

## Case Study: Game Design Thinking as a Strategy for Community Engagement in a Rural Indigenous Village

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**Abstract.** This paper presents the formulated ‘play-to-engage’ model for community engagement that incorporates factors in cultural protocols and the game design thinking approach. The model was experimented in an indigenous rural village in Borneo. Engagement was done with a group of indigenous community leaders, teachers and indigenous students from the village. It is a known fact that all indigenous cultures have overwhelming cultural protocols and rural custom practices for researchers to adhere to and follow. Since game is a universal language, the creation of a trustworthy partnership between the community and researchers was made easier using play during the engagement process. Incorporating a fun gameplay approach could also be a solution to thrive on reflection and creativity of those individuals in capturing the needs of the study. The outcome of the engagement was positive and the communities’ needs, issues, experiences and motivation were collected during the play.

**Keywords:** cultural protocol, play-to-engage, game design thinking for community engagement

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## Engaging Primary Schools in Rural Malaysia With Game-Based Learning: Culture, Pedagogy, Technology

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**Abstract:** Mustea and Herman (2015) suggested that social constructionism enables learners to explore new understanding and knowledge through social interactions. In the same theoretical tradition, Gee (2016) and Kafai (2015) have suggested that games and game literacy constitute a particularly powerful and engaging path toward the social constructionist pedagogical perspective, where

creative social interactions are scaffolded by a playful context in which learners can interact with self-directed purpose and heightened interest. Following these theoretical groundings, this paper presents findings and experiences in bringing game-based learning to two primary schools in two different remote rural locations in Sarawak, Malaysia, and articulates both the challenges and the opportunities that emerge when introducing this innovative approach in a context that is very different from the standard, Western, urban, tech-centred classroom that is the “object” of most experimentations. Sharing similar (and, from a urban perspective, disadvantaged) socio-economic backgrounds, students at these schools were introduced to a variety of game-based learning materials (both digital and analog) which were designed in alignment with both the national curriculum for Science, Mathematics and English, and the cultural-technical specifics of their everyday living contexts. The paper discusses how context, intended contents and pedagogical approach informed the design, the deployment and the impact of these activities. The paper then moves to discuss the relevance of incorporating local values into the design of game-based learning for remote rural students, how games can enable critical and creative thinking to be encouraged in a playful social context, and the opportunity for students and teachers to become the designers of their own culturally informed game-based learning tools.

**Keywords:** social constructionism, game-based learning, rural schools

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## Learning Supported by Story Templates

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**Abstract:** School students are increasingly distracted by modern technology, leading to decreasing skills in reading and writing. This paper presents the e-learning-tool “Story Templates”, which enables teachers to include stories into the daily homework assignments. The basic idea is to insert learning content meaningfully into exciting stories, coming from a large database of stories. Each story has its predefined breaks, where different templates or rather tasks can be inserted, for example an arithmetic problem. Teachers can choose between various ways of grading the homework results, including multiple choice, text based etc. The tool also contains an app that students can use on their smartphones or tablets to read the stories and provide answers. The goal of this work is to make learning and reading fun, by using modern technology.