis siswa. Peningkatan diamati dalam partisipasi siswa, penyerahan tugas tepat waktu, dan peningkatan skor observasi baik untuk siswa maupun guru. Duolingo mendukung siswa dalam memahami struktur kalimat, memperkaya kosakata, dan terlibat lebih aktif dalam proses pembelajaran. Selain itu, guru mampu menyampaikan pelajaran dengan lebih kreatif dan sistematis. Penelitian ini merekomendasikan penggabungan aplikasi berbasis teknologi seperti Duolingo sebagai alat alternatif dalam pembelajaran bahasa Inggris, khususnya untuk meningkatkan keterampilan menulis siswa dengan cara yang lebih efektif dan menarik.

#### I. INTRODUCTION

Language consists of four main skills, namely reading, writing, speaking, and listening. These four skills play an important role in everyday communication and have various functions such as conveying emotions, gaining knowledge, and recognizing the cultural identity of a nation. Language also has various functions, such as expressing emotions, communicating, acquiring knowledge, and maintaining cultural and social identity (Damayanti et al., 2023). Thus, writing skill are directed to convey ideas or thoughts indirectly into communication (Barbe et al., 2023). Of all these skills, writing is one of the

most important skills in communication, education, and professional success. Writing is very important as one media of communication, that can help us to have a good socialization, can express our idea, feeling, and our opinion so that we can have a good interation with our society (Lestari 2023). Writing allows someone to convey ideas, share knowledge, and express thoughts clearly and effectively. Writing is the process of finding ideas so that the writer can express them into a result of writing through sentences, paragraphs or text (Siregar 2021). In the context of education, writing skills help students organize information systematically,

think critically, and communicate meaningfully. However, many students still have difficulty improving their writing skills, especially in writing descriptive texts. As stated by (Selvy Kurniasari et al., 2021), writing is a very complex and difficult because students have to structure their paragraphs, ensuring coherence and unity between them. This statement is also emphasized by (Duha, 2022), it is occurred because they do not know how to write well, so the students should learn and practice writing.

Descriptive text is a text that contains information about something, an object, or an event in detail so that the reader can see, hear, feel, or experience the object being described directly. The descriptive text is described or illustrated as the object, experience, emotion, situation, person, or idea as seen physically through their eyes (Luthfi Abdillah, 2022). So, descriptive is describing something or someone, especially in detailed way (i Syafar, 2021). Through descriptive writing, students can develop their ability to convey ideas clearly and enrich their vocabulary and sentence structure. So that readers can understand the objects mentioned. As stated by (Ismayanti and Kholiq, 2020), the students must organize their ideas into clear paragraphs and ensure their writing is readable. This challenge is even greater for students who are not native English speakers, because limitations in mastery of vocabulary and grammar can hinder accurate message delivery.

For non-native English speakers, writing descriptive texts presents additional challenges, such as limited vocabulary, grammatical inaccuracies, and difficulty in conveying accurate images. In addition, some students experience anxiety and lack of motivation when given descriptive writing tasks, which further hinders their progress. Overcoming these difficulties requires effective teaching strategies that encourage student participation and provide meaningful writing experiences. Fortunately, technology has developed rapidly, so that the difficulties experienced by students are made easier with the help of technology. The use of only books or pictures in the teaching-learning process is now seen as ineffective or outdated; therefore, a modern and engaging teaching method is necessary to meet students' expectations (Rokhayati and Widiyanti, 2022).

Nowadays, the use of technology-based media in education is in demand. Rapid technological developments have had a positive impact on the world of education, including in efforts to improve students' writing skills. One of

the technology-based learning platforms that is quite popular and widely used is the Duolingo application. Duolingo is a language learning elements application that combines gamification, adaptive learning, and artificial intelligence-based feedback. This application program uses gamification and adaptive learning to make language learning more enjoyable and accessible. Duolingo has many features and exciting colours, which would attract students" interest to learn English from Duolingo (Zahra, 2022). The program applies different learning strategies, including gamification, interactive learning, and language challenges, and its provides lessons in over 40 languages (Shinta Shofia Ananda et al., 2023). Through structured exercises, interactive features, and real-time grammar correction, this application is able to improve users' writing skills in a fun and personal way. Features such as gap-filling exercises, sentence translation, and contextual learning help students broaden their horizons, construct sentences, and maintain coherence in external writing such as student background, personal motivation, and access to applications outside the classroom cannot be fully controlled.

