

The ecosystem of the Learning City: Genealogy, governance, and resilience challenges in the Unesco paradigm

L'ecosistema delle Learning City: genealogia, governance e sfide della resilienza nel paradigma Unesco

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Abstract

This paper examines the evolution of the concept of the Learning City as a central pedagogical and political device for achieving the Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda. Through a historical overview that moves from Faure Report (Faure et al., 1972) to the Yeonsu Declaration (Unesco, 2021), the article explores how a city has transformed from a mere container of services into a widespread learning environment. Particular attention is given to the role of lifelong learning in building resilient communities capable of responding to systemic crises, such as the pandemic, through the promotion of new a health and digital citizenship.

Keywords: learning city; lifelong learning; Unesco GNLC; urban resilience; sustainable development goals.

Sintesi

Il presente contributo analizza l'evoluzione del concetto di Learning City come dispositivo pedagogico e politico centrale per il raggiungimento degli Obiettivi di Sviluppo Sostenibile (SDGs) dell'Agenda 2030 delle Nazioni Unite. Attraverso una ricognizione storica che muove dal Rapporto Faure (Faure et al., 1972) fino alla Dichiarazione di Yeonsu (Unesco, 2021), l'articolo esplora come la città si sia trasformata da mero contenitore di servizi a contesto educante diffuso. Particolare attenzione è rivolta al ruolo del *lifelong learning* nella costruzione di comunità resilienti capaci di rispondere alle crisi sistemiche, come quella pandemica, attraverso la promozione di una nuova cittadinanza sanitaria e digitale.

Parole chiave: learning city; lifelong learning; Unesco GNLC; resilienza urbana; obiettivi di sviluppo sostenibile.

1. Introduction

In the current global scenario, characterized by rapid technological shifts and socioeconomical instability, the city has evolved from a mere physical space into a complex educational ecosystem. The Learning City paradigm, as promoted by the Unesco Global Network of Learning Cities (GNLC), represents a strategic response to these transformations, positioning lifelong learning at the cornerstone of sustainable urban development. This model is not a simple administrative strategy; rather, it takes the form of a pedagogical imperative aimed at operationalizing the 17 Sustainable Development Goals (SDGs) of the Agenda 2030 through the empowerment of rights and the mobilization of local human potential (Osborne et al., 2013).

The theoretical roots of this concept trace back to the “territorial turn” in pedagogy (Alessandrini, 2003), which redefines the urban environment as an “educating *polis*” where learning is situated, continuous and distributed. While the adherence to international networks has catalyzed urban policies across Europe, a significant scientific problem remains: the evaluation of impact. Moving beyond quantitative indicators of participation, this paper explores the qualitative dimension of the learning experience. By analyzing the historical genealogy of the movement and specific Italian case studies — namely Turin, Trieste, Lucca and Palermo — we aim at investigating as cities can foster individual and collective “capabilities” (Sen, 1999) and build resilience in the face of systemic crisis.

2. The city as pedagogical device

The Learning City paradigm transcends the traditional boundaries of urban planning and administrative strategy; it manifests itself as a profound pedagogical imperative designed to operationalize lifelong learning and the 17 Sustainable Development Goals (SDGs). Within the overarching framework of the Unesco Global Network of Learning Cities (GNLC), education is repositioned at the pinnacle of socio-economic growth and the empowerment of human rights. This model views the human environment not as a passive container of services, but as a dynamic, active agent of transformation. As noted by Osborne, Kearns and Yang (2013), the systemic creation of community educational networks seeks to mobilize diverse local resources to enrich human potential, hereby fostering social justice and civic cohesion through a distributed governance of knowledge. In this perspective, the contemporary city reclaims its ancestral function of “educating *polis*”, a space where, echoing the Aristotelian tradition, the potential of the individual and the flourishing of the community (*eudaimonia*) are inextricably linked. However, while the roots of localized learning reach back to ancient Greece, its modern theoretical codification is a product of the “territorial turn” in pedagogy (Alessandrini, 2003). This shift redefines the territory: it is no longer a merely neutral, Cartesian geographical space, but a place (*topos*) in the phenomenological sense, characterized by knowledge-generating relationships, shared social practices, and collective memory.

