# EMPOWERING CHILDREN THROUGH COMPUTER PROGRAMMING

LUIS VALENTE

*Universidade do Minho*


ANTÓNIO OSÓRIO

*Universidade do Minho*

## Abstract

Perhaps we could say that all kids love computers. However, such a claim could only be proven if all children had a computer suitable for their needs, and if they knew how to use it to accomplish their projects, their dreams, and their games ... but all of us know that, in general, children like to use computers. In Portugal, for example the *e.escolinha* program allowed all children of primary school to access a personal computer with selected software and educational digital content. We may assume as very positive to put computers in the hands of children starting at six or seven years, thus enabling them to contact and to use new languages and contemporary forms of knowledge representation. However, we will not be able to deny that they hardly have alternatives to the consumption of digital contents designed by others. If we are rigourous in our analysis, it seems that children began to be trained as passive consumers of technologies. The interactivity goes no longer than turn on and off their computers, opening and closing programs and clicking buttons and menus, or even to play the same games the older ones play on their computers or game console, like Counter Strike or Grand Theft Auto.


Digital Adventurer's Park is a week (5 mornings, to be more precise 4) activity of a summer school proposal for young people at University of Minho. There we adopt a comprehensive methodology to integrate ICT in supporting new ideas on how 'children live, learn, and play' (Druin & Hourcade, 2005), trying to contribute to 'a whole new culture', in the sense used by Papert (1980) to the need for a new culture of new technologies. During this activity, children are challenged with problems that they seek to solve by building their own projects trough programming computers with Squeak Etoys.


Keywords: empowering children, Etoys, new technology, programming computers

## References

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