Problem-solving in collaborative game design practices: epistemic stance, affect, and engagement

# Details

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## Topics

* Internet usage, practices and engagement
* Literacy and skills
* Learning

## Sample

A Swedish elementary school grade 4 with children aged approximately 10 years from predominantly from ethnically homogenous middle-class family backgrounds. The analytical focus is on the interactions between two boys.

## Implications For Educators About

* Digital citizenship
* School innovation
* Other

## Implications For Stakeholders About

Researchers

# Abstract

This article explores children's development of problem-solving practices through multimodal engagements in digital activities. The study is based on analyses of a video recorded peer group activity in which two children, within the context of a project on computational thinking using the software Scratch, collaboratively work to solve a coding problem. Drawing on work on epistemics-in-interaction and the cooperative and transformative organization of human action and knowledge, the analyses focus on the interactional strategies that the children use to establish, sustain, and develop knowledge within the peer group and the role of affect in the unfolding organization of actions. By analyzing the multimodal cultural production in children's interaction with digital technologies, it is shown how children learn creative and artful skills, thus positioning them as consumers as well as producers of media.

# Outcome

"[T]he children orient to expanding their epistemic domains by mobilizing a number of resources, such as asking the teacher or a peer for help, by referring to (a lack of) instructions, by scrutinizing scripts from similar coding projects, etc.... [C]oding and digital game design seem to be particularly fruitful ways of incorporating children’s everyday lived experiences into school activities in ways that allow for personal agency and ownership as well as creativity.... [T]his study has shown how children learn creative and artful skills, positioning them as consumers as well as creators and producers of media." (Author, in "Concluding Discussion")