



Article

Education for Sustainable Development and Children's Involvement in Public Spaces. From Universalism to Places, from Rights to Capabilities: Some Evidence from a Research Project on the Regeneration of Public Spaces in Milan

Stefano Pippa *, Stefano Malatesta, Cristina De Michele and Elisabetta Biffi

Department of Human Sciences for Education "Riccardo Massa", University of Milano-Bicocca, Piazza dell'Ateneo Nuovo 1, 20196 Milano, Italy; stefano.malatesta@unimib.it (S.M.); cristina.demichelle@unimib.it (C.D.M.); elisabetta.biffi@unimib.it (E.B.)

* Correspondence: stefano.pippa@unimib.it



Citation: Pippa, Stefano, Stefano Malatesta, Cristina De Michele, and Elisabetta Biffi. 2021. Education for Sustainable Development and Children's Involvement in Public Spaces. From Universalism to Places, from Rights to Capabilities: Some Evidence from a Research Project on the Regeneration of Public Spaces in Milan. *Social Sciences* 10: 88. <https://doi.org/10.3390/socsci10030088>

Academic Editors: Guadalupe Francia and Jenna Gillett-Swan

Received: 30 January 2021

Accepted: 1 March 2021

Published: 3 March 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Abstract: The United Nations Decade on Education for Sustainable Development (ESD) expanded the epistemological and methodological debate on sustainability and education. Currently, ESD encompasses a broad spectrum of socio-political issues (including global citizenship and social justice), while "place-bonding" is seen as key to fostering citizen advocacy in local communities and enhancing "children's lived experiences of local issues". Herein, we emphasize both the political and the pedagogical value of this perspective, arguing that ESD bears the potential to overcome "universal vs. individual" tensions and dichotomies. Our line of reasoning is that the "capabilities approach" (CA), although it did not originally focus on children, can offer a useful theoretical framework in support of ESD, thanks to its multidimensional nature and focus on the concrete agency of individuals. Accordingly, we see the CA as playing a key role in bridging the gap between universal prescriptions, which disregard the specificity of the actors involved, as well as the peculiar nature of their social environment and its context-specific needs or constraints. We supplement this theoretical discussion by presenting "The Flying Carpet", an ongoing community-based education project that has elicited the active involvement of over one hundred 11–13 year old students in an urban regeneration project in a municipal district of Milan.

Keywords: ESD; children's rights; capabilities approach; public spaces

1. Introduction

The United Nations Decade on Education for Sustainable Development (2005–2014) put forth the need to deepen our understanding of the connections between sustainability and education on the agenda. Undoubtedly, over the past 15 years the challenge launched by the United Nations initiative markedly broadened the epistemological and methodological debate, leading to a refined comprehension of these connections and opening to redefinitions of the concept of sustainability (Gusmão Caiado et al. 2018; Grossek et al. 2019). Currently, as is well-known, Education for Sustainable Development (ESD) encompasses a broad spectrum of socio-political issues including global citizenship and social justice (UNESCO 2014a). Moreover, "place-bonding" is increasingly seen as key to fostering citizen advocacy in local communities and enhancing children's lived experiences of local issues. In this paper, we take the political and pedagogical value of this perspective as our point of departure, but still challenge the persistent hiatus between the universal character of the declarations in which sustainable development goals are stated and the local level at which these goals need to be implemented. From a methodological point of view, our paper combines a theoretical perspective (Sections 1 and 2), in which some theoretical problems affecting ESD (and the Sustainable Development Goals (SDG) pin-pointing it) are presented through literature reviews and discussed. We also feature an

empirical part (Section 3). In the first Section 1, we introduce the idea that more attention is needed on the potential of “community-based” education (Andrews et al. 2002) as a means to bridge the gap between the universal level of prescriptions (such as declarations enshrining the principles of sustainability and education to sustainability) and the local level of their implementation. In the Section 2, we suggest that the “capabilities approach” (CA) (Nussbaum and Sen 1993; Sen 1999; Nussbaum 2011) can offer a useful theoretical framework to support ESD, thanks to its multidimensional nature and focus on the concrete agency of individuals (Robeyns 2017). We see the CA as playing a key role in bridging the gap between universal prescriptions—which disregard the specificity of the actors involved as well as the peculiar nature of their social environment—and context-specific needs or constraints. In the third part of the paper, we discuss “The Flying Carpet”, an ongoing community-based education project based on the principles of the CA—a project that has elicited the active involvement of over 100 11–13 year old students in an urban regeneration project in a municipal district of Milan. The analysis of this project aims to bring to the fore the potential of a community-based education premised upon the CA principles for the development of “capabilities” for sustainable development.