This study's focus is on the type of descriptive text and how the Duolingo application can help grade X students at SMA Negeri 5 Purworejo improve their writing abilities. A qualitative approach is used in this study to gather thorough data. However, there are several limitations in this study, such as the scope is limited to one educational institution, the type of text is limited to descriptive text only, and the time of the study may not reflect the long-term impact. In addition, external factors such as student background, personal motivation, and access to applications outside the classroom cannot be fully controlled.

This study has several objectives and benefits. For teachers, this study is expected to provide more creative and enjoyable English learning strategies, as well as provide references in integrating Duolingo into lesson plans. For students, this study is expected to help them overcome obstacles in writing and increase their confidence in expressing ideas in writing. Meanwhile, for researchers, this study can be a basis for further research on technology-based language learning, especially in developing

# II. METHOD

This study uses action research to observe the improvement of using descriptive text writing skills using Duolingo Application. Classroom action research is action research project that is

created, carried out, and reflect collaboration, and action with teacher and researcher in the classroom or with others to improve the standard of learning processes in a classroom through targeted action carried out in one cycle. An action research is applied to improve the processes of teaching and learning, reflective practices, as well as critical and creative thinking (Al-Obaydi et al., 2021). The purpose of classroom action research is to develop variations in learning media. As stated by (Ferstephanie and Pratiwi, 2022), the purpose of Classroom Action Research is to provide new knowledge and awareness to teachers to improve their teaching practices in the classroom.

Therefore, this study uses a cycle consisting of planning, acting, observing, and reflecting. As a result, this study developed when implemented. Meanwhile, for data collection, the researcher took one class, the class taken was class X6 of SMA Negeri 5 Purworejo which had 36 students.

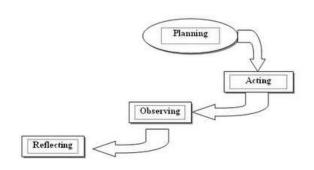


Figure 1. Cycle Process

# III. RESULT AND DISCUSSION

# A. Result

In this study, the implementation of Classroom Action Research (CAR) followed four systematic phases: Planning, Acting, Observing, and Reflecting. These phases were carried out collaboratively by the teacher and the researcher with the aim of improving students' descriptive text writing skills through the integration of the Duolingo application into classroom activities. The structured cycle allowed continuous monitoring and reflection, enabling targeted improvements throughout the teachinglearning process.

# 1. Planning

In this phase, the teacher and researcher collaboratively identified students' difficulties in writing descriptive texts. They developed a detailed lesson plan that incorporated the Duolingo application as

the main instructional tool. Learning objectives were formulated, instructional materials were prepared, and observation sheets for both students and teacher performance were designed to guide the process. This planning ensured that the teaching activities would be focused and measurable.

# 2. Acting

During this phase, the instructional plan was carried out in the classroom. The teacher conducted writing lessons by integrating Duolingo into the activities. Students engaged with the application through interactive tasks focused on vocabulary building descriptive practicing sentence structure. The activities included vocabulary drills. sentence translation, and structured writing tasks, all delivered via the Duolingo platform to increase student motivation and participation.

# 3. Observing

Observation was conducted using structured observation sheets to monitor both student and teacher performance. The observation focused on several aspects: student engagement, task completion, interaction in class, and the teacher's ability to facilitate the learning process using Duolingo. Students' active involvement in using the application and the timeliness of assignment submission were key indicators recorded during this phase.

