



**Proceedings of the 2nd International Conference
of the Journal Scuola Democratica
REINVENTING EDUCATION**

VOLUME II

**Learning with New Technologies,
Equality and Inclusion**

ASSOCIAZIONE "PER SCUOLA DEMOCRATICA"

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ASSOCIAZIONE "PER SCUOLA DEMOCRATICA"
Via Francesco Satolli, 30 – 00165 - Rome, Italy

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***Title* Proceedings of the Second International Conference of the Journal “Scuola Democratica” – Reinventing Education VOLUME II Learning with New Technologies, Equality and Inclusion**

This volume contains papers presented in the First International Conference of the Journal “Scuola Democratica” which took place at the University of Cagliari on 5-8 June 2019. The aim of the Conference was to bring together researchers, decision makers and educators from all around the world to investigate the concepts of “education” in a “post-democracy” era, the latter being a set of conditions under which scholars are called to face and counteract new forms of authoritarian democracy.

Populisms, racisms, discriminations and nationalisms have burst and spread on the international scene, translated and mobilized by sovereigntist political movements. Nourished by neo-liberalism and inflated by technocratic systems of governance these regressive forms of post-democracy are shaping historical challenges to the realms of education and culture: it is on this ground, and not only on the political and economic spheres, that decisive issues are at stake. These challenges are both tangible and intangible, and call into question the modern ideas of justice, equality and democracy, throughout four key dimensions of the educational function, all of which intersected by antinomies and uncertainties: ethical-political socialization, differences, inclusion, innovation.

The Conference has been an opportunity to present and discuss empirical and theoretical works from a variety of disciplines and fields covering education and thus promoting a trans- and inter-disciplinary discussion on urgent topics; to foster debates among experts and professionals; to diffuse research findings all over international scientific networks and practitioners’ mainstreams; to launch further strategies and networking alliances on local, national and international scale; to provide a new space for debate and evidences to educational policies. In this framework, more than 600 participants, including academics, educators, university students, had the opportunity to engage in a productive and fruitful dialogue based on researches, analyses and critics, most of which have been published in this volume in their full version.

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Premise

In recent years, an important debate has developed on the role that digital technologies are playing and can play in the transformation of education and its institutions. Digital platforms, distance learning, blended learning, online training technologies are part of a significant restructuring and reculturing of the educational worlds. Digital technologies have restructured learning practices, educational content and the forms of educational governance which are immersed in public spaces and global markets. On the one hand, the digital governance of education contributes to changing and reconfiguring educational practices and the management of education on a local, national, international and transnational scale. On the other hand, technologies make possible the interconnection of multiple modes and shapes of formal, informal and non-formal education and training, producing forms of re-spatialization of education, locating the classroom within a digital learning ecosystem and favouring the emergence of different models of blended or hybrid learning.

The pandemic scenario has accelerated these processes, making more visible the tensions between multiple worlds of education and the processes of digitalization, while triggering a complex restructuring of educational institutions whose directions are not yet easily predictable. Perhaps, we are entering a new era that will mark the end of education as we have known it so far. In such a scenario, it becomes more urgent to carry on and debate an informed educational research, that explores the realities of the relations between education and digital technologies. This is especially needed because technologies are far from neutral. They are a heterogeneous technical and social world in which possibilities to change education for the better and make education fairer can be encountered as well as risks can be run of reproducing social and educational inequalities. Therefore, key questions are: how and in what direction the processes of digitalization are changing education, its practices and its governance? What are forms of coordination between educational technology markets and the institutional and educational actors in the emerging transnational governance arenas? How do the professional and social actors (teachers, managers, students, families) that are involved in the digitalization of education react to and translate these transformations? How do digital technologies change the aims and the curriculum of contemporary educational institutions? How can the digital competencies learned by students beyond the educational spaces (school and university) become a resource for learning processes and educational socialization in educational contexts? And above all, what are the possibilities that digital technologies offer us to reinvent education and its governance that are worth to be explored?