2. ESD between Universalism and Place-Based Education

Recent years have seen considerable development, arguably stimulated by the United Nations Decade of Education for Sustainable Development (2005–2014), in the interdisciplinary debate on the biunivocal links between education and sustainability (Jickling and Wals 2008; Reunamo and Pipere 2011; Sterling 2016; Zutshi et al. 2019). “The number of publications, authors, and journals has increased, proving that ESD has gained momentum” (Grosbeck et al. 2019, p. 30), while experts and scholars have focused on two main priorities, namely “international efforts to bring this area of inquiry into the mainstream [and] the integration of education into sustainable development and of sustainable development into education” (ivi, p. 1). In the meantime, the UNESCO’s (n.d.) decade mission “to mobilize the educational resources of the world to help create a more sustainable future” (For more information in this, see <https://en.unesco.org/themes/education-sustainable-development/what-is-esd/un-decade-of-esd> (accessed on 21 October 2020) brought to light two prominent dimensions of ESD: its transformative (and political) nature and its reliance on universal values and statements. The discussion in this Section 1 goes back and forth between these dimensions with a view to challenging the dialectics shaping the current debate on ESD, introducing community-based ESD as a potential means of striking a dialectical balance.

ESD is a highly debated and constantly evolving concept. Steiner and Posch (2006) justified this complexity in light of the openness and vagueness of sustainability. At the same time, they remind us that openness is one of the constitutive features of all key concepts in politics, such as justice, welfare, or equity, none of which lend themselves to precise analytical definitions. This interpretation attributes education (as a form of communication) with a pivotal role in translating such an open, transversal, and multi-level term into private behaviors, social practices, and political choices. It also helps experts, educators, and practitioners to avoid establishing hierarchies among the three dimensions of sustainability (society, environment, and economy), as indirectly suggested by the so-called “new sustainability” paradigm, and to prevent research or actions from addressing these three dimensions separately and independently (Steiner and Posch 2006; Eizenberg and Jabareen 2017).

Grosbeck et al. (2019) identified three stages that ESD has gone through in the course of its history; each stage targeted a given priority: 1992–2004, defining ESD; 2005–2014, integrating ESD into educational curricula and plans; 2015–present, legitimizing ESD as a field of research (Huckle and Wals (2015) offered an interesting critical view on the political outcomes of the United Nations Decade of Education for Sustainable Development). As Sterling (2016) rightly pointed out, Sustainable Development Goals may be seen as an “agenda-setting milestone” within this evolution, and as the “current culmination” of a

long-term process aiming at consolidating global consensus concerning the key part to be played by ESD in our present. Two key themes emerge from the history of ESD.

1. The progressive building up of a corpus of declarations, documents, charters, and conventions that has fueled the institutionalization of ESD within both national and international agendas. Among these, the most authoritative document is the 2014 UNESCO Aichi-Nagoya Declaration on Education for Sustainable Development ([UNESCO 2014b](#)). This Declaration emphasized “the potential of ESD to empower learners to transform themselves and the society they live in by developing knowledge, skills, attitudes, competences, and values required for addressing global citizenship and local contextual changes” (p. 8). Further, it stressed “that the implementation of ESD should fully take into consideration local, national, regional, and global contexts [and needs to respect] universal principles such as human rights, gender equality, democracy, and social justice” (p. 10). In addition to the formal mention of the political power of education, a kind of trans-scalar tension resonates here between the local and the global, as well as between action in everyday life contexts and the normative value of universal principles. Furthermore, the authoritativeness and universal value of international charters and declarations should be observed from a critical perspective. Indeed, a top-down approach to education has long prevailed in the international sustainability agenda ([Gusmão Caiado et al. 2018](#)), which displays a “center-periphery pattern [fostering] UNESCO as the main proponent of ESD research and practice all around the world” ([Grosseck et al. 2019](#), p. 26).
2. The need to adopt a perspective (often labelled as “transdisciplinary”) with the power to further the dialogue between knowledge and theories, and to equip ESD with a language and set of methodologies that can fully realize both its transformative potential and its “agency-driven and change-oriented nature” ([Reunamo and Pipere 2011](#), p. 111). [Sterling \(2016\)](#) claimed that: “the role of education is more profound and comprehensive than is recognized in the text of the SDGs as regards its potential to address their implementation. Education requires a re-invention, and re-purposing so that it can assume the responsibility these challenges require, and develop the agency that is needed for transformative progresses to be made” (p. 208). Meanwhile [UNESCO \(2017\)](#) proposed the idea of “embedding” sustainability and global citizenship in education programs and languages and knowledge of subjects. This implies a holistic, transdisciplinary, and universal perspective on ESD as a field of action where pedagogical principles may be transferred into educational practice.

