Robotica e coding. Le nuove sfide della scuola.

Engl. transl.: Robotics and coding. New challenges for schools

# Keywords

* coding
* robotics
* digital skills

# Details

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## Editors

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## Book title

Tecnologie e linguaggi dell'apprendimento. Le sfide della ricerca mediaeducativa

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Roma

## Topics

* Learning
* Literacy and skills
* Digital and socio-cultural environment

## Sample

Children from different school levels, aged 3-18

## Implications For Educators About

School innovation

# Abstract

"Among the most demanding challenges that schools must face is certainly that of preparing boys and girls to anticipate the future. And this activity should be carried out as soon as possible, targeting digital natives, that generation that, since it was born, has never gone a day without the Internet, and that, crossing the threshold of school, often finds itself in a parallel world that appears alien to their way of learning. The use of robots at school focuses on curiosity, which is a vital and innate mechanism that can be traced back to the pleasure/need to explore the territory and that has served man during the course of evolution to survive as a biological and cultural entity.
With this contribution, we intend to provide guidance on three classes of robots that can be used respectively by pupils of pre-school and elementary school (BeeBot), secondary school (ProBot), and secondary school (Moway)." (Grimaldi Palmieri, 2015, p.121).

# Outcome

The research shows "that creative experimentation with robotic technologies not only promotes motivation for learning, but also offers valuable support for both the transition from the abstract to the concrete (and vice versa; Papert, 1993) and the development of new cognitive skills. In particular, our study highlighted that interaction with robots promotes the development of spatiotemporal and reasoning skills" (Grimaldi Palmieri, 2015, p. 122, translated).