Papers collected in the Volume try to give preliminary answers to those issues. Furthermore, contributions from a range of experts, specialists and scholars cannot avoid facing educational inequalities which haven't by any means disappeared. They have rather changed and (re)combined into new forms that challenge the resilience of educational systems in terms of both effectiveness and equity. Several contributions published in the Volume aims to address these issues from a theoretical and empirical point of view, as well as their implications for educational policies. In this sense, proposals linked to educational inequalities in relation to social stratification as a factor affecting cognitive results, educational choices, the attainment of educational qualifications and working careers are of interest for the reader. Comparative research on different scale (comparisons between national, regional or local cases) is

particularly relevant and much importance is attached to the analysis of institutional factors (tracking, comprehensive vs selective systems, accountability policies, private education, ability grouping) which can produce educational segregation dynamics affecting educational inequalities, intersecting extra-curricular factors, such as urban segregation, for example.

The intertwining and interconnecting of differences (gender, socio-economic, cultural, ethnic, cognitive, and motivational factors) often generate inequalities both for their effects in themselves and in relation to the policies implemented to address them in their multidimensionality and intersectionality. Therefore, specific tracks on how education systems and educational institutions try to manage differences and end up producing inequalities are welcome.

The links between education and the labour market are another central aspect of research: the debate on the inflation of educational qualifications and over-education, the differential returns to education according to the type of diploma, degree program or type of tertiary program attended and, more generally, the relationship between education and social mobility represent a pivotal set of phenomena to understand production and reproduction of educational inequalities.

The applications of randomized controlled trials to the assessment of policies aimed at reducing inequalities and improving cognitive and career results as well as empirically driven reflections on how educational policies intersect the complex relationship between equity (equality and inclusion), quality and excellence are one of the main focuses researchers have dealt with in the collected papers.

Gender inequalities are a key topic to understand educational differences. Educational contexts are marked by a significant gender gap in staffing and in the formative experiences of children, teenagers and young students. These differences reflect and often reproduce gender stereotypes and asymmetries in societies at large. How are gender issues addressed in classrooms? Where are they encountered in training settings? What models do teachers convey, and what are the emotional responses from students of diverse gender? How do educational institutions practice and reproduce gender stereotypes and asymmetries? Can school and university provide contexts in which to acquire gender awareness and tackle gender issues? What are the responsibilities of educational contexts in the representation of gender in society? What experiences and good practices have been activated to promote greater gender equity? What cultural resistances? Several questions are addressed in the Volume and many are the answers discussed.

Many forms of educational segregation persist, yet today a growing presence of women – which are in some cases becoming a majority – is found even in fields that have historically been a male domain; this is the case, for example, of medicine and biology in higher education. International and national data show that many things have changed in recent decades, and gender equity is rising in all spheres of education and training. At the same time, several initiatives have been launched to promote greater awareness of gender stereotypes and prevent phenomena such as discrimination and gender-based violence. However, much remains to be done – not least to prevent backlashes and the emergence of new inequalities alongside

established ones. This is the case, for example, of the asymmetries in accessing fields of knowledge that may become relevant for the future of work (e.g., digital skills), or the development of new practices of discrimination related to the use of new technologies (e.g., hate speech or revenge porn).

Younger generations have been challenging those constraints surviving from the past, but new challenges arise in a constantly evolving global environment, where the urgency of the climate crisis in the midst of the coronavirus pandemic call for societal radical shifts while populism, unemployment, artificial intelligence, remote education and communication are affecting the ordinary daily life as we knew it.

Some analysts fear the pandemic will spur a new kind of backlash against the very basis of global society, from migration to cooperation and interdependence, while others worry about younger generations' abilities to overcome mass unemployment and economic vulnerability. Economic, political and environmental crisis are now fully part of the youth horizon: how are formal, informal and non-formal education going to support young people in moving forward positively and purposefully in their lives while simultaneously ensuring space for their autonomy, decision-making and voice?