The Aichi-Nagoya Declaration defined ESD as a “vital means of implementation of sustainability” (p. 5), while [Gusmão Caiado et al. \(2018\)](#) recently recalled the need to operationalize the implementation of SDGs in societies. Crucial factors in the activation of such processes will include:

- The key role and agency of young people in transforming the societies they live in.
- The integration of inter-generational justice, one of the founding assumptions of the classical notion of sustainability, intra-generational justice ([Steiner and Posch 2006](#)), and mutual collaboration between children and adults.
- Continuous interaction between educational practices and social contexts.
- The activation of “real-world” learning processes and place-based education, because, as highlighted by experts in geographical education ([Tilbury and Williams 1997](#)), issues of sustainability always have spatial dimensions and implications, therefore place-stewardship and place-bonding are key tools for ESD programs and actions.

As already mentioned, the tension between universal principles and actual educational practice challenges the implementation of ESD as a fundamental component of contemporary political agendas. Addressing this tension solely by seeking to change our epistemological paradigms, as proposed by [Sterling \(2016\)](#) who, in his critical reading of SDGs, suggested shifting away from an instrumental and goal-oriented ESD to a learner-centered one, will only partially assist experts and practitioners in bridging this gap. ESD

implies promoting spaces and tools for negotiation between all components of society, with a view to fostering the inclusion of all citizens in the management of environmental, social, and political issues (for example via the enhancement of individual awareness and the activation of personal and collective place-stewardship). From this perspective, sustainability *de facto* exists when all the various societal actors have the opportunity to express themselves and to take their share of responsibility for their community's environmental, social, and economic agenda; and when all generations can contribute to and support (etymologically to sustain) the "project" for the community. The active participation of all social actors in a community project is a basic condition for the transition of a social system towards sustainability.

Within such a framework, community-based education (Aguilar 2018) may play a pivotal role in fostering integration between the top-down (and universalistic) dimension of ESD principles and educational practice in local contexts. Reading Andrews et al. (2002), 'Community-based education means more than 'education based in the community'. It implies an education plan created as a result of community involvement and designed to match community interests (2002, 164), as well as "a human collectivity, a shared living place, a political concern, the focus of critical analysis. It calls for solidarity, democracy, and personal and collective involvement in order to participate in the evolution of the community" (Sauvé 1996, p. 12).

3. Towards a CA Framework for Sustainability

In the last section, we explored a key dialectical tension within ESD, pointing out the gap between the universal character of the declarations in which sustainable development goals are stated and the local level at which these goals need to be implemented; we also discussed the need to bridge this gap by cultivating a greater focus on the agency of the actors involved and on integration with the local dimension. In this section, we contend that the CA can cater to this need as a theoretical perspective with the potential to endow ESD with a language and set of methodologies for fully realizing both its transformative potential and its "agency-driven nature" (Reunamo and Pipere 2011). In our view, there are two specific advantages associated with using the capabilities approach as a framework for community-based ESD:

- (i) it facilitates systematic attention to the process-related aspects of implementing SDGs, thus overcoming the limitations of the SDG perspective's top-down, goal-oriented, and results-based emphasis and fully recognizing the key role of agency and participation in ESD;
- (ii) it also narrows the gap between universal rules and local contexts by allowing ESD to be understood as the development of "capabilities", thereby providing a robust conceptual framework for the deployment of spaces and tools enabling social actors to negotiate with one another and jointly navigate sustainability issues, as mentioned in the previous section.

3.1. SDG and CA—Beyond a Results-Based Approach

The capabilities approach (CA) was originally formulated by A. Sen (1980, 1999) and M. Nussbaum (2000, 2011) (Nussbaum and Sen 1993). Overall, it may be defined as a theorization of social justice that conceptualizes development as the expansion of capabilities, namely the real freedoms that individuals have to achieve valuable functionings, that is, the kind of life that they have reasons to value. Functionings are "doings and beings", or the activities and states that make up the lives of individuals (Robeyns 2017). The key notion underpinning the CA is that social justice should be measured in terms of capabilities that offer a "multidimensional" measure of an individual's quality of life or wellbeing and their substantive freedoms rather than in terms of the distribution of resources across society or in terms of utility.

