Artigo

Widespread School. New learning landscapes in the Reggio Emilia Educational Experience

Escola generalizada. Novos cenários de aprendizagem na Experiência Educacional Reggio Emilia

Escuela generalizada. Nuevos paisajes de aprendizaje en la Experiencia Educativa Reggio Emilia

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Resumo
Os espaços de aprendizagem surgem como elementos cruciais para moldar a experiência educacional em um ambiente acadêmico que muda rapidamente. Este artigo examina o impacto dos ambientes físicos e digitais na aprendizagem, destacando como a configuração dos espaços pode influenciar significativamente o desempenho e o envolvimento dos alunos. A análise de diferentes metodologias e configurações de espaço destaca as melhores práticas para promover um aprendizado eficaz e inclusivo. Em particular, a "Widespread School" é discutida como um exemplo de adaptação dos espaços educacionais às necessidades contemporâneas de flexibilidade, interação e segurança sanitária. O artigo conclui com recomendações para a criação de espaços que facilitem vários modos de aprendizado e interação e seu potencial de adaptação a futuras inovações pedagógicas.

Abstract
Learning spaces emerge as crucial elements in shaping the educational experience in a rapidly changing academic environment. This article examines the impact of physical and digital environments on learning, highlighting how the configuration of spaces can significantly influence student performance and engagement. Analyzing different methodologies and space configurations highlights best practices for promoting effective and inclusive learning. In particular, the "Widespread School" is discussed as an example of adapting educational spaces to contemporary needs for flexibility, interaction, and health security. The article concludes with recommendations for designing spaces that facilitate various modes of learning and interaction and their potential for adaptation to future pedagogical innovations

Resumen
Los espacios de aprendizaje surgen como elementos cruciales para configurar la experiencia educativa en un entorno académico en rápida evolución. Este artículo

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examina el impacto de los entornos físicos y digitales en el aprendizaje, destacando cómo la configuración de los espacios puede influir significativamente en el rendimiento y el compromiso de los estudiantes. El análisis de diferentes metodologías y configuraciones de espacios pone de relieve las mejores prácticas para promover un aprendizaje eficaz e integrador. En particular, se examina la «Widespread School» como ejemplo de adaptación de los espacios educativos a las necesidades contemporáneas de flexibilidad, interacción y seguridad sanitaria. El artículo concluye con recomendaciones para diseñar espacios que faciliten diversos modos de aprendizaje e interacción y su potencial de adaptación a futuras innovaciones pedagógicas.

Palavras-chave: Espaços de aprendizagem, Ambiente físico, Ambiente digital, Abordagem Reggio Emilia

Keywords: Learning spaces, Physical environments, Digital environments, Reggio Emilia Approach

Palabras clave: Espacios de aprendizaje, Entorno físico, Entorno digitale, Enfoque Reggio Emilia

1. Introduction

Since June 2020, the Reggio Emilia Municipal Administration, in collaboration with the city's schools, has chosen to accompany the restart of in-presence teaching through the "Scuola Diffusa – widespread School" project.

"Scuola Diffusa" aimed to enhance educational environments as community places where the resumption of school life could provide equal opportunities for access and attendance, increasing spaces and environments in which to "do school," enhancing, including through technologies, connections between inside and outside school, and finally multiplying and spreading suitable and equipped contexts for innovative learning experiences in the city. Resuming dating and hanging out in different educational contexts meant reconnecting the idea of learning with the concept of relationships (among peers and with adults) understood as two dimensions that were inseparable from each other and not disjointed.

The project activated several resources to the school world by searching for diverse analog and digital proposals and technologies, spaces inside and outside schools that provided the necessary physical distancing, could also implement and qualify school teaching, spreading plural and creative learning possibilities. The pedagogical culture of our city had, over the years, taken on the spaces of educating as a guiding thread of social construction: the care of spaces was a commitment to children and young people, the attestation of the centrality of the person of their inalienable rights, among which priority was that of quality education for all.