Furthermore, the Learning City embodies what Peter Jarvis (2007) describes as the *learning society*, a condition where the boundaries between formal, non-formal and informal learning become porous and interlinked. The city thus transforms into *liquid* educational laboratory where learning is profoundly “situated” (Lave & Wenger, 1991) and distributed across urban fabric, from public libraries to digital hubs, and from workplace training to community gardens.

This conceptualization aligns seamlessly with the Italian pedagogical tradition of the so-called *Sistema formativo integrato* (integrated formative system) (Frabboni, 2008). This

tradition argues for a strategic, non-hierarchical alliance between the school, the family and the territory to combat educational poverty and social exclusion. By fostering this alliance, the Learning City serves as a catalyst for the Capability Approach (Nussbaum, 2011; Sen, 1999). In this evaluative framework, the city's success is not measured by the mere presence of educational infrastructure, but by the *conversion factors* it provides, such as the social, political and environmental conditions that allow citizens to transform a learning opportunity into a real *functioning* or a life path they have reason to value (Striano, 2018). Consequently, the Learning City becomes an inclusive infrastructure that democratizes access to knowledge. It shifts the focus from the *standardized student* to the *learning citizen*, ensuring that the urban environment itself provides the scaffolding necessary for individuals to navigate the complexity of 21st century.

This evolution aligns with the pedagogical shift proposed by Walker and Fongwa (2017), who argue that the transition from a focus on *standardized* outcomes toward the development of the learning citizen is essential for prioritizing human development over mere market-driven employability. In this sense, the scaffolding provided by the urban environment serves as the catalyst for that Walker and Fongwa (2017) define as the expansion of human capabilities, ensuring that individuals are not just trained for the workforce but are empowered with the agency and critical consciousness required for democratic participation in a complex World.

3. The evolutionary trajectory: from educational policy to social pedagogy

The theoretical architecture of Learning Cities is not a mere byproduct of contemporary urban planning; rather, it rests upon foundational milestones in international pedagogical literature that have fundamentally redefined the relationship between the individual, the community and the urban space. This evolution represents a shift from a vertical, school-centric model of education to a horizontal, pervasive model of lifelong learning.

The document *Learning to Be*, authored by the International Commission on the Development of Education, introduced the revolutionary vision of the *learning society* (*cit  educative*). It challenged sovereign states to overcome institutional fragmentation by recognizing that education is no longer a localized, time-bound event (the school), but a global social process. In this vision, every social agency — public administration, industry, transport, healthcare and cultural centers — becomes an inadvertent or intentional provider of education.

The city, when maintained at human scale, contains an immense potential of administrative and social structures that serve as “training ground for civic life” and the cultivation of “civic friendship” (Faure et al., 1972, p. 162). This report laid the groundwork for the ontological idea that urban vitality is synonymous with educational vitality: a city that doesn't teach is a city that doesn't live.

Two decades after, with *Learning: The Treasure Within*, Unesco shifted the focus toward a holistic understanding of human development through the four pillars of education: learning to know, learning to do, learning to be and learning to be together (Delors, 1996). This report was instrumental in consolidating the transition from “adult education” — often viewed as a remedial measure — to lifelong learning, a paradigm that transcends the traditional boundaries between initial and continuing education.

Under this framework, the rigid distinctions between formal, non-formal and informal education blur in favor of a learning ecosystem. This ecosystem provides continuous opportunities for individual fulfillment and social inclusion, positioning the “treasure” of learning as an indispensable key to navigating the liquid complexities of 21st Century. This

historical transition marks a decisive move towards the “social pedagogy” (Cambi, 2010), which demands systemic collaboration among families, business, the third sector and local governance. The city is no longer perceived as a passive backdrop for policy implementation, but as a proactive educational partner. Italian scholars such as Milana et al. (2023) and Alessandrini (2003) argued that while national governments are responsible for high-level legislative strategies, the actual empowerment — or capability — of the citizens is realized exclusively at the micro territorial level. It is in the neighborhood, the library and the local square that the right to education transforms into the freedom to learn (Quaglia, 2025).

Drawing on the Capability Approach, the Learning City is redefined as an environment that provides the *conversion factors* (social, environmental, individual) necessary for persons to transform educational resources into real opportunities of flourishing (*functionings*).

