The Concept of ‘Bringing Your Own Device’ in Scaffolded and Augmented Education

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## Editors

Geroimenko V.

## Authors

Mozelius P.;Jaldemark J.;Eriksson Bergström S.;Sundgren M.

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## Sample

Students and teachers from a 5th-grade class and a 6th-grade class in 1 school in Sweden.

## Implications For Educators About

* STEM Education
* School innovation
* Professional development

# Abstract

Location-based games has enabled new opportunities for augmenting the traditional learning space. In a time where most students have their own smartphones, the concept of bringing your own device (BYOD) seems promising in educational settings as well. However, playing by random in augmented reality environments will not automatically bring curriculum-aligned learning outcomes. This chapter analyses and discusses how the combination of BYOD and augmented reality gaming might be scaffolded to support collaborative curriculum-aligned learning. The overall research strategy was a case study approach with Affordance theory, Social Constructivism and BYOD as theoretical assumptions for a deductive analysis. The case units were two outdoor sessions for middle school students with curriculum-aligned assignments in Mathematics and Social Science solved by playing the augmented reality game Pokémon GO. Data have been collected by video recordings of the outdoor sessions with spy glasses and a handheld camera. Results indicate that the augmented reality environment stimulates active learning, but that there like in traditional learning, is a need for scaffolding to achieve the stated learning outcomes.

# Outcome

"[T]he mobile, game-based, augmented reality setting seemed to stimulate students to engage in collaborative activities. The categories of affordance that the analysis resulted in show that inter- play is of crucial importance. Knowledge-ability requires interplay between students and teachers in order for students to perceive opportunities for the knowledge-based affordances. Furthermore, teaching-ability requires students to be present to inter- act with the teacher, otherwise, the teacher does not perceive the opportunities to teach." (Authors, 69)