Over the last few decades, the CA has been used in a variety of ways and in different fields, giving rise to multiple interpretations. In her systematic overview of the CA today,

Robeyns proposed the following definition, arguably the most comprehensive currently available: “[The CA] is generally understood as a conceptual framework for a range of evaluative exercises, including most prominently the following: (i) the assessment of individual levels of achieved well-being and well-being freedom; (ii) the evaluation and assessment of social arrangement or institutions; (iii) the design of policies and other forms of social change in society” (Robeyns 2017, p. 24). In this paper, we focus on (iii), treating the CA as a toolbox from which to draw the elements of a theoretical framework for ESD.

The CA’s theoretical affinity with, and its usefulness to, the working out of rules for sustainable development at the social, economic, and environmental levels has been widely acknowledged (Lessman and Rauschmayer 2014). A. Sen’s perspective on human development, with his emphasis on overall quality of life (as opposed to utility, wealth, or income) and on fostering agency and empowerment (Sen 1999) has also been well represented in the development debate thanks to the United Nations Human Development Reports. The inclusion of Sen’s perspective in these reports has prompted a paradigm shift in how development is assessed: rather than being exclusively based on GDP, the international debate about development and developmental policy is now more nuanced, multidimensional, and sensitive to the role of local and individual factors (Nussbaum 2011).

Robeyns summed up a broadly held view when she stated that “the Millennium Development Goals could be understood as being a practical [. . .] translation of the Capability Approach in practice, and their successors, the Sustainable Development Goals, can also be seen as influenced by the Capability Approach” (Robeyns 2017, p. 159). Alkire and Deneulin (2018) list three key areas of convergence between SDGs and the CA:

- (1) Like the SDG framework, the CA is a universalist perspective, presented as a theory of global justice.
- (2) Both SDGs and the CA offer a new outlook on the assessment of societal progress given their “multi-dimensional perspective on progress and poverty”. The CA emphasizes that the measurement of progress and justice must ultimately be based on the kind of life that people can actually live, including their access to basic resources, the kind of environment they live in, and the quality of their relationships.
- (3) In keeping with the concern expressed in the SDGs with “leaving no one behind”, the CA is informed by a Kantian ethics that sees each individual as an end in him/herself. In contrast with the utilitarian approach that characterizes economics and moral judgments, which in turn prompt the aggregation of statistical data, exponents of the CA have always insisted on the uniqueness of the individual and the need for disaggregated analysis. This “echoes the SDGs’ call for disaggregated data to break down information”.

However, despite these broad areas of commonality, capability scholars have also emphasized a specific weakness in the overall framework underpinning SDGs. Alkire and Deneulin (2018) argued that the SDGs are too results-oriented to offer a secure basis for the development of all aspects of a just society. In their view, “like their predecessors, the Millennium Development Goals, the SDGs are targets born from a results-based management mindset”. Consequently, they lack “an explicit focus on empowerment”, although these authors stress that this dimension is *implicitly present* both at the performative level, since “they are the result of global consultation process”, and at the level of commitment, since “states have committed to engaging the private sector and civil society”. In this regard, the CA can offer solid normative underpinnings given its dual perspective on freedom: namely, freedom as real possibility (an aspect that we examine in greater depth later in the paper), and freedom as a process of making choices, implying the key importance of individual agency at every level. As stated by Dixon and Nussbaum, “The idea of agency has a central role to play in the CA: the CA sees people as striving agents, and in contrast with approaches that only focus on the satisfaction of preferences, it aims at supporting the growth of agency and practical reason” (Dixon and Nussbaum 2012, p. 560). Thus, The CA emphasizes that “the road to human dignity, which the SDGs call on us to embark upon, is not only about outcomes but also about processes” (Alkire and Deneulin 2018)

and prompts a focus on empowering individual “agents”, thereby linking the pursuit of sustainable development goals with public programs in which ordinary citizens play a direct and leading role in implementing these goals.