The three projects presented in this paper, framed within the framework of "Widespread Schooling," involved existing school spaces that were large enough to allow compliance with the planned rules, in which rest and movement reorganized the pace of learning for class groups. Starting from the ministerial and Cts guidelines, the design of the new room arrangements by the working group came about in dialogue with schools, teaching, and Ata staff, considering the needs and information gathered during meetings and inspections. Thus, the following were rethought: the atrium at Galileo Galilei Secondary School on

Cassala Street as a modular agora and, at Marco Polo Primary School on Medaglie d'Oro della Resistenza Street, the stepped green classroom with nomadic stations and the outdoor green space in Black Walnut Park as a "school under the tree" with outdoor experiences. Thanks to modular furniture, which can configure space with different "learning landscapes," the environments lent themselves flexibly to group and non-frontal learning, offering various ways of being, relating, and learning. The design of these environments started from the idea of the school as a "big laboratory" in which each space or environment was an active and educational interlocutor in daily teaching. The design solutions did not arise provisionally, based only on the obligation of social distancing. Still, they were intended to offer themselves as tools that could enhance the possibilities of acquiring and exchanging knowledge in different ways.

Thus, "safety" became an opportunity to seek qualifying solutions that could continue to accompany and support the school's experimentation with new ways of teaching and learning. By maintaining distancing but in beautiful and comfortable, interactive environments, the context made it possible to safeguard fundamental elements of education: inclusion, integration, mental and physical well-being, relationships, and cooperation. At the same time, the context offered learning supports, such as contact with nature in the case of the tree or digital learning through the arrangement of furniture. Once the spaces were inaugurated, the children, youth, and teachers were at the center of the research, constantly innovating and verifying with the working group on the proposed solutions, in a process of necessary refinement.

The research questions that guided the project were:

How do we organize spaces and environments safely without neglecting fundamental aspects of schooling such as inclusion, integration, mental and physical well-being, comfort, relationships, conviviality, cooperation, innovation, and learning? Also, is it possible to ensure safety without imposing it but suggesting new behaviors? Is it possible to find an opportunity to think about a better school for our future in an emergency?

2. The design approach

The identification and design of school environments arose from the interweaving of different skills and experiences, from listening to, comparing, and surveying the needs and information of school referents and from the in-depth study of ministerial documents regarding the guidelines on contagious containment measures in addition to the technical framework standards on school construction and the national indications for the curriculum of kindergarten and the first cycle of education. The aim had been to go beyond identifying provisional solutions in sole response to the obligation of social distancing, seizing "safety" as an opportunity to seek qualifying solutions that could continue to accompany and support the school in experimenting with different modes of teaching and learning. The design of these environments started from the idea of school as a "big laboratory" in which each space or environment was an active and educational interlocutor in daily teaching. The design solutions developed were thus intended to offer themselves as tools that could enhance the possibilities of acquiring and exchanging knowledge in different ways. Environments that qualified for the relationships they could trigger, spaces that found quality in their performance aesthetics, and furniture that could support

differentiated activities and respond to ever-changing educational contexts. Thus, these were "prototypes" capable of generating multiple learning landscapes. These flexible and mutable action spaces granted users large degrees of freedom in spatial configuration aimed at carrying out different educational activities, "microarchitectures" capable of soliciting new concepts of ergonomics and proxemics related to learning effectiveness and the search for ideal conditions of comfort and well-being.

Specifically, the aim was to create indoor and outdoor spaces that, starting from a central reference structure, activate a series of "satellites," sometimes tools for exploring nature as an educational context, sometimes tools for configuring diversified learning contexts. Stopping and moving reorganize the learning rhythm to seek a rebalance between digital and analog dimensions and physical and virtual dimensions. For this reason, the projects are not conceived as mere furniture solutions but as natural "systems of projections of one's body" to implement new scenarios of virtuous balance between body and space as a function of an effective spillover of learning possibilities.

This experimentation aims to make available to teachers and educators a system of solutions that remain open and flexible to stimulate new ways of schooling and adapt to a free and personal interpretation. For this reason, it will be essential to monitor the activities and collect data on the actual use of the proposed solutions in a process of necessary refinement that sees children, young people, and teachers at the center of the research on a path of constant innovation.

3. From an atrium to an educational space. Reconfiguration of the class group into multiple learning in the middle school G.Galilei, in Reggio Emilia

How can a place experienced as an area of crossing and interconnection become a learning space, a place of relationships, and generate the possibility of teaching outside of the classroom?

