

# CROWDSOURCING STEM CONTENT FOR EDUCATIONAL GAMIFICATION

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**Abstract.** In this project, crowdsourcing science, technology, engineering and mathematics (STEM) content was used to promote enjoyable, challenge-based English language learning to learners and instructors altogether. However, for this kind of facilitation to materialize is somehow vague as there is minimal empirical evidence of its execution in real life setting. This action research therefore, was conducted to explore the concept of engagement via crowdsourcing for gamification in education. Through an analysis of 48 participants (pupils aged 13 to 14 years) and 20 facilitators who were involved in the ‘Young Scientist Camp’, the participants were assigned to crowd-source STEM content for revisions using English language. They then took turns to test their peers in other groups on STEM content using Kahoot!. Observations via video recording and focus group interviews were conducted to detect the evidences, and thematic analyses of crowdsourcing characteristics and engagement elements of gamification were presented in qualitative manner. The outcomes of this study are used to obtain general recommendations in engaging learners and applying crowdsourcing techniques in educational contexts.

**Keywords.** *Crowdsourcing, gamification, STEM, language learning*