ABSTRACT

The rapid advancement of technology necessitates changes in the education system, emphasizing the development of creative skills, critical thinking, and technological proficiency. However, many schools, including SMP Negeri 21 Kota Bekasi, still predominantly employ conventional teaching methods focused on rote memorization and exam-based assessments. This approach hinders students' creativity, limits their exploration of ideas and problem-solving skills, and often leads to disinterest and demotivation in learning.

A significant challenge observed at SMP Negeri 21 Kota Bekasi is the lack of support for student creativity development, exacerbated by teachers' limited competence in utilizing technology and a declining interest in subjects like mathematics.

To address these issues, this research proposes the development of a website named Mathporia, which implements the EduKreativa approach. EduKreativa is a technology-based learning model integrating five main elements: interactive videos, discussion communities, live mathematics reasoning sessions, gamified progress tracking, and contextual multimedia content.

Mathporia is designed to foster students' creativity, collaboration, and interest in learning through adaptive, enjoyable, and meaningful learning experiences. As part of the innovation, Mathporia is planned to include a progress-based rewards feature, where students can unlock advanced materials or additional games upon achieving specific learning targets.

Quantitative and qualitative data support the urgency and effectiveness of this solution. System testing including Blackbox, Security, Performance, Usability, Compatibility, and Beta testing confirmed all features function as expected, and the system has the potential to improve the quality of education at SMP Negeri 21 Kota Bekasi.

Keywords: Mathporia, EduKreativa, Student Creativity, Interactive Learning, SMP Negeri 21 Kota Bekasi.