

Lecture Notes in Networks and Systems 240

David Scaradozzi · Lorenzo Guasti ·
Margherita Di Stasio · Beatrice Miotti ·
Andrea Monteriù ·
Paulo Blikstein *Editors*

Makers at School, Educational Robotics and Innovative Learning Environments

Research and Experiences from
FabLearn Italy 2019, in the Italian
Schools and Beyond

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Contents

Introduction to the Main Topics

Perspectives for School: Maker Approach, Educational Technologies and Laboratory Approach, New Learning Spaces	3
Margherita Di Stasio and Beatrice Miotti	

Making: Laboratory and Active Learning Perspectives	11
Margherita Di Stasio	

Robotics in Education: A Smart and Innovative Approach to the Challenges of the 21st Century	17
Laura Screpanti, Beatrice Miotti, and Andrea Monteriù	

Innovative Spaces at School. How Innovative Spaces and the Learning Environment Condition the Transformation of Teaching	27
Giovanni Nulli, Gianluigi Mondaini, and Maddalena Ferretti	

Keynotes

Makers in Education: Teaching is a Hacking Stuff	35
Domenico Aprile	

If We Could Start from Scratch, What Would Schools Look like in the Twenty-First Century? Rethinking Schools as a Locus for Social Change	41
Paulo Blikstein	

From Classroom to Learning Environment	51
Samuele Borri	

Pedagogical Considerations for Technology-Enhanced Learning	57
Linda Daniela	

School Makerspace Manifesto	65
Giovanni Nulli	
Elements of Roboethics	73
Fiorella Operto	
Making to Learn. The Pedagogical Implications of Making in a Digital Binary World	81
Maria Ranieri	
The Game of Thinking. Interactions Between Children and Robots in Educational Environments	87
Luisa Zecca	
Maker Spaces and Fablabs at School: A Maker Approach to Teaching and Learning	
Furniture Design Education with 3D Printing Technology	97
Meltem Eti Proto and Ceren Koç Sağlam	
Makerspaces for Innovation in Teaching Practices	107
Giuseppe Alberghina	
Montessori Creativity Space: Making a Space for Creativity	113
Tiziano Fattizzo and Pierfrancesco Vania	
Fab the Knowledge	119
Sofia Scataglini and Daniele Busciantella-Ricci	
Teaching Environmental Education Using an Augmented Reality World Map	125
Anastasia Nancy Pyrini	
Laboratory Teaching with the Makers Approach: Models, Methods and Instruments	
The Maker Movement: From the Development of a Theoretical Reference Framework to the Experience of DENSA Coop. Soc	133
Valentina Costa	
Chesscards: Making a Paper Chess Game with Primary School Students, a Cooperative Approach	141
Agnese Addone and Luigi De Bernardis	
A New Graphic User Interface Design for 3D Modeling Software for Children	147
Laura Giraldi, Mirko Burberi, Francesca Morelli, Marta Maini, and Lorenzo Guasti	

Museum Education Between Digital Technologies and Unplugged Processes. Two Case Studies	155
Alessandra Carlini	
<i>Officina Degli Errori: An Extended Experiment to Bring Constructionist Approaches to Public Schools in Bologna</i>	165
Sara Ricciardi, Stefano Rini, and Fabrizio Villa	
Service Learning: A Proposal for the Maker Approach	173
Irene Frazzarin and Danila Leonori	
Learning by Making. 3D Printing Guidelines for Teachers	181
Stefano Di Tore, Giuseppe De Simone, and Michele Domenico Todino	
Roboticsness—<i>Gymnasium Mentis</i>	187
Paola Lisimberti and Domenico Aprile	
Curricular and Not Curricular Robotics in Formal, Non-formal and Informal Education	
Educational Robotics and Social Relationships in the Classroom	195
Laura Screpanti, Lorenzo Cesaretti, Michele Storti, and David Scaradozzi	
Analysis of Educational Robotics Activities Using a Machine Learning Approach	203
Lorenzo Cesaretti, Laura Screpanti, David Scaradozzi, and Eleni Mangina	
Learning Platforms in the Context of the Digitization of Education: A Strong Methodological Innovation. The Experience of Latvia	213
Arta Rūdolfā and Linda Daniela	
Educational Robotics: From Structured Game to Curricular Activity in Lower Secondary Schools	223
Alberto Parola, Elena Liliana Vitti, Margherita Maria Sacco, and Ilio Trafeli	
Educational Robotics in Informal Contexts: An Experience at CoderDojo Pomezia	229
Lina Cannone	
RoboCup@Home Education: A New Format for Educational Competitions	235
Luca Iocchi, Jeffrey Too Chuan Tan, and Sebastian Castro	
Erwhi Hedgehog: A New Learning Platform for Mobile Robotics	243
Giovanni di Dio Bruno	
Educational Robotics and the Gender Perspective	249
Daniela Bagattini, Beatrice Miotti, and Fiorella Operto	