Consequently, the city becomes a space of situated pedagogy, where learning is inextricably tied to specific social cultural needs and the *genius loci* of the cultural community. By focusing on these conversion factors — such as the accessibility of cultural spaces or the inclusivity of digital infrastructures — the Learning City ensures that the “treasure within” is not a luxury for few people, but an accessible right for all, regardless for the social-economic starting point. This theoretical evolution justifies the current shift toward qualitative evaluation: we must not only ask how much the city teaches, but how effectively it empowers its citizens to lead lives they have reason to value.

The transition from the theoretical frameworks of Faure and Delors to a structured, global, operational model was codified with the establishment of the Unesco Global Network of Learning City (GNLC), which serves as the primary mechanism for mobilizing cities to support the 17 Sustainable Development Goals and their 169 under goals, particularly SDG 4 (*Quality Education*) and SDG 11 (*Sustainable Cities and Communities*).

To bridge the implementation gap between high-level policies and local actions, Unesco developed the Key Features of Learning Cities. This framework identifies 42 indicators organized into three thematic pillars, designed to monitor progress and provide roadmaps for urban educational development:

Pillar 1: Promoting Inclusive Learning in the Education System. This focuses on the formal sectors, ensuring that the city provides equitable access from pre-primary to tertiary education, while modernizing learning environments;

Pillar 2: Revitalizing Learning in Families and Communities. This addresses the “informal” heart of the Learning City, promoting intergenerational learning and the use of public spaces (libraries, parks, museums) as pedagogical sites;

Pillar 3: Facilitating Learning for and in the Workplace. This recognizes the city as an economic engine, focusing on technical and vocational education (TVET) and the upskilling of the workforce in response to digital transformations.

The global Covid-19 pandemic acted as a stress test for the GNLC: the crisis revealed that cities with robust learning infrastructures were better equipped to manage public health literacy and maintain social continuity. This led to the Yeonsu Declaration (Unesco, 2021), which officially integrated “Education for Health” and “Community Resilience” as core mandates of the network.

In this context, the Learning City is no longer just about academic or professional skills: it is about “*Cittadinanza Sanitaria* (Health Citizenship). This involves the ability of a city to disseminate critical information, combat misinformation and ensure that health literacy is treated as a fundamental capability for urban survival.

Del Gobbo, De Maria and Pampaloni (2021) posit that Lifelong Learning must be deeply rooted in the specific social and cultural fabric of a territory. For the authors, the *Learning City* is an ecosystem where education serves as a driver for sustainable local development,

ensuring that social cohesion is achieved by valuing local identity and shared community resources.

While the 42 indicators provide a quantitative baseline, the scientific community highlights a persistent challenge: how to measure the quality of the experience. Current research is moving forward soft indicators that can capture consistent aspects such as: subjective well-being, the perceived value of learning opportunities by the citizens themselves; social capital, the strength of the civic friendship as mentioned by Faure, measured through density of collaborative networks; agency, the degree to which a citizen feels empowered to influence their urban environment through the knowledge they have acquired.

As suggested by Milana et al. (2023), the evaluation of a Learning City must therefore evolve in a participatory process, where the indicators are not just imposed from above, but are co-constructed with the local community to reflect their specific conversion factors.

4. The implementation gap and the role of global policy frameworks (OECD and EU)

The conceptualization of the Learning City necessitates a comparative analysis of the humanistic, social, and economic frameworks provided by Unesco, the European Union (EU), and the OECD. Unesco situates the Learning City as a vehicle for a “New Social Contract for Education”, emphasizing sustainability, peace, and the holistic development of the *learning citizen* within a global citizenship framework. Conversely, the OECD traditionally prioritizes the urban environment as a hub for human capital and innovation, focusing on the acquisition of market-relevant skills to ensure economic resilience in the 21st century. Mediating these perspectives, the EU interprets the Learning City through the lens of active citizenship and digital transformation, linking educational equity with the objectives of *Next Generation EU* to bridge the gap between individual empowerment and social cohesion. Ultimately, while the OECD focuses on economic functionality, the Unesco and EU frameworks converge on the pedagogical necessity of *teaching the human* and fostering civic awareness to ensure that urban infrastructures provide the essential scaffolding for individuals to navigate the complexities of a datified and post-truth world. The transition from a theoretical pedagogical ideal — the *philosophical why* of the Unesco — to a concrete urban reality has been shaped by the *strategic how* of international organizations, primarily the OECD and the European Commission. These entities moved the discourse from humanitarian aspirations toward a pragmatic linkage between education, economic competitiveness and social stability.

