

# **A Collaborative Support Tool for Creativity Learning:**

## **Idea Storming Cube**

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### **Abstract**

Creativity plays an important role in many learning activities but how to enhance creativity with the support of modern computer tools deserves further studies. The objective of this research is to develop a Web-based collaborative creative support tool with an intelligent mechanism for learning creativity. This research describes a collaborative game-based creativity support system, Idea Storming Cube, in support of creative thinking. It aims to make people form a creative and perspective-shift thinking habit. The system analyzes the knowledge acquired from the history of user inputs and compares it with the ideas possessed by the domain expert and other users in the current brainstorming group. It is also designed to provide user-, goal- and context-sensitive supports with this mechanism that stimulates more divergent thinking. The system can be parameterized by two distinct support strategies, Basic Mode and Idea Generation Mode, in order to support different gaming objectives. The proposed Human-Computer Interaction (HCI) tool for collaborative idea generation has been implemented and a case study for preliminary evaluation of the system is also reported in this research.