Such general question contains intersected and multiple issues and applies across contexts as diverse as the role and relevance of democracy as educational content, the changing landscape of non-formal learning/education, the forging of future visions on politics, digital technologies and the media, youth educational transitions, youth experiences at work, the relation between consumerism and environmentalism, the widening of opportunities and constraints stemming out from cooperative learning and digital exchange tools.

Social research and youth studies have been producing a wide range of analyses on these relevant issues, with the (re) emergence of broader theories and empirical inquiries directed towards the recognition and validation of non-formal education, the promotion of youth participation, and the deeper rethinking of youth policies.

Under the large umbrella of an education to be re-invented, papers in the Volume are dedicated to new generations, transitions and the future of education, with a broad, multidisciplinary, and internationally set of contributions focusing on a variegated platform of topics on youth studies theories, critical analysis of relevant societal debates surrounding youth in and out education; in and out the labour market; on youth transitions throughout and across cultures, statuses, roles, responsibilities and institutions; on the impact of the various initiatives to promote and enhance youth participation; on the role of youth organisations as well as on the strengths and weaknesses of youth policies at both a national and supranational level.

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**The Times They Are A-Changin'
What is Meant by Reinventing Education in
the Digital Era?**

Towards Innovative and Creative Use of Participatory Platforms. Research Experiences Promoted by Fondazione Reggio Children

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ABSTRACT: *The importance of taking clear steps in designing online learning, rethinking the roles of teachers and students in digital interactive experiences and the limitations and possibilities of online learning, have been recently debated in the scientific context (Verawardina et al., 2020), also given the sudden changes imposed by the COVID-19 pandemic. This contribution aims to describe recent research experiences developed by the research project Scintillae, jointly promoted by the Fondazione Reggio Children-Centro Loris Malaguzzi and The LEGO Foundation, and to discuss possible ways to design online workshops based on co-construction and children and adult's engagement in hybridized practices. The experiences described were intended to create and offer contexts where the creative potentials of play and digital tools generate ideas, connections, meaningful aesthetic experiences and new knowledge. In particular, the digital dimension was intended as a new interpretative context of the Hundred languages theory (Malaguzzi, 1987). Learning contexts were designed by referring to an idea of technology diffused and integrated, involving adults and children in the active investigation and «movement» between digital, analogue tools and expressive languages, exploring new digital alphabets. During the online workshops designed and proposed by the research team, the active role of the young students and adults in the co-creation of learning processes through technologies was emphasized. The use of participatory and collaborative platforms was aimed at sustaining children and adults' creative strategies, by interpreting participatory online platforms as spaces where a collective design process could take place.*

KEYWORDS: *Creativity; Co-creation; Participatory platforms; Digital aesthetics; Innovation.*

Introduction. The development of the research project

In March 2020, the COVID-19 pandemic hit Italy and forced the National Government to take drastic health containment measures. School buildings of every grade were suddenly closed and children from infant

toddler centres up to high schools were asked to stay at home. The Italian Ministry of Education appealed to teachers and educators to find ways to continue the educational relationship with their students using digital platforms¹. Even though many schools were already using digital platforms and online tools on a regular basis, such an extensive interruption of the physical and in presence relationship never occurred before. Fondazione Reggio Children² was invited by the Ministry of Education to contribute to the development of an online platform of educational topics that they were preparing for supporting teachers with possible ideas and some hints. A group of the Fondazione, led by the staff of the research project Scintillae³, created online contents starting from ongoing projects and research topics that were being explored at the moment. This project led to the development of a new project, consisting in the design of online workshops based on co-construction and children and adult's engagement in hybridized practices. The research project was founded on the following questions:

- How can we offer digital actively engaging learning experiences that keep the essence of our work and at the same time can expand what is possible in the physical world?
- How can we, as adults, teachers and educators, ensure that elements of creativity and meaningful interaction emerge in the use of digital platforms?
- Which features and characteristics are necessary in order to constitute a truly interactive relationship between medial environments, digital technologies and human subjects?
- How can digital platforms foster complex and shared cognitive acts, that involve as well meaningful aesthetic experiences?