It should be noted that, although Alkire and Deneulin make every effort to appear sympathetic towards the SDGs, theirs is a potentially radical critique insofar as it points up an (at least) residual “top-down” dimension of the sustainable development agenda; this top-down aspect underpins, in both theoretical and practical terms, the gap outlined in the previous section. It is clear, in fact, that shifting the emphasis to processes means paying far greater attention to the means used to pursue sustainability, which in turn requires revising the concept of sustainability itself to embed in it the processes deployed to attain the declared aims of the 17 SDGs. This was also the key point underscored by Sen in his critique of sustainability discourse over the thirty years following publication of the Brundtland Report. For Sen, defining “sustainable” development as “development that satisfies the need of the present without compromising the ability of future generations to satisfy theirs”, as does the Report, or reformulating it as “standard of living” (see Solow 1992), means retaining an excessively narrow anthropological view of human beings as “subjects of needs” (which betrays, one can note in passing, an anthropological perspective still entrenched in Enlightenment thinking and thus still too close to the concept of *homo economicus*). In this sense, this conception of sustainability implies a “narrow view of humanity” (Sen 2009, p. 250). What is worse, it can also encourage seeing people as “*patientes*” whose needs deserve consideration (252). Such a view is not wrong per se; nevertheless, it overlooks a key aspect of human dignity, which in the CA is non-negotiable, namely the principle that “the importance of human lives lies not merely in our living standard and need-fulfilment, but also in the freedoms that we enjoy” and that we therefore desire to be treated as “agents” (*agentes*, as opposed to *patientes*) with the freedom “to decide what to value and how to pursue what we value” (252). Therefore, the “process-based” approach called for by Alkire and Deneulin is a crucial need in its own right, as well as a potential corrective to the SDGs’ excessively results-based focus. This point should not be overlooked because broader citizen engagement would lay a more solid foundation for sustainable development, making the pursuit of the SDGs less susceptible over the long term to “shocks” caused by economic and political changes at the global level (Alkire and Deneulin 2018).

The emphasis that the CA lays on process-freedom has strong normative consequences not only for the implementation of SDGs, but also for ESD, as it implies that any educational project must actively involve the participants as protagonists in the pursuit of social justice aims. Crucially, the CA extends the emphasis on agency to children too, given that “this emphasis on agency, under CA, further means that children should be afforded the maximum scope for decisional freedom consistent with their actual or potential capacity for rational and reasoned forms of choice or judgment” (Dixon and Nussbaum 2012, p. 561). This strongly resonates with the previously mentioned need to also recognize the key role and agency of young people in the implementation of SDGs (Gusmão Caiado et al. 2018).

3.2. From Universal to Local—CA and ESD

The other key aspect of the CA (ii) is that it allows the implementation of sustainability goals to be conceptualized as developing people’s capabilities in terms of real opportunities, thus offering a means of mediating between the abstract prescriptive level and the contextual factors and information impacting on individuals’ real-world capabilities. The gap bridged by the CA in this case is that between a general (universal) declaration and the question of what individuals, in a given context, actually have the possibility to do. Sen proposed viewing this discrepancy—particularly evident in the fact that nowhere in the world may human rights declarations be said to be fully applied in practice—in terms of the distinction between the *niti* and *nyaya* concepts of justice, which he drew from Indian culture (Sen 2009, p. 20). *Niti* denotes a notion of justice corresponding to abstract principles of what is just, a perspective that Sen attributes to most of the Western

tradition, or at least to the dominant modern European tradition, that of contractualism. This way of framing issues of justice gives rise to what Sen termed “transcendental institutionalism” (Sen 2009, p. 8), or the quest to design institutions that are perfectly just, in the Kantian sense of offering conditions of possibility for social justice, with a related focus on distributing rights and resources (entitlements). According to Sen, the flaw in this tradition is ultimately its blindness to what is actually going on in society, in that it relies on assumptions of individual conformity to institutionally acceptable behaviors and overlooks real differences between individuals. In contrast, the *nyaya* notion of justice concerns what is actually happening in the world, rather than on what should be happening according to institutional regulations; its focus is on the real-life injustices that can persist regardless of statements of principle. Looking at the world through a *nyaya* lens means committing to analyzing actual behaviors and actual injustices, and intervening accordingly (Sen 2009, p. 20). Coming back to rights and capabilities: rights remain mere abstract statements if they never translate into actual “capabilities” or alternative functionings truly available to individuals and among which they may choose in order to shape their lives. Hence, from a CA perspective, social justice is realized through capabilities, meaning that the pursuit of social justice objectives—if these are not to remain on paper—must be focused on creating the real-life conditions required to implement them.

The CA’s emphasis on the real possibilities of individuals and real-life conditions as key to achieving social justice translates into attending to a set of key dimensions which act at multiple levels to determine the actual capabilities of individuals. These key dimensions are:

- (1) The resources actually available to individuals.
- (2) Conversion factors, defined as the conditions under which resources may be transformed into functionings. Different authors list different kinds of conversion factors; in general, they may be divided into (i) personal, (ii) environmental, and (iii) social.
- (3) Structural constraints, or the limitations at different levels (institutional-regulatory, social, environmental) that impact on the possibilities available to individuals.

