Orchestrating Learning as an Emergent Practice in the Use of Location-Based Games with Mobile Devices

# Details

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20 students and two teachers in a 5th and 6th-grade class in Sweden.

## Implications For Educators About

STEM Education

# Abstract

This study discusses the inclusion of location-based games and mobile devices in an educational setting that embraces both indoor and outdoor sessions. The study was built on a framework including learning as a social and collaborative phenomenon. Two case units, in terms of a fifth grade Social Science class and a sixth grade Mathematics class, were included in the study. Each case unit embraced an indoor preparing session, an outdoor session including mobile devices and the location-based game Pokémon GO, and an indoor follow-up session. The chapter aims at contributing to the understanding of how students and teachers together, in an emergent practice of orchestrating learning, apply mobile devices and location-based games in their educational setting. From this aim, the following research question unfolds: How could location-based games and mobile devices be applied by students and teachers to orchestrate learning in middle school settings? Data were gathered by semi-structured group interviews and video recordings with 20 students and two teachers. Moreover, documents such as lesson plans were included in the dataset. In the study, it was found that students and teachers participated in a shared and emerging practice of orchestrating learning and teaching. In this practice students and teachers acted as co-designers to orchestrate the application of location-based games and mobile devices in the educational setting. Findings suggest that an orchestration including a combination of a collaborative approach to learning, location-based games and activities that embrace outdoor and indoor sessions has the potential to vitalize and enhance traditional classroom-based education. However, there is not a guarantee that all students will concentrate on the given task, and just as in an ordinary classroom setting, teaching and learning also require careful orchestration.

# Outcome

"[O]rchestrations of educational settings may benefit from building links to students’ everyday phenomena, for example, location-based games and mobile devices.... [W]ell-reasoned orchestrations are needed to reach good enhancement of students learning. Nevertheless, most of the students’ learning seemed to benefit from combining indoor and outdoor sessions." (Authors, 177)