This question lead the reconfiguration project that took place in the atrium of the middle school G.Galilei, in Reggio Emilia

Image 1. The atrium before and after the project, designed by architect Valentina Conte

Source: authors' archive

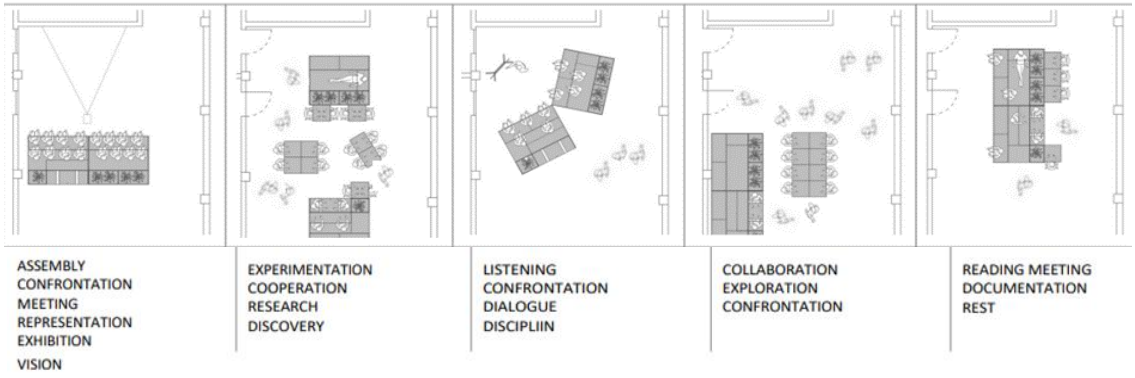
The project proposal was not developed to identify an interim solution in sole response to the obligation of social distancing; instead, it seizes "security" as an opportunity to seek qualifying solutions that can continue to accompany and support schools in experimenting with new ways of teaching and learning.

The project also considers two assumptions:

> 1. The overcoming of the classroom is understood as the only place for school education
> 2. The overcoming of the prominence of the frontal lecture
>
> An educational space is proposed that can offer the possibility of acquiring and exchanging information in different ways: flexible, mutable, efficiently configurable spaces and furniture that can support differentiated activities and respond to ever-changing educational contexts, to offer different ways of being, and of learning.

Furniture and fittings played a strategic role because they granted users large degrees of freedom in relation to how they conceived of the space, thus enabling important synergies to be built with instructional design. Miur's most recent guidelines on school construction confirmed these considerations, emphasizing its importance as a tool for configuring space: "Furnishings were the interface of use between users and the space, they enabled the triggering of relationships (like enzymes): they were the real tools of the school" (Italy, 2018)

Image 2. Five different hypotheses



Source: authors' archive

Transforming spaces like the atrium into innovative educational contexts offers significant potential for the evolution of teaching practices. This experience at G.Galilei Middle School in Reggio Emilia demonstrates that the requalification of school environments can facilitate the emergence of new teaching and learning dynamics. As noted by Barrett et al. (2015, p. 125), "well-designed learning environments can significantly impact students' academic outcomes and overall well-being".

The reconfiguration project of the atrium at G.Galilei Middle School underscores the importance of moving beyond the traditional concept of the classroom as the sole place of instruction. The flexibility of spaces and furnishings has created a dynamic environment that fosters collaboration, creativity, and adaptability to continuously evolving educational needs. According to Fisher

(2005, p. 17), "flexible learning spaces promote a more active and engaging form of education, accommodating various learning styles and activities".

In conclusion, the innovative approach to educational space design, as evidenced in the case of G.Galilei Middle School, shows that investment in transforming environments can significantly impact the experiences of teachers and students. Considering the principles of flexibility, interactivity, and adaptability can contribute to creating more stimulating and inclusive learning contexts. As highlighted by Byers et al. (2018, p. 230), "adaptable learning environments enable educators to meet the diverse needs of students better, enhancing engagement and academic performance".

4. Rethinking the "green room" at Marco Polo Primary School in Reggio Emilia

Image 3. The green room before and after the project, designed by architect Oliver Foghieri

Source: Autor's archive

The proposed project for the "green room" at Marco Polo Primary School in Reggio Emilia aimed to take advantage of the particular conformation of the classroom characterized by a wide staircase to imagine different ways of being at school. The project proposed to overcome the classic chair-bench-chalkboard configuration in the awareness that every child had the right to carry out their activities in the ways that made them feel most comfortable and at ease.