1. Digital interactivity and Aesthetic perspectives

In order to foster the authenticity of the experience in media environments, the research group considered, in particular, elements such as wonder, unpredictability, creative invention and the use of

¹ With online platforms (Helberger et al., 2018), the research groups refer to digital spaces that allow forms of collaboration. Some of the platforms explored are listed in paragraphs 4 and 5.

² Fondazione Reggio Children-Centro Loris Malaguzzi was established in 2011 and originated from the educational experience developed in Reggio Emilia since the 1960's. It is a research foundation, based in Italy, and works with local, national, and international stakeholders for the promotion of Children's rights.

³ Scintillae-play and learning in the digital age is a research project promoted jointly by the Fondazione Reggio Children-Centro Loris Malaguzzi and The LEGO Foundation. The project started in 2018 and it is also a physical space located in Reggio Emilia at Loris Malaguzzi International Centre. Scintillae aims to create and offer contexts where the expressive potential of play and digital tools generate ideas, connections and new knowledge.

imagination, concepts that belong to the aesthetic tradition. Furthermore, the reconfiguration of the sensitive experience related to the increasingly pervasive mediation processed by digital technologies, are contributing to the definition of Aesthetics' actual perspective, as the concept of digital interactivity is strictly related to the aesthetic sphere. In fact, this concept involves the creative margins available to the subject in the process of identification with the performances that digital technologies express in interactive contexts, allowing a subject to elaborate various strategies of explorations (Montani et al., 2018). To understand the qualities of the experience of medial environments, it is useful to refer to the concept of multimodality, as it implies complex relationships between the sensory and cognitive dimensions, as well as the interweaving of different symbolic codes (Tønnessen, Forsgren, 2019). By drawing on recent interpretations of the Deweyan aesthetic paradigm, Marfia and Matteucci underlined the importance of the interactive relationship – continuously reorganized – between body and environment, which is necessary to relate it to the possibility of providing participatory and communicative experiences in medial environments.

Furthermore, both the imaginative aspects and those that define the use of digital devices are characterized by a common interactive statute, as stated by Montani's in his analysis of the concept of intermedial imagination (Montani, 2020). Digital devices can therefore be understood, through a phenomenological analysis, as constitutive extensions of human sensitivity. This inter-relational and interactive paradigm fosters the promotion of a critical and active use of digital tools to allow a creative use of technologies. The issue of the aesthetic aspects related to digital technologies concerns, in fact, the continuous processes of transformation of our sensitive perception operated by such devices through the various types of interface we interact with, defining the environment that surrounds us not as an object of passive contemplation, but as a vast field of action and interaction in which we are dynamically involved also through the mediation of digital devices. Finally, by referring to Diodato's recent theoretical reflection (Diodato, 2020; 2021), the research group adopted a phenomenological perspective on digital environments, which concurred to outline some of the main aspects that contribute to determine the authenticity of the aesthetic experience in medial environments. In particular, the elements considered were: innovation, unpredictability and creative invention.

2. Key features of the research project

In addition to the perspective described in the previous paragraph, the key features of the research project were related to the educational philosophy developed in Reggio Emilia since the 1950's and the LEGO Foundation holistic view of children's development and learning. Both perspectives are based on the idea of a child and a human being

competent in learning, full of potentials, producer of culture, in a relationship of reciprocity with the world around them (Rinaldi, 2018). Furthermore, the educational experience of Reggio Emilia is based on a research approach to learning, where teachers and children are co-researchers and make hypothesis, experience and elaborate theories, with the awareness that mistakes and misunderstandings can be the occasions to develop new forms of perception, to challenge and revise normative standards and inherited conventions. In fact, as stated by Carla Rinaldi (2020, 18):

Children are born with many tools to explore their world: they are born with wonder, curiosity, with love and the desire to live. And they are born with creativity. Children, freer from given rules and pre-established solutions, are the generators par excellence of new ideas and creative thoughts. When they encounter a new object or material, in their face and body we can see that they ask, «What is the meaning of this?». They naturally explore it, trying it out in many ways. To us, the adults, there may be one answer to their question, but for them there are still many possibilities, and they try them all.