## 4. Reflecting

In this phase, the teacher and researcher analyzed the data collected during the observation phase to evaluate effectiveness of the teaching strategy. The results showed that the application of Duolingo had a positive impact on student performance. Strengths included increased student participation, timely task completion. and improvements vocabulary usage and sentence structure. Areas for further development such as promoting verbal interaction and maximizing all available features Duolingo were identified to enhance future learning cycles.

## **B.** Discussion

Based on the results of observations made during the learning process, class X6 students of SMA Negeri 5 Purworejo showed that the use of the Duolingo application to improve descriptive text writing skills had a positive influence. Students demonstrated a good level of engagement, particularly in working on Duolingo-based quizzes and writing tasks. Although verbal participation—such as asking and answering questions—still needs improvement, most students followed the lesson well, completed assignments on time, and took part actively in class activities. This is supported by the student observation score which reached 19 points out of a maximum of 24.

The classroom activities, which followed the four phases of Classroom Action Research (Planning, Acting, Observing, and Reflecting), were able to support students' learning progress. The discussion below is presented based on each phase.

## 1. Planning

In this phase, the teacher and researcher worked together to identify the students' problems in writing, such as difficulties in organizing ideas, limited vocabulary, and a lack of motivation. These findings became the foundation for designing lesson plans using Duolingo. The learning objectives were adjusted accordingly, and observation instruments were prepared to evaluate both student and teacher performance. This preparation was important to ensure that the learning process would run smoothly and meet the desired outcomes.

#### 2. Acting

In the acting phase, the teacher implemented the planned activities in the classroom. Duolingo was used as the main learning media during writing sessions. Students were involved in a variety of tasks provided by the application, such as vocabulary practice, sentence construction, descriptive writing drills. Most students actively participated in the activities and showed increased enthusiasm when completing the tasks. They appeared more focused, and some were even motivated to complete exercises beyond the minimum requirement.

#### 3. Observing

During the observing phase, both student and teacher activities were monitored using observation sheets. The student observation score reached 19 out of 24, indicating that students were generally engaged, submitted tasks on time, and followed instructions well. The teacher observation score was 37 out of 40,

reflecting effective classroom management and clear instruction delivery. In addition to the numerical scores, the observations showed that students were confident in writing, used newly learned vocabulary in their work, and demonstrated improved understanding of sentence structure.

# 4. Reflecting

In the final phase, the teacher and researcher reviewed the results of the observations. The reflection indicated that the use of Duolingo contributed significantly to enhancing students' writing skills. Most students were more confident and active during the lessons, and they demonstrated better writing performance than before. However, it was also noted that some students were still hesitant to engage in verbal interactions. For future learning cycles, combining the use of Duolingo with interactive discussions or peer feedback could further strengthen student engagement and support broader language development.

# IV. CONCLUSION AND SUGGESTION

## A. Conclusion

Overall, learning using the Duolingo application can improve student motivation, enrich vocabulary, and provide a more interactive and interesting learning experience. This is also in line with the principles of 21st century learning which emphasizes the integration of information and communication technology in teaching and learning activities.

# **B.** Suggestion

Based on the results of this study, several suggestions can be made for further development. First, teachers are advised to continue to utilize technology-based learning media such as Duolingo as a tool in learning to write. In addition, teachers can also combine the use of applications with other learning methods that encourage active student participation orally, such as group discussions or presentations, so that students' speaking skills can also develop. Second, students are expected to be able to use the Duolingo application not only during classroom learning, but also as a means of independent learning outside the classroom to practice vocabulary and sentence structure descriptive texts. Third, further researchers are advised to conduct research development with broader indicators, such as improving writing test results or writing skills in other text genres, so that the research results are more comprehensive. Finally, schools are expected to support the use of digital media in learning by providing adequate facilities and training for teachers so that technology-based learning can be implemented optimally and sustainably.