Moreover, it had been repeatedly demonstrated that learning occurred more readily when contexts were set up to allow movement. For this reason, the "green room" setup eliminated the desk as its main feature, offering alternatives for children to carry out school activities while sitting comfortably, lying down, or even standing. The "Support Table" created a work surface that children could use while sitting on the classroom step. Creating a 25cm high "bridge" allowed children to slide their legs underneath while keeping their backs supported, allowing them to write in their notebooks. The top was completed by a hole that accommodated a glass to carry pens while preventing them from falling, a cushion to make sitting more comfortable that was attached via Velcro to the side, and a "pocket" that could hold pencil cases and personal items also attachable from the side with Velcro. In addition, the Leaning Table had legs that supported

it and could be folded down to allow for stability when not in use and a flat work surface when lying on the stomach. Finally, the Leaning Table allowed maximum flexibility in the organization of the classroom as each child could freely position himself where he wanted, becoming his work base that could also be taken outside the classroom space to allow, for example, drawing from life in the outdoor courtyard or as support for tools to be used in activities proposed by teachers.

Image 4: Project and realization of the outdoor areas of the Marco Polo Primary School, designed by architect Francesco Bombardi

Source: Autor's archive

On the other hand, the Futon with backrest allowed for additional seating within the classroom space that was more comfortable and easier to move around thanks to handles on the sides. The backrest was detachable via Velcro to make it a simple mattress. The backrest could be used independently as a support.

The rethinking of the "green room" at Marco Polo Primary School in Reggio Emilia highlights the importance of creating adaptable learning environments that cater to students' diverse needs and preferences. As highlighted by Mulcahy et al. (2020, p. 45), "innovative learning environments can positively influence student engagement and motivation". Blackmore et al. (2019, p. 230) further emphasize the importance of flexibility in learning spaces, stating that "flexible learning environments support diverse teaching practices and encourage student-centered learning". Additionally, Hattie (2017, p. 78) stresses

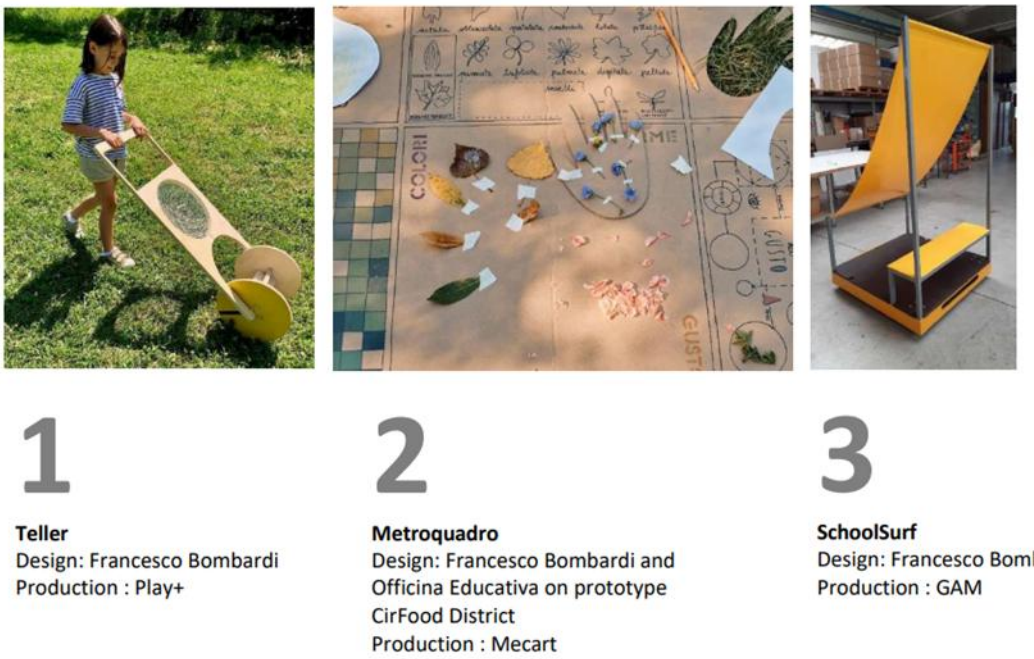
the significance of adaptable learning environments in meeting the diverse needs of students, noting that they "enable educators to create conditions that maximize student learning".

5.Setting up the outdoor areas at the Marco Polo Primary School (Reggio Emilia)

For the setting up of the outdoor areas at the Marco Polo Primary School, the research group envisioned an outdoor experience that considered the opportunity for a relationship with the outdoor environment as an educational context, to be enhanced through a site-specific interpretation of activities. In this view, we considered the value of the experience as a continuous flow, starting from the environments inside the school (preparation and expectations) to the open spaces where the activities would take place, and then back to school (archiving, documentation, and reworking). Movement, rhythm, perception of distance, and the body in (natural) space were the themes guiding the project.

