CHAPTER I

INTRODUCTION

A. Background of Study

Artificial Intelligence (AI) refers to the development of computer systems that can perform tasks requiring human-like intelligence, such as learning from data, recognizing patterns, making decisions, and adapting to new situations. AI technologies encompass machine learning and deep learning, enabling applications in areas like autonomous vehicles, virtual assistants, healthcare, and more, transforming the way we interact with and benefit from technology. In using Bing AI to enhance students' descriptive text writing skills, some issues that need to be considered include limitations in students' creativity, students becoming overly dependent on AI, potential inconsistency in the quality of generated content, limitations in available languages, and errors in interpreting context. Akerkar (2014) state AI is the part of computer science which is concerned with designing intelligent computer system that exhibit the characteristics used to associate with intelligence in human behavior.[1]

Descriptive writing is an important skill in writing that allows the writer to create a vivid and engaging

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[1] R. Arkerkar. *Introduction to Artificial Intelligence, 2nd ed*. PHI Learning Private Limited: Delhi. 2014.

experience for the reader. Descriptive writing is important because it creates a dominant impression, provides sensory information, increases readability, creates an emotional response, enhances clarity and quality, and elevates the standard of writing.

Teaching descriptive writing comes with its own challenges. These challenges include students' limited language proficiency, lack of imagination and observation, difficulty in creating engaging texts, and a basic understanding of the concept of description itself. One of the main challenges in teaching descriptive writing is students' limited language proficiency. Some students might have a restricted vocabulary or struggle to construct sentences correctly. This can affect their ability to create clear and detailed depictions in their writing.

Artificial Intelligence (AI) plays a crucial role in the field of education, ranging from personalized curriculum design to automated assessment and individualized feedback. The use of AI can enhance learning efficiency, provide a more personalized learning experience, and help optimize the potential of each student. One of the primary roles of AI in education is aiding in the creation of personalized curricula for each student. Based on individual data analysis such as learning capabilities and interests, AI can develop tailored

learning plans that cater to the specific needs of each student. This enables a more effective and relevant learning process.

According to Chen et al. (2020), the implementation of AI in writing instruction significantly improves grammar and spelling errors in students' writing.[2] Their research findings indicate that with the assistance of an automated system utilizing Natural Language Processing (NLP) techniques, students were able to enhance the quality of their writing, such as sentence structure, vocabulary, and language fluency.

According to Jones et al. (2018), the AI system analyzes students' writing and provides specific feedback related to sentence structure, word choice, and grammar errors.[3] The results of the study indicate that the use of automatic feedback through AI can assist students in understanding their writing weaknesses and guide them towards making appropriate improvements.

Li et al. (2020) suggested that using a deep learning approach to develop an AI model can help students enhance their writing skills in descriptive texts.[4] The research findings demonstrate that the utilization of AI models in writing

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[2] Chen, H., Liu, G., & Yang Z. (2020). *"Improving Student Writing Skills Using Machine Learning Techniques."* IEEE Access.
[3] Jones, R., Smith A., & Davis C. (2018). *"The Impact of Automated Feedback on Student Writing Skills."* Journal of Educational Technology.
[4] Li, J., Zhang, L., & Wang, Y. (2020). *"Artificial Intelligence-Based Writing Education System for College Students."* International Journal of Emerging Technologies in Learning.

instruction is capable of significantly enhancing the quality of students' writing.

Artificial Intelligence in descriptive texts offers benefits such as quick feedback, grammar and spelling correction, vocabulary development, sentence structure suggestions, plagiarism detection, enhanced creativity, personalized learning, time efficiency, self-guided training, and integration of technology in the learning process.

Based on the current explanation, the researcher is ready to continue the study with the title ''The Effect of Bing AI Toward Student's Writing Skill on Descriptive Text of Tenth Grade in MA Al - Inayah Jerang Ilir Cilegon''

B. Identification of Problem

In the context of the effect of artificial intelligence (AI) on students' writing skills in descriptive text, the following problem areas need to be addressed:

1. Limitations of Creativity.
2. Dependence on AI.
3. Inconsistent Quality of Content.
4. Limitations of Available Languages.
5. Misinterpretation of Context.

C. Scopes of Research

The research on the effect of artificial intelligence (AI) on students' writing skills in descriptive text has the following scopes and limitations.

Scopes:

1. Assessment of AI tools: The study will focus on evaluating the effectiveness of AI tools in enhancing students' writing skills in descriptive text.

2. Writing performance analysis: The research will examine the impact of AI on various aspects of writing, such as grammar, vocabulary, coherence, and organization in descriptive text.

3. Student perception and feedback: Students' perspectives and experiences regarding the use of AI tools for writing in descriptive text will be explored through surveys or interviews.

4. Comparison with traditional instruction: The study will compare the outcomes of AI-supported writing instruction with traditional teaching methods to identify the unique benefits and limitations of AI.

D. Limitations of the Problem

1. Research Sample.
2. Learning Environment
3. Duration of Research

4. Control Variables

This research acknowledges certain limitations that need to be considered, such as the study's limited sample of high school students, the influence of the school environment, the restricted study duration, and other factors that can affect the research outcomes. However, this study can still provide valuable insights into the impact of using Bing AI on students' descriptive text writing skills.

E. Statements of the Problem

Based on the problem in the background above, the researcher formulates the problem in research as follow:

1. Is there any effect of Bing AI Toward Student's Writing Skill on Descriptive Text of Tenth Grade in MA Al - Inayah Cilegon?

2. How is the effect of Bing AI Toward Student's Writing Skill on Descriptive Text of Tenth Grade in MA Al - Inayah Cilegon?

F. The Objectives of the Study

1. To know the effect of Bing AI Toward Student's Writing Skill on Descriptive Text of Tenth Grade in MA Al - Inayah Cilegon.

2. To know how the effect of Bing AI Toward Student's Writing Skill on Descriptive Text of Tenth Grade in MA Al - Inayah Cilegon.

G. Significance of the Research

The research on the effect of artificial intelligence (AI) on student's writing skills in descriptive text holds significance for teachers, students, and researchers in the following ways:

1. Teachers: This research is highly beneficial for teachers because Bing AI can be used as an effective tool for teaching descriptive text writing. With Bing AI, teachers can provide instant feedback to students, correct grammar mistakes, and offer suggestions for idea development, thereby improving the quality of teaching and students' writing skills.

2. Students: This research significantly impacts the development of writing skills. With Bing AI, students can improve their ability to find relevant information, expand their vocabulary, enhance grammar, and develop ideas in descriptive writing, resulting in better quality work.

3. Researchers: This research holds significant value in advancing the field of knowledge. It provides a

better understanding of the impact of Bing AI on students' writing skills in descriptive texts. The results can serve as a foundation for AI research in education and offer guidance to researchers in enhancing students' writing skills.

H. Organization of Writing

To make this research accessible to sight-catch, this paper is structured into five chapters, and every chapter has some point to explain the chapter. The writer organized it as follows:

Chapter I is the Introduction. In this chapter, the researcher put some points: Background of the Study, Identification of Problem, Focus of Study, Research Questions, Objective of the Study, Previous Study, and The Organization of Writing.

Chapter II is the Literature Review. This chapter consists of the theories from some experts who have conducted research related to this research.

Chapter III is the Method of The Research. Which consist of Place and Time, Research Method, Research Approach, Instrument, and Technique of Data Collection; the last is Data Analysis.

Chapter IV is Findings and Discussion. This chapter consists of an explanation of the data description and the analysis data.

Chapter V is Closing. This chapter consists of conclusions and suggestions.