3. The design of the workshops

Given these premises, the research team tried to avoid a mere transposition of experiences from the physical to the digital environment. Instead, building on the previously acquired know-how, it was necessary to create and offer contexts where the creative power of play and digital tools generate ideas, connections and new knowledge. For this reason, six dimensions were identified and studied to develop new pilot workshops to be offered to children and adults in order to enhance a different attitude towards digital experiences.

- Environment, space and context: setting up of contexts; favouring the use of the surrounding physical environment, beyond the screen, to offer multi-sensory learning opportunities; creating the possibility to work in small groups giving value to everyone's contribution, recognizing the importance of quality interaction for learning.
- Time: taking time and giving time to experience, creating occasions for continuity, expanding the time for learning before and after the workshops; focussing on the process, not the performance or the product; welcoming creative hitch, proceeding by trial and error.
- Role of the adult (leading the experience): how does the role of those conducting an online experience changes compared to the in-presence workshops; a conductor who supports and relaunches without forcing in one direction only, which competencies are to be activated, cultivating an empathic relationship – from initial

engagement (sharing), to welcome, encouragement during the experience, final greetings; empathy is related to people, materials and technology.

- Languages and new media: digital tools already support the use of different languages; how to enhance cross languages experiences, explore and use different new media.
- Documentation: Documentation is an integral part of the educational theories and practices. It makes visible the ways of learning of the individuals and the group; it enables reading, revisiting and assessing in time and space, giving structure to knowledge-building process (Rinaldi, 2006); how to create a meaningful documentation of online experiences.
- Scalability: It is important to create experiences that can inspire and support the work of teachers and educators at different levels and diverse contexts.

During the online workshops designed and proposed by the research team, the active role of the young students in the co-creation of learning processes through technologies was emphasized. As underlined, the use of participatory and collaborative platforms was aimed at sustaining children and adults' interconnected creative strategies as the element that defines learning processes. Participatory platforms became a larger space where collective design could take place. Three pilot workshops were designed, one based on narration, one on composition, one more focussed on materials – in the first phase twenty different workshops involving around 200 people were offered on various occasions. The participants were mostly teachers and children: in order to avoid a passive experience with digital technologies where children spend more time looking at screens than exploring materials and possibilities, the research team⁴ designed workshop experiences that were immersive, interactive and participatory, supporting the use of digital technologies for playfully designing and creating. Every workshop had a previous invitation with an engagement for participants. The choice of digital platforms, video conferencing apps, collaborative whiteboards were made according to the characteristics of each workshop and changed along the way from one experimentation to the other. The videoconferencing app Zoom was identified as the digital medium for the workshops, because of the possibility to create two or more «rooms» to split large groups into smaller ones and for the function of recording which allowed the research team to review the sessions and discuss them during the process of analysis and documentation. The opportunity to

⁴ The research team involved Maria Barbara Donnici, project coordinator; Lorenzo Manera, post-doc fellow; Eloisa Di Rocco, atelierista project ReMida, the Creative Recycling Centre; Elena Sofia Paoli, atelierista research project scintillae; Federica Selleri, atelierista research project scintillae; Ilaria Cavallini, pedagogical consultant; Jennifer Coe, atelierista research project scintillae; children and adults, co-researchers, who participated in the workshops.

work in both a large group and in small groups during the workshop, to create collective moments but also to have a more intimate space, seemed strategic for promoting a meaningful learning experience. Besides it, in order to offer a really interactive experience, the number of participants was restricted to 10 maximum, plus at least two atelierista⁵. Participants were always asked to use the «gallery» function, to be able to see everyone at the same time. Different collaborative whiteboards, from Google Jamboard to Conceptboard, to Miro were explored during the first months of the research.