The school under the tree was a point of reference and gathering in the school's open spaces; it was a base (STAY) from which to move and to which to return (MOVE), carrying the tools of exploration of the natural environment. The base was a large yellow disk, hugged by a large tree, with seats/boxes that could hold tools and materials for the outdoor learning experience. A locker was provided at the entrance to the school to have rubber boots that children would want to wear so that they did not get their shoes dirty and could decide to go outside even when the grass was wet.

Image 5. Tools designed for the outdoor areas of the Marco Polo Primary School



Source: Autor's archive

The Storyteller is a prototype that goes every meter traveled, has a mesh pocket for carrying objects, and, once you get to the base, perhaps under the

shade of a beautiful tree, turns into a stool for resting and listening to nature, our best teacher. Designed for outdoor experience in schools, it is made from a single wooden board of 100x42 cm, assembled quickly through interlocking. It helps perception and awareness of distance through play dynamics and promotes doing without imposing it.

The “Metroquadro”, Starting from the concept of distancing, embodied in the linear meter perceived as empty, we propose a change of perspective/viewpoint by working on the square meter, perceived as "full." The macro experience of nature thus becomes the experience of a micro-landscape that contains, however, in a small way (and using the magnifying glass) all the syntax of the language of nature, conceived as an educating context, and all the elements related to the experience of the senses that bring us back to the experience of taste.

So many stations of different square meters draw a map consistent with an educational program and logistics that can ensure without imposing spacing and work in separate groups.

Finally, the “Schoolsurf” is a cariole with a sail to bring shade where there is no shade. Individual modules can be put into a system to make multiple configurations. Accessories allow content to be included and enable different levels of learning.

The development of outdoor learning environments, as exemplified by the Marco Polo Primary School project, underscores the importance of integrating nature into educational settings. As highlighted by Stevenson et al. (2021, p. 78), "experiential learning in outdoor environments enhances students' engagement and fosters a deeper understanding of ecological concepts". Additionally, Smith and Williams (2020, p. 112) emphasize the significance of hands-on experiences in nature, stating that "direct interactions with the outdoor environment promote curiosity and stimulate critical thinking skills".

6. Conclusions

Implementing the "Widespread School" project in Reggio Emilia, mainly through the innovative use of spaces in the Marco Polo Primary School and Galileo Galilei Secondary School, demonstrates the significant impact of reimagined learning environments on educational practices.

The atrium transformation at Galileo Galilei Middle School and the creation of the "green room" at Marco Polo Primary School are prime examples of how reconfiguring educational spaces can promote various modes of learning and interaction. As highlighted by Mulcahy et al. (2020, p. 45), "innovative learning environments can positively influence student engagement and motivation". These redesigned spaces have allowed for a departure from conventional classroom setups, supporting the development of new teaching methodologies prioritizing student comfort and active participation.

Moreover, the emphasis on outdoor learning environments at Marco Polo Primary School underscores the importance of integrating nature into the educational context. By providing students with opportunities to learn in diverse settings, the project has addressed the immediate needs for health and safety and laid the groundwork for future educational innovations.

The connection between these projects and the Reggio Emilia Approach is evident in several key aspects. Central to the Reggio Emilia philosophy is the

concept of the environment as the "third teacher." This approach emphasizes creating learning spaces that inspire exploration, collaboration, and discovery. The redesigned spaces at Marco Polo Primary School and Galileo Galilei Secondary School embody this principle by offering flexible and interactive environments that encourage students to engage deeply with their surroundings and each other. As Edwards, Gandini, and Forman (2011, p. 304) note, "The environment should act as an aquarium that mirrors the ideas, values, attitudes, and cultures of the people who live in it".

Furthermore, the Reggio Emilia Approach values the role of the child as a protagonist in their learning journey, advocating for an educational experience that respects the individuality and agency of each student. This principle is reflected in the "green room" design and the outdoor learning environments, which provide various ways for children to engage in activities that suit their preferences and needs. In conclusion, the "Widespread School" initiative exemplifies how thoughtful design and innovative use of space can significantly enhance the educational experience, closely aligning with the Reggio Emilia Approach. By embracing flexibility, interactivity, and adaptability, these projects have created environments that support diverse learning styles and promote overall well-being. As the Reggio Emilia philosophy suggests, such environments are not just spaces for learning but are integral to the educational process, fostering a culture of inquiry and community.

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