The implementation of the Learning City concept was pioneered in the 1990s as a response to the deindustrialization of developed nations. The 1993 study, *City Strategies for Lifelong Learning*, acted as a watershed moment, analyzing how seven different cities (including Adelaide, Edinburgh, and Vienna) integrated education into their core economic and sustainable development strategies (Hirsch, 1993). By 2000, the OECD expanded this focus toward the *Learning Region*, recognizing that learning is an embedded process requiring local synergy between political authorities, research institutions, and industrial clusters. The institutionalization of such networks is further analyzed by Federighi and Torlone (2019), who emphasize the need for rigorous public policies that protect the right to learn, particularly for vulnerable populations. Their work highlights that cross-border best practices are only effective when backed by institutional frameworks that guarantee social inclusion and the recognition of prior learning in non-formal contexts.

However, this period is often critiqued for its instrumentalist approach. As Biesta (2006) argues, the emphasis frequently shifted toward “human capital” — viewing the citizen as

an asset to be optimized for labor market adaptability — rather than “human flourishing”, which prioritizes the holistic and democratic development of the individual.

Following the Lisbon Agenda (2000), which sought to transform Europe into the World’s most competitive knowledge-based economy, the European Commission launched the R3L Initiative (EC, 2003). This project aimed at accelerating the creation of European Networks to promote the local and regional dimensions of lifelong learning. The R3L Framework represents a significant shift toward Social Cohesion. The objective was no longer purely economic; it was about ensuring that the digital and social evolution of society did not leave vulnerable populations behind. This initiative institutionalized peer learning between cities, allowing for the cross-border sharing of best practices in adult education and digital literacy.

Despite these robust institutional frameworks, a significant implementation gap remains a central point of scientific inquiry, particularly within the Italian pedagogical context and there is a persistent disconnect between the “top-down” strategies formulated in Brussels or Paris and their bottom-up actualization, such as: political and administrative fragmentation, as local governments often struggle to integrate educational policies across siloed departments. A true Learning City requires the synchronization of housing, transport, health and education, at a level of horizontal governance that is often absent in traditional municipal structures.

A critical risk is that Learning City initiatives may primarily benefit those who are already highly educated and socially integrated, inadvertently widening the gap for marginalized or *hard-to-reach* groups. Thus, the reliance on quantitative indicators – such as the number of graduates or employment rates – often fails to capture the quality of the learning experience or the degree of individual agency and empowerment gained by the citizen.

As argued by Bagnall (2000) and echoed by Frabboni (2005), the true Learning City must move beyond the role of a mere service provider to become a relational space. This necessitates a paradigm shift from top-down governance to a participatory model. In this light, the city — its squares, libraries, digital platforms, and neighborhood hubs — ceases to be a background and becomes a distributed curriculum co-created with inhabitants. The evaluation of such a space requires new qualitative devices capable of detecting the invisible networks of trust and knowledge that constitute a truly resilient community.

5. Case study analysis: the Italian experience and local implementation

The adhesion to the Unesco Global Network of Learning Cities (GNLC, 2024) has provided several Italian municipalities with a strategic framework to systematize pre-existing territorial learning practices, evolving them into organic policies for urban development. This section examines how different cities have declined the Unesco paradigm according to their unique socio-economic and cultural identities.

5.1. Turin: innovation and competencies for the future (Joined 2016)

As the first Italian city to join the network, Turin has oriented its strategy toward the transition from a traditional industrial pole to a global knowledge hub.

Through the *Torino City Lab* and various open innovation initiatives, the city aims at upskilling citizens in digital competencies and entrepreneurial culture. This aligns with what Margiotta (2015) identifies as the *laboratoriness* of the territory, where the city itself becomes a classroom for the Fourth Industrial Revolution.

The strategic enhancement of library networks is seen as *cognitive proximity centers*. Here, informal learning converges with technological experimentation, creating an ecosystem that fosters both high-tech skills and social literacy.