Since time is a crucial variable in the learning process the designers ensured to plan enough time for introductions of people and activities, for the development of the co-construction of the experience, giving time to participants to express themselves. The media explored, the Zoom and collaborative whiteboards, despite their planetary pervasiveness, still needed to be studied, deconstructed, disassembled, reassembled and rethought together with children, teenagers, and adults in order to imagine the new digital design and hybrid education, where technology and expressiveness are in dialogue.

4. The workshop «Symphony of paper»

The workshop «symphony of paper» was developed after the collaboration of the research team with a group of preschool and primary school teachers involved in professional development activities as part of the project *Fare Scuola in progress*. The goal of the workshop was the exploration of sound qualities of paper. Teachers, introducing some experiences developed at school with different materials, reflect on how to work on the properties of materials and the possibilities offered by paper as a material in a context between the presence in class and the remote connection through digital technologies.

Together with their students, they explored and recorded the sounds produced by different kinds of paper materials. The research around the sound properties of paper was born by chance and it emerges from the documentation where one can see different children playing with the paper's sounds.

The questions guiding experimentations were:

- How can we work/play/use materials without having them available physically?
- How can we continue to explore materials from a distance?

This workshop produced a creative use of technology, inviting the group of teachers to compose their own symphony through a tool that was not designed for musical composition but very used in Italian schools:

⁵ The atelierista is a professional with an artistic background who works in formal and non-formal educational contexts collaborating with teachers and educators.

Google Presentations. This was a precise choice: using a tool that teachers and students knew and used in their daily activity for new purposes and from a different perspective. Participants were challenged to modify their paradigms and beliefs related to the partial knowledge and basic use of digital tools. They experimented, first-hand, the many possibilities and the great potentials of tools through a research approach. Thus, allowing more trust in technology and broadening their interest and their digital competencies.

The workshop was developed in four stages:

- a research stage as individuals or small groups experiencing the sounds of paper and recording them;
- a second stage in a larger group to listen to recordings and sharing visions and reflections;
- a third stage in smaller groups again to experiment the sound composition through Google Presentations and the use of the previously set sounds' archive;
- the last stage to share the symphonies composed with all participants.

Working with a material well known and present in the activities at school such as paper, but shifting the focus from a visual or tactile approach to auditory, has required the group to experiment a new language: the language of sounds. A language that, like others, opens up scenarios of research, new imagery, thanks to different codes of expression and interpretation.

The use of digital instruments to record, store, reproduce and compose sounds has supported and amplified the research around this suggestive property of paper.

The idea to 'manipulate' an intangible material such as sound to compose and return images, suggestions, atmospheres, and soundscapes, has stimulated the group to take new paths using technology to support the expressiveness of materials.

Without any musical competencies, each participant manipulated sound, discovering its alphabets and communicative rules. They have reflected and worked with many aspects of musical composition such as repetition, variation, duration, rhythm, pause, timbre and have done so naturally meeting and responding to what the experience put in place. There were many borrowings from other more familiar fields, such as visual composition.

Thanks to the remote connection on the Zoom platform and the virtual workspace of Google Presentations, the experimentation, and the final output were developed by the different groups involved by agreeing, sharing ideas, suggestions, doubts, competencies, and overcoming technical difficulties. Creative gaps kept a continuous dialogue going, collaborating for an open and common goal, in a relaxed time to think, try and try again. The pleasantness and positive aspect of the experience contributed to the strong link with the emotional and immersive factor that sound stimulates, the possibility to share and connect the research

to one's own experiences, subjectivity, and a look always turned to the imaginative aspect of the experience.

