

The Need for Interactive Brainstorming Platforms for Students

Sukrati Chaturvedi¹, Sneha², Saurav³

Assistant Professor, Department of Computer Science Engineering ¹

UG Students, Department of Computer Science Engineering ^{2,3}

Dronacharya College of Engineering, Gurugram, India

Abstract: *In today's digital age, effective collaboration and creativity are essential skills for students, particularly in academic settings where group projects and innovative problem-solving are common. Traditional brainstorming techniques, while foundational, often face limitations such as time constraints, geographical barriers, and unequal participation. These challenges have intensified with the growing prevalence of remote learning and hybrid education models.*

This paper explores the increasing necessity of interactive brainstorming platforms tailored specifically for students. These platforms address critical shortcomings of conventional methods by offering real-time collaboration, structured ideation, and inclusivity through features like multimedia support, gamification, and AI-driven suggestions.

The study highlights the benefits of these tools in fostering creativity, enhancing engagement, and preparing students for future professional environments where digital collaboration is paramount. It also examines existing tools like Miro, Jamboard, and Padlet, identifying their strengths and limitations. Finally, the paper proposes a framework for designing student-centric brainstorming platforms, emphasizing accessibility, adaptability, and scalability.

Through this research, we aim to underscore the transformative potential of interactive platforms in reshaping the brainstorming process for students, making it more effective, engaging, and aligned with the demands of modern education.

Keywords: Interactive brainstorming, Student collaboration, Digital platforms, Real-time collaboration, AI in education, Idea generation, Creative problem-solving, Technology in education