5.2. Lucca: learning and cultural sustainability (Joined 2020)

Lucca has interpreted lifelong learning through the lens of civic participation and the valorization of cultural and historical heritage.

The city utilizes its iconic Medieval walls and monumental spaces as outdoor classes, to promote environmental education and sustainability (SDG 13). This practice reflects the concept of the *educational heritage* (*patrimonio educante*), where history becomes a living curriculum for modern ecology. The active mobilization of the third sector and the volunteer associations are involved in co-designing training paths. This strengthens the sense of community belonging and the collective care for common goods, fostering a pedagogical model based on relational capital.

5.3. Trieste: science, research, and intercultural dialogue (Joined 2020)

Already internationally recognized as the *City of Science*, Trieste leverages its high density of researchers to utilize scientific dissemination as a vehicle of social inclusion.

Dismantling the ivory tower barriers between prestigious academic institutions (such as SISSA and ICTP) and the general public. The goal is to make complex scientific data accessible, thereby improving public health literacy and climate awareness. Such citizen scientific activities involve inhabitants directly in research processes and the city promotes cognitive agency and critical thinking, empowering citizens to make informed decisions in a complex World.

5.4. Palermo: social inclusion and urban regeneration (Joined 2019)

In the Mediterranean context, the Learning City becomes a vital tool for combating marginalization and promoting a culture of legality. Palermo focuses on the revitalization of vulnerable neighborhoods through educational hubs that integrate vocational training, the arts and psychological support.

Given its multicultural spirit, Palermo's approach as a Learning City focuses on interculturality and hospitality. By transforming the urban fabric into a multi-ethnic learning laboratory, Palermo addresses the needs of its diverse population, directly responding to the goals of equity and inclusion (SDGs 5 and 10).

5.5. Synthesis and discussion of results

The analysis of these cases demonstrates that the Italian Learning City is not a rigid and monolithic model but an adaptive process. While Turin and Trieste emphasize the science-technology axis, Lucca and Palermo invest more heavily in social cohesion and cultural heritage (Figure 1).

This differentiation validates the principles established in the Yeonsu Declaration (Unesco, 2021): for learning policies to be truly effective, they must be situated. In other words, they must be capable of responding to the specific contextual needs of the territory and its most vulnerable populations. As noted in the Italian pedagogical debate (Cambi, 2010; Milana et al., 2023), the success of a Learning City is measured by its capacity to transform geographical space into a relational place where learning acts as the primary catalyst for

resilience and democratic empowerment.

City	Primary Driver	Dominant SDG Goal
Turin	Digital Innovation	SDG 8 (Decent Work & Economic Growth)
Lucca	Participation and Culture	SDG 11 (Sustainable Cities & Communities)
Trieste	Research and Health	SDG 3 (Good Health & Well-being)
Palermo	Inclusion and Legality	SDG 4 (Quality Education for All)

Figure 1. Italian Learning Cities' primary drivers and referred SDGs.

6. Conclusions

The transition of a Learning City from a visionary ideal to a localized reality represents one of the most significant shifts in the 21st century social pedagogy. As demonstrated through the historical analysis of the Faure and Delors reports and the contemporary implementation in Italian cities, the “learning society” is no longer a utopian concept but a functional necessity for urban survival and flourishing. However, the true success of a Learning City cannot be measured solely by the breadth of its educational offer or its technological infrastructure.

As highlighted throughout this study, the critical challenge lies in redefining evaluation. To move from a logic of *service provision* to one of “human flourishing”, evaluation must adopt a multidimensional approach that captures:

- The quality of the lived experience: how learning interventions actually alter the life trajectories of citizens;
- The degree of inclusivity: whether policies effectively reach the most vulnerable populations, as urged by the Yeonsu Declaration (Unesco, 2021);
- The cultivation of Agency: the extent to which the city empowers individuals to become active co-creators of their urban environment.

The Italian experiences of Turin, Trieste, Lucca and Palermo illustrates that there is no a *one-size-fits-all* model. Effectiveness is found in situatedness, in other words the ability of a city to listen to its specific territorial needs and transform geographical space into a relational place. Ultimately, the Learning City serves as a vital pedagogical laboratory for a new *urban humanism* where the goal of lifelong learning is to equip humanity with the critical tools and resilience needed to navigate an increasingly complex and interconnected world.

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