

ABSTRACT

GPT is an artificial intelligence model that is trained to understand and produce text that closely resembles human language, so that it is easy for students to understand and able to answer questions quickly and relevantly according to the given context. Based on interviews with 36 grade 5 students at SDN 009 Balikpapan, 61% of students stated that they had difficulty mastering tense, which was mainly caused by a lack of practice that suited their needs. As many as 83% of students also mentioned that lack of practice and feedback were the main obstacles to learning. This research aims to develop and evaluate the effectiveness of a GPT-based WhatsApp chatbot using the waterfall method, the development methodology includes Waterfall stages, including requirements planning, design, i menetapkan skup perbandingan prompt dan tidak prompt, serta pemilihan metode waterfall belum ada justifikasinya. mplementation, experimentation and implementation evaluation. Chatbots were developed in two types, namely, using a prompt system and without a prompt system, with the function of providing grammar material (tense), practice questions, and evaluating practice questions. Evaluate the use of chatbots through pre-test, post-test, and questionnaires. The results of the GPT-based WhatsApp chatbot analysis show significant effectiveness in increasing understanding of grammar material (tense) for users. The results of the analysis for the comparison between the chatbot and the system prompt principle, show that respondents feel this chatbot is useful in increasing their understanding of learning, which indicates that this chatbot is effective in supporting the aim of providing grammar material (tense), respondents feel this chatbot is easy to use. This indicates that the chatbot interface and features are well designed to simplify the learning process.

Keywords: *Chatbot, GPT, Metode Waterfall, Grammar, Tense, System Prompt*