Conclusion

This contribution aimed to share a framework to foster the possibility to interpret participatory online platforms as spaces where collective design processes can take place. This interactive paradigm, based on the concept of intermedial imagination, was designed to promote a critical and diverse use of online platforms. Digital learning contexts were designed by referring to an idea of technology diffused and integrated, involving children and adults in the active investigation and «movement» between digital, analogue tools and expressive languages, exploring new ways of using and interpreting participatory online platforms. What usually happens when using digital technologies in educational contexts, is that children and adults interact with them, but do not create with them (Resnick, 2017). The idea to propose a research question to participants attending the workshops had the goal to open up a more creative approach to learning both for individuals and groups. It made the research approach more participatory and thus democratic. The experiences described in this contribution, even though requiring further explorations and developments, represent an attempt to develop and promote ways of looking at and using online platforms actively and creatively. The creative margins of such experiences were fostered by the proposal to integrate the opportunities offered by digital platforms with the multimodal exploration of analog materials such as paper, recording different sounds and interpreting them, a proposal which allowed participants to elaborate various strategies for re-interpretation. Both the digital platforms and the analog materials were intended as expressive material that could be explored and reinvented: the research team stressed the importance of keeping the subjectivity of children, teenagers, adults at the center of the experience. Starting from the subjectivity of each person means considering their way of interacting with others, their learning pace and their past experiences. It means recognizing the diversity of competences, intelligences and different languages that each of us approaches and practices in a unique way. The value of an individual becomes community. The exploration of how the perception of children and adults works when multiple possibilities of interaction are offered opens up new possibilities for developing creative ways of using online platforms that need to be further explored and researched.

References

- Diodato, R. (2020). *Immagine, arte, virtualità. Per un'estetica della relazione*. Brescia: Morcelliana.
- Diodato, R. (2021). Ontology of the Virtual. In S. Chiodo and V. Schiaffonati (Eds.), *Italian Philosophy of Technology* (233-246). Cham: Springer.
- Marfia, G., and Matteucci, G. (2018). Some remarks on aesthetics and computer science. *Studi di estetica*, 12, 1-30. DOI 10.7413/18258646059.
- Montani, P., Cecchi D., and Feyles M. (Eds.) (2018). *Ambienti mediali*. Milano, Meltemi.
- Montani, P. (2020). *Emozioni dell'intelligenza: Un percorso nel sensorio digitale*. Milano, Meltemi.
- Tønnessen, E. S., and Forsgren, F. (Eds.) (2019). *Multimodality and Aesthetics*. New York and London, Routledge
- Helberger, N., Pierson, J., and Poell, T. (2018). Governing online platforms: From contested to cooperative responsibility. *The information society*, 34(1), 1-14.
- Malaguzzi, L. (1993). «The hundred languages of children. I cento linguaggi dei bambini: The hundred languages of children», in Edwards, C., Gandini, L. and Forman, G. (eds.), *The Hundred Languages of Children*, Norwood, NJ: Ablex.
- Resnick, M. (2017). *Lifelong Kindergarten. Cultivating creativity through Projects, Passion, Peers and Play*. Cambridge Massachusetts: MIT Press.
- Rinaldi, C. (2018). «Prefazione», in A. Raffone (Ed.), *La Città Educante. Metodologie e tecnologie innovative a servizio delle Smart Communities*. Napoli: Liguori, 1-3.
- Rinaldi, C. (2020). *Documenting creativity. Seeking meaning in life*. Available at https://www.legofoundation.com/media/2825/assessing-creativity_may2020.pdf
- Verawardina, U., Asnur, L., Lubis, A. L., Hendriyani, Y., Ramadhani, D., Dewi, I. P., and Sriwahyuni, T. (2020). Reviewing online learning facing the COVID-19 outbreak. *Talent Development and Excellence*, 12.