European Recommendations on Robotics and Related Issues in Education in Different Countries 255
Michele Domenico Todino, Giuseppe De Simone, Simon Kidiamboko, and Stefano Di Tore

Growing Deeper Learners. How to Assess Robotics, Coding, Making and Tinkering Activities for Significant Learning 261
Rita Tegon and Mirko Labbri

Buzzati Robots 269
Matteo Torre

Escape from Tolentino During an Earthquake Saving as Many Lives and Cultural Objects as You Can 275
Paola Pazzaglia and David Scaradozzi

Ten years of Educational Robotics in a Primary School 283
Mariantonietta Valzano, Cinzia Vergine, Lorenzo Cesaretti, Laura Screpanti, and David Scaradozzi

Educational Robotics at Primary School with Nintendo Labo 291
Mauro Gagliardi, Veronica Bartolucci, and David Scaradozzi

Educational Technologies and Assistive Robotics

Study and Development of Robust Control Systems for Educational Drones 301
Maria Letizia Corradini, Gianluca Ippoliti, Giuseppe Orlando, and Simone Terramani

Arduino: From Physics to Robotics 309
Irene Marzoli, Nico Rizza, Alessandro Saltarelli, and Euro Sampaolesi

Weturtle.Org: A Web Community for Teacher Training and Sharing Resources in Educational Technologies 315
Michele Storti, Elisa Mazzieri, and Lorenzo Cesaretti

Good Educational Robotics Practices in Upper Secondary Schools in European Projects 323
Marco Cantarini and Rita Polenta

Assistive Robot for Mobility Enhancement of Impaired Students for Barrier-Free Education: A Proof of Concept 333
Alessandro Freddi, Catia Giaconi, Sabrina Iarlori, Sauro Longhi, Andrea Monteriù, and Daniele Proietti Pagnotta

How Innovative Spaces and Learning Environment Condition the Transformation of Teaching: Good Practices and Pilot Projects**UP School: Motion, Perception, Learning** 341
Lino Cabras and Fabrizio Pusceddu**Landscapes of Knowledge and Innovative Learning Experiences** 347
Massimo Faiferri and Samanta Bartocci**Child Friendly Architectures. Design Spaces for Children and Adolescents** 353
Marco d'Annunziis and Sara Cipolletti**Multipurpose Learning Environments for Flexible Didactics** 359
Anna Celeste Rubino**Adaptive Environments. New Spaces for Learning** 367
Gianluigi Mondaini and Marco Rosciani**Conclusion** 375

Child Friendly Architectures. Design Spaces for Children and Adolescents



Marco d'Annunziis and Sara Cipolletti

Abstract This paper presents the educational and laboratory experience of the course entitled “Child Friendly Architectures”, taught during the 2019 academic year at the School of Architecture and Design (SAAD) of the University of Camerino, in collaboration with UNICEF Italia. The training course is the first in Italy to build a dialogue between the discipline of architecture and the protection and promotion of children and adolescents’ rights. The course was offered to the university’s students and was structured as two modules. In a series of training seminars, the first module, Teaching Activity, addressed the design of spaces for children and adolescents while looking closely at good practices and case studies. The second module, Application Activity, was a practical laboratory which guided students in a participatory process of planning. The students experimented with reading and planning a specific context in which they live, using specially structured tools and methods. The Child Friendly Architectures training course theorizes a way of thinking about the design of spaces for children and adolescents, taking into consideration their rights, and promoting the learning of tools, design techniques and new technologies. The competences involved in participatory planning—which can be learned—strengthen team work through important networking and listening opportunities. This helps young people to develop a critical awareness of children and adolescents’ rights, and the quality of the spaces dedicated to them.

Keywords Design spaces for children and adolescents · Children and adolescents’ rights · Laboratory · Innovative didactics · Participation

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1 Introduction

Every year, UNICEF Italia organizes multidisciplinary university courses on development education and education in rights. These courses are part of the university program, one of UNICEF's long-running activities.

UNICEF works closely with host universities, which provide the necessary professional skills and resources, to give young people the tools to read and analyze the issues that affect children and adolescents in Italy and the rest of the world. The Convention on the Rights of the Child is the main tool on which training courses are built and remains the key to understanding these matters but also to identifying possible solutions [1].

The diversity of the universities hosting the UNICEF university program brings a wealth of readings and possible applications of the Convention, directed at the individual subject matters and professions. Organized by the University of Camerino's "Eduardo Vittoria" School of Architecture and Design and UNICEF Italia during the 2019 academic year, *Child Friendly Architectures. Designing spaces for children and adolescents* is the first training course in Italy to build a dialogue between the discipline of architecture and protection and promotion of children and adolescents' rights.

Other UNICEF Italia programs conducted throughout the country are of significant importance for the project. Some of them include "*Child Friendly Schools*", "*Child Friendly Cities*" [2] and other international projects like "*Malnate. The city of children and adolescents*", which have set the framework for this project, guiding the actions and activities organized.