#### REFERENCES

- Al-Obaydi, L.H., Nashruddin, Rahman, F.F., Suherman, L.O.A., 2021. The Use of Action Research in EFL Socio-professional Context: Students-teachers' Perceptions. ELS Journal on Interdisciplinary Studies in Humanities 4, 232–240. https://doi.org/10.34050/elsjish.v4i2.108 76
- Barbe, K., Sakkir, G., Syafitri, E., Dollah, S., 2023.
  Using Illustration Images to Enhance Junior
  High School Students' Writing Skills.
  Journal of Language Learning and
  Assessment 1–8.
  https://doi.org/10.71194/jlla.v1i1.74
- Damayanti, M., Yosephin, M., Lestari, S., 2023. Improving Students' Writing Ability In The Procedure Text Using Duolingo Application At 8 Grade Students Of SMP Negeri 5 Pati 2023/2024. Fonologi: Jurnal Ilmuan Bahasa dan Sastra Inggris 1, 161–172. https://doi.org/10.61132/fonologi.v1i4.17
- Duha, M., 2022. Students' Difficulties In Writing Descriptive Text: Faguru: Jurnal Ilmiah Mahasiswa Keguruan 1, 13–25. https://doi.org/10.57094/faguru.v1i2.503
- Ferstephanie, J., Pratiwi, T.L., 2022. The Effect Of Tiktok Platform To Develop Students' Motivation In Speaking Ability: A Classroom Action Research. Wiralodra English Journal (WEJ) 6, 1–12. https://doi.org/10.31943/wej.v6i1.147
- i Syafar, N.F., 2021. Applying Discovery Learning Model in Teaching Descriptive Text Writing Viewed from Creativity at IAIN Palopo (doctoral). Universitas Negeri Makassar.
- Ismayanti, E., Kholiq, A., 2020. An Analysis Of Students' Difficulties In Writing Descriptive Text. E-Link Journal 7, 10–20. https://doi.org/10.30736/ej.v7i1.260

- Lestari, W., 2023. English Tadris Study Program Tarbiyah And Teaching Training Faculty State Islamic University Datokarama Palu.
- Luthfi Abdillah, M., 2022. The Effectiveness of Discovery Learning Method on Reading Descriptive Text at Eighth Grade of SMP Diniyah Al Falahiyah Lamongan. JERS 1, 76–80. https://doi.org/10.57060/jers.v1i03.28
- Purnamasari, D., Hidayat, D.N., Kurniawati, L., 2021. An Analysis of Students' Writing Skill on English Descriptive Text. ee 14, 101–114. https://doi.org/10.24042/ee-

jtbi.v14i1.7943

- Rokhayati, T., Widiyanti, A., 2022. Using Technology-Based Media for Teaching Speaking in Intercultural Education. Lingua Cultura 16, 9–15. https://doi.org/10.21512/lc.v16i1.7752
- Selvy Kurniasari, Tri Mulyati, Sutami Dwi Lestari, 2021. The Influence of Whatsapp Group on Descriptive Text Writing Ability of the Tenth Grade Students of SMK Al-Achyar in the 2019/2020 Academic Year. LUNAR 5, 203–210. https://doi.org/10.36526/ln.v5i1.1466
- Shinta Shofia Ananda, Arso Setiaji, Indri Kustantinah, 2023. The Role Of Duolingo Application To Improve Students' Vocabulary Mastery At Junior High School In Academic year 2023/2024. didaktik 9, 1124–1133. https://doi.org/10.36989/didaktik.v9i5.20
- Siregar, S.R., 2021. Students' Descriptive Text Writing in Experiential Function Realization. English Education: English Journal for Teaching and Learning 9, 63–76. https://doi.org/10.24952/ee.v9i01.4103
- Zahra, N.S., 2022. The Effectiveness Of Using Duolingo Application Towards Students' Mastery In Making Simple Present Tense At The Second Grade Students Of Smp El-Syihab Bandar Lampung At The First Semester In The Academic Year Of 2021/2022 (diploma). Uin Raden Intan Lampung.