It is important to specify that these dimensions are not substantial but functional: that is to say, they define the role of a given factor in determining the real opportunities available to an individual (clearly, a given legal rule might act as a conversion factor in some cases but as a structural constraint in others). The basic interrelations between the multilevel determinants may be represented as Figure 1:

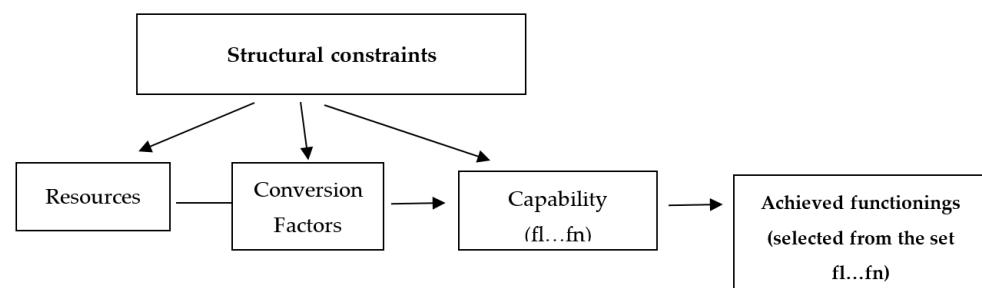


Figure 1. Diagram of the “capabilities approach” (CA) core concepts. Source: adapted from (Robeyns 2017, p. 83).

Although the CA has been critiqued as individualist, in reality—precisely by virtue of its emphasis on substantial freedom—it recognizes the constitutive relationship between individual freedoms and the social and economic orders, emphasizing that there is “a deep complementarity between individual agency and social arrangements”, and that individual freedom “is a social commitment” (Sen 1998). Indeed, it is clear that from a CA perspective, people’s substantive freedoms depend on a series of factors that concern the environmental and social contexts and, more remotely, the multilevel governance architecture affecting legislative output down to the local level. It is not by chance, therefore, that both Sen and

Nussbaum, as well as all those working with or in the CA field, are strongly inclined to think both in terms of global justice (one example of this is Sen's role in drafting reports for the UN) and in terms of local intervention designed to enhance people's capabilities. The very conceptual structure of the CA lends itself to mediating between these levels and hence is particularly useful to translating universal prescriptions, such as SDGs, into local contexts.

The implications of bringing the CA to bear on ESD should be clear at this point. Standard definitions like that proposed by UNESCO, whereby "Education for Sustainable Development empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity" (<https://en.unesco.org/themes/education-sustainable-development/what-is-esd> (accessed on 22 September 2020)), seem inadequate because they remain too centered on individual responsibility, failing to sufficiently recognize the role of multilevel structural constraints, conversion factors, and resources in the actual implementation of the SDGs. At the same time, as mentioned earlier, only calling for a change of "epistemological paradigm" (Sterling 2016), while a step in the right direction, overlooks the necessarily participatory and practical dimensions of ESD.

Considering what we have said up to now, conceptualizing education for sustainability as fostering specific capabilities, which we might also term "sustainability capabilities", means uniting two principles:

- (1) Focusing on individual agency as part of recognizing the key role of processes in the pursuit of sustainability.
- (2) Targeting the set of structural constraints and conversion factors affecting the salient capabilities, and therefore eliciting significant involvement on the part of institutions, stakeholders, and civil society in the implementation of specific goals while taking into account the specific local context where the action is taking place.

Thus, the CA can provide a comprehensive theoretical framework for the pursuit of SDGs as "sustainability capabilities", which in turn can drive sustainable development.

4. The Flying Carpet: A Community-Based Education Project

The framework outlined in the previous sections justified "the Flying Carpet" project, commissioned by Milan City Council under the terms of the call for tender "Piazze Aperte in ogni quartiere" in the viale Molise, via Monte Velino, and via Maspero district of the city (Project proposers: Cooperativa Sociale Comunità Progetto, Istituto Comprensivo Tommaso Grossi, Fondazione Snam, Associazione Ingrossiamoci, Associazione Luisa Berardi). The "Piazze Aperte in ogni quartiere" project was promoted by Milan City Council in order to support the urban regeneration and sustainable mobility of the Milan 2030 Territory Government Plan and of the Sustainable Urban Mobility Plan. The project aims to enhance public spaces of the neighborhoods by increasing pedestrian traffic and promoting sustainable mobility for the benefit of the environment, safety, and quality of life in the city, within the wider framework of the SDGs.

The area targeted by the project contains two social housing complexes. Most of the local children attend the same group of public schools: around 500 children/adolescents attend the primary school and lower secondary school, while 150 young children attend the adjacent kindergarten.

