Abstract

In today's rapidly evolving digital age, Generative Artificial Intelligence (Generative AI) has been extensively developed by major companies. One of the most popular forms of Generative AI is the Large Language Model (LLM), which has the ability to generate various human-like outputs, particularly text-based outputs. However, in the world of education, LLM has not been used directly during the learning process in the classroom, but is still limited to helping with assignments. This study will analyze the level of student motivation and interaction in the learning process in the classroom using LLM assistance. This study observed seven meetings in two different classes, one class serving as the control class, which conducted the learning process in the classroom as usual, and the other class serving as the experimental class, which conducted the learning process in the classroom with the help of LLM. The results of the study showed that the experimental class received a total of 189 responses from students, while the control class received a total of 175 responses. The number of interactions between instructors and students was also higher in the experimental class, with a total of 151 questions, while the control class had a total of 124 questions. However, when viewed from the ratio, the control class produced a higher total score, generating 1,411 student responses per lecturer question, while the experimental class only generated 1,252 student responses per lecturer question. This indicates that the use of LLM during the teaching and learning process in the experimental class did not significantly impact the level of student interaction in the class, as indicated by the total student response ratio. This is due to slight differences in motivation and learning strategies between the two classes, resulting in differences that are not particularly significant. However, the lower ratio in the experimental class could also be caused by various factors that were not measured in this study, such as student learning profiles. On the other hand, the role of lecturers also proved to be very influential in this study, where the total number of interactions between lecturers and students in the experimental class also affected the number of student responses in the class. This also shows how the lecturers' teaching methods with the help of LLM also influenced the level of student activity during the learning process.

Kata kunci: LLM; learning process; student motivation; student interaction