The aim of these programs is to recognize the subjectivity of children and young people, in order to build a world that is suitable for children and adolescents, using an integrated approach and a specific methodology. In keeping with the activities of UNICEF Italia and testing laboratory activities with a "maker" approach, the Child Friendly Architectures project delivers knowledge about children and adolescents' rights. It ensures the perspective of children and adolescent is made a priority in local government structures. Also, it promotes the active involvement of children in the issues that concern them, so their opinions are heard and they are at the center of considerations during decision-making (Fig. 1).

2 Construction of the Training Course

The *Child Friendly Architectures. Designing spaces for children and adolescents* training course has two important objectives. The first and most immediate is to increase graduates' skills on the theme of children and adolescents' rights, engagement with and the listening and participation of children and young people in matters relating to their study programs and their future professions. With regard to architecture, the training course aims to encourage a sense of awareness of the design



Fig. 1 Some of the UNICEF programs conducted in Italy, <http://www.unicef.it>

of spaces that are suitable for children and adolescents, by studying issues related to design devices, invested spaces, quality, project scales, technologies applied, and including a Teaching Module.

The second objective is to listen to the needs and proposals of children and young people, with the aim of improving the specific contexts in which children and adolescents live, by considering the relationships between city/neighborhood and the educational/school context. An Application Module was formulated with the direct involvement of the school children in a participation experience. The Child Friendly Architectures training course was implemented by a specially created network of people who offer their skills and professionalism in favor of recognition of the rights of children and adolescents. In addition to the two group leaders, namely “Eduardo Vittoria” School of Architecture and Design and UNICEF Italia, “Pericle Fazzini” Secondary School of Grottammare and the Municipality of Grottammare (province of Ascoli Piceno) were also involved in the project.

Collaboration between the university, the school and the public administration is fundamental for constituting a territorial context in which the rights of children and adolescents to be heard and to participate are guaranteed.

The speakers in the two modules are university lecturers, UNICEF experts, external consultants, and experts in participative methodologies (Fig. 2).

2.1 Teaching Module

Teaching Module 1 is for 20 students on degree courses from Camerino University’s School of Architecture and Design. It takes place over six seminars exploring the themes of the Convention on the Rights of the Child. An in-depth study is made of the four general principles and the Rights of the Child according to the general United Nations’ Commentary, with a particular focus on the rights to be heard and



Fig. 2 The poster of the Child Friendly Architectures teaching course, edited by Sara Cipolletti

to participate and the right to education. How the spaces of the city [3], spaces of learning, spaces for leisure time and play can positively affect the quality of life and educational experiences is the subject of seminars on architectural topics. The relationship between architecture and spaces for children is analyzed through good practices and case study projects.

Different topics are investigated from historical examples to the contemporary spaces: for example, the summer *camp* in Misano (province of Rimini) designed by Giancarlo De Carlo; the playgrounds by Aldo Van Eyck in Amsterdam; the revolution of school spaces and the New Vertical Communities in Toronto.

One of the final stages of the course is dedicated to experimenting new technologies, such as 3D printing, laser cutting for the design and creation of games, teaching materials and child-friendly objects (Fig. 3).

Fig. 3 Creating a laser-cut game in the laboratory Lab#Prototype, Unicam SAAD, ph C. Vagnozzi



2.2 Application Module

The activities in Application Module 2 involved “Pericle Fazzini” secondary school in Grottammare and the Municipality of Grottammare. A laboratory was created for secondary school adolescents with teachers and students from the University course acting as facilitators. The activity guides children through the use of specifically structured tools and methodologies to read an aspect of the context where they live: a route linking the historic city to the coastal settlement. Students conducted a survey to understand how adolescents use the space and their idea of the city. The students then organized round tables in order to discuss the findings of the survey and the developments in the area. The students developed special indicators—accessibility, pedestrian traffic, the reuse of disused buildings, green and water resources—to identify scopes where ‘the teenagers’ desires and vision intersect with and could improve interventions.

The adults involved in the activity offered their skills and guidance to the children/teenagers along the way (Figs. 4 and 5).

Fig. 4 Round table, ph. G. Sabatini



Fig. 5 Visit to the historical route, ph. A. Guaiani



3 Conclusions

The combination of a teaching module and an application laboratory with a “maker” approach offers students and schoolchildren a way to become familiar with and experience their rights. The laboratory, in particular, meets one of the Convention rights: the creation of a physical space and an ideal context in which children and adolescents can express themselves and can be heard.

In the final reports, the university students said that the course applies the rights of children and adolescents to the design of space, giving them a new perspective [4]. The teaching experience draws the attention, among academics and professionals, but also among young people themselves, to the fact that protecting children and adolescents' rights is pivotal to the choices made for the organization, planning and management of public and private spaces.

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