t-books: A block interface for young children’s narrative construction

# Details

## Year

2018

## DOI

10.1016/j.ijcci.2018.07.002

## Issued

2018

## Language

English

## Volume

18

## Start Page

## End Page

## Authors

Sylla C.;Pereira Í.;Brooks E.;Zagalo N.

## Type

Journal article

## Journal

International Journal of Child-Computer Interaction

## Publisher

Elsevier BV

## Topics

## Sample

The pilot study was conducted with a randomly assigned sample of 50 children from two classes of a Portuguese kindergarten; interviews were made with the children’s teachers, and there was a further (narrative creation/artifact testing) study consisting of fourteen randomly assigned different students from the same pre-school (all between five and six years old).

## Implications For Educators About

School innovation

## Implications For Policy Makers About

Other

## Other PolicyMaker Implication

Opportunities of the use of technology in the classroom

# Abstract

This article presents a body of work developed to focus on the development of innovative learning materials that promote young children’s exploration and collaborative playful learning that have been deeply inspired by Seymour Papert. Through this contribution, we highlight how his research and published concepts have had a fundamental influence upon the development of t-books, a digital manipulative that aims at promoting scaffolded, collaborative and creative storytelling.

# Outcome

"A thematic analysis of the video-observations showed that the children quickly understood the principle behind t-books. The analysis identified three main themes in children’s interaction with the interface, namely (1) curiosity and skilfulness regarding the technical aspects of the system; (2) enjoyment in manipulating the narrative blocks and the pages of the book to create stories ‘page by page’; (3) collaboration among children" (Syllaa, C., Pereira, I., Brooks, E., Zagalo, N., 2018: 63-64).

"Through observations it was evident that t-books was intuitive to use and that the manipulative framework provided by the book scaffolded collaborative creation of structured yet original, creative stories" (Syllaa, C., Pereira, I., Brooks, E., Zagalo, N., 2018: 64).

"The children were enthusiastic about t-books and related to it in a very personal way, engaging and playing with the materials. In fact, the materials (building blocks) promoted active and collaborative story construction. In accordance with Papert’s notion that by decomposing the task into mind-size bites makes leaning more assimilable, the segmentation of the story into small narrative units scaffolded the creation of structured narratives, making the task 'more communicable, more assimilable, more simply constructable' [1; 171]. Starting from narrative elements from well known stories, the children were able to appropriate and transform the elements creating original narratives. The stories were fully shaped by children’s exploration of the materials and its possibilities. The collaborative manipulation of the materials increased the children’s involvement as they mutually inspired (and scaffolded) each other, building on each other’s ideas, immersing in challenges, interactions and negotiations" (Syllaa, C., Pereira, I., Brooks, E., Zagalo, N., 2018: 64).

"The design of t-books was informed by Seymour Papert’s constructionist vision of learning, placing the learner in action in a constructivist learning context that is supported by active learning materials. (...) In future work, we will investigate how a model of ‘narrative-doing’ is assimilated/used by the children alongside the pedagogical use of t-books in the context of primary schools. An additional focus of future studies is to investigate how children’s creation of narratives unfolds as collaboration over the course of storytelling sessions" (Syllaa, C., Pereira, I., Brooks, E., Zagalo, N., 2018: 65).