Families with children were involved in designing the project with a view of identifying the spaces most crucial to the district's livability. The project team observed the children's routes from home to school, and especially the route between the school and the nearest public park, which is one of the main places frequented by the local children and youth. The project was conducted during the 2019–2020 school year and led to the redevelopment of a 500-meter route between the school and the leading local public park. Mobility in the area was complicated by a series of phenomena including the high speed of traffic on the surrounding streets, illegal parking on pavements, and a general neglect of public spaces with empty bottles littering the entire route from the school to the park.

In response, the project partners developed a set of interrelated educational initiatives targeting the neighborhood's children and adolescents with a view to getting them to participate in the construction of a *sustainable* space (via actions aimed at taking care of and developing public spaces including looking after green areas, cultivating vegetable gardens, engaging in street art, and digital manufacturing as a service to the community) and encouraging children and teens to walk to school on their own (getting children and adolescents to walk to school represents a strategic gain within urban sustainability policies). In this paper, we deliberately chose to use the term "space" to refer to a field of social interactions and the term "place" to indicate the outcome of both individual and collective processes of appropriation, signification, and care (e.g., place bonding). However, the theorizing of both political and cultural geographers suggests that the social production of spaces and subjective meanings of places are inextricable rather than separate processes. From a methodological point of view, the project team held a series of meetings with the children and residents of the neighborhood, with the input of one or more artists, for the purpose of choosing an art project for the district's public spaces and eliciting attendees' practical participation (e.g., painting on the ground, putting out flowerpots, and so on). The creativity required to construct a collective work of art leveraged color and graphic signs to *draw* and *mark out* a space and the meanings it bore as *a espace vécu* both in geographical and pedagogical meanings (Frémont 1976; Iori 1996).

Therefore, the initial aim of the project was to explore representations of the local area to identify the relations that were most characteristic of it. Students were at the center of the participatory approach used during the project development. Starting with the involvement of the students at the local schools, children were engaged in identifying their first ideas through an ad hoc workshop entitled "If you were an architect/magician who was thinking about transforming the road that leads from the school to the park, what would you do?". Their first ideas can be summarized as follows:

- to secure the spaces of entrance and exit from the school, which are lived as meeting spaces for children and families
- to clean the street and sidewalks
- to make the school/home trip "more suitable for children", with seats and colors.

Together with the adults of the network (teachers, educators, parents, and local operators), students explored some key aspects of these ideas in order to plan the core action of the project. In this sense, residents themselves designed the intervention to be implemented, which entailed making changes to the school-park route by converting some portions of it into play areas (including by painting a giant chessboard on the street near the school), thus attributing new meanings to the public spaces crossed by the students on their way to school. The central role taken on by students in leading the creative process developed through the project implementation was underpinned by the recognition of the role of the child as a citizen actively involved in his/her social community, as supported by the UNCRC.

Getting the school-goers and community residents to jointly plan the intervention was a novel approach that seemed to yield promising results, as suggested by the results of a set of interviews with the main actors involved in the process, specifically: the Milan city councilor with responsibility for community participation, the project partners, participating teachers, and other project staff and volunteers.

5. Reading a Community-Based Education Project through the Lens of the Capabilities Approach

"The Flying Carpet" project offers a situated example of the theoretical framework outlined in the opening sections of this paper.

It was constructed on the basis of multiple, layered needs, whose underlying complexity was reflected in how they were formulated by the various actors: these included the requirement of municipal authorities to ensure students' safety while entering and exiting the schools, especially in the context of the unexpected public health emergency

in 2020, the requirement to redevelop the area outside the school to enhance the school's public image, parents' requirement for their children to be able to get to school safely, the residents' requirement for their neighborhood to be made more appealing to outsiders, and the students' requirement to experience the spaces they moved through each day as livable.

In brief, neglect of the area had had the effect of making residents feel more insecure and generated a perception of the neighborhood as unwelcoming, a negative image that was also projected onto the schools. Such dynamics underpin the processes that leads to the segregation of neighborhoods, as part of the broader phenomenon known as "White Flight", whereby the parents of Italian students choose not to enroll their children at schools thought to be attended by a high percentage of students from immigrant backgrounds, which is viewed as a negative. Thus, schools are at risk of becoming places of segregation, where processes of inequality and social exclusion are reproduced. Furthermore, the perception that the home-school trajectory was unsafe and even dangerous was pushing parents to discourage their children from spending time in the public spaces along the route, thus further fueling their sense of alienation from the neighborhood and local community.

Thus, the educational project took on board the demand for an intervention that would address needs at a variety of levels—social, environmental, economic, and political—and offered a multifaceted and cross-cutting response based on collective and intergenerational engagement. The intervention may be interpreted as supporting sustainable development goals precisely because of this circular interaction between looking after one's living environment and social inclusion. Indeed, as previously mentioned, the UN's Sustainable Development Agenda (UN General Assembly 2015) emphasized the notion of ESD as a key tool for making children and young people capable of taking on an active role in the development of society (as laid down in the UNESCO guideline document Roadmap for implementing the Global Action Program on Education for Sustainable Development, 2014). This means offering education projects that seek to deliver Global Citizenship Education (GCED) as laid down in Objective 4.7 in the 2030 Agenda for Sustainable Development, where education is understood to also entail the taking on of collective responsibility for their own life environment by children and youths too. In this sense, the entire project development process described a path of participatory citizenship that moves in the direction of what is expressed by the GCED, by starting from the lived experience of the students and adults to invent creative solutions which, however, had to be negotiated with the institutions in order to understand the feasibility and sustainability of those solutions.

The intergenerational underpinnings of sustainability took the form of a collective taking on responsibility for the needs of a neighborhood and its residents, interpreting them in light of both resources and constraints. In the opening section of the paper, we pointed out that implementing ESD at the local level requires the integration of inter-generational justice, intra-generational justice (Steiner and Posch 2006), and mutual collaboration between children and adults. Informed by this perspective, the Flying Carpet project is a practical example of how children and their families (and the community more broadly) may be empowered to recognize and relate economic, social, and environmental factors while contributing to the sustainable development of their neighborhood. Hence, the project may also be viewed as informed by a *community-based* intervention perspective. Investing in a project that entailed looking after public spaces fostered community members' sense of belonging to the places involved, educating them in taking responsibility for the public dimension which also affected them as individuals and stimulating cooperation between local actors at different levels.

Finally, one further aspect of this project speaks to our line of reasoning in this paper. The entire sustainability debate, which was initially triggered in the late 1980s by the Brundtland Report, "Our Common Future", has explored the intergenerational nature of development, understood as the capacity to respond to the needs of present generations without compromising future generations' need to cater for theirs. Over the long course of this debate, which early prompted questioning of the meaning of modernity (Beck et al. 1994), one of the most critical aspects discussed has been the extent to which the

adult generations of the present are capable of imagining the needs of future generations. The risk inherent in a shortsighted view of sustainability is being too quick to assume that the grownups of today can forecast what the needs of future generations will be or, even more likely, to assume that the needs of future generations will be identical to the needs of the present generations. On the one hand, this dynamic is inevitable and, indeed, needs to be monitored if we are to ensure the survival of society as we know it: the sustainability of a community is a function of its capacity to reproduce itself while at the same time enabling an acceptable level of functioning (Coleman 1988). If such risks are to be mitigated however, sustainability should be underpinned by the present participation of the youngest generations. This is a deeply educational theme: the new generations must be educated in listening to their own needs, presenting them in their dialogues with the present generations of adults, and – crucially – taking responsibility for them in the here and now. Thus, children and youths should not be seen as future generations, or the adults of the future, but rather as present generations, and hence as actors and citizens who – as laid down in the UNCRC – bear responsibility for today and not only for tomorrow.

Thus, “the Flying Carpet” project exemplifies how we might begin to move in this direction: that is to say, by looking to redevelop a local area from the perspective of children and youths, and explicitly inviting them to say how they wish to live, in the here and now, in their own neighborhood. In this project, the concept of livability became the key to reconciling a universalist vision with its local implementation, no longer situated in an abstract ideal future but rather in concrete everyday life. “What can we do today?” was thus the key question from which the project took shape, a question that requires even young children to become aware of the feasibility criteria that allow ideas to be transformed into projects.

6. Conclusions

In conclusion, “the Flying Carpet” embodies some of the leading arguments laid out in this paper. In light of a policy framework targeting local intervention, the project invited adult community members and local institutions to join together in creating the conditions for—by implementing the project with the schools, and identifying the salient resources and constraints—children and youths to ask themselves questions about the livability of their neighborhood. The *small matter* of the home-school route thus acted as a gateway to a form of participation that was local area political activism: the goal of taking care of public spaces was pursued by first getting citizens of all ages to examine the real-life needs and constraints facing them, which were economic (the cost of purchasing materials for the project, the economic implications of local patterns of segregation, etc.), environmental (constraints on caring for the green areas along the route, etc.), and social (the implications in terms of mobility and the use to which public spaces are put, etc.) in nature.

However, there is more: development that entails novel transformation requires an education for sustainability that is underpinned by training the new generations to think *otherwise*, and to imagine paradoxically unforeseeable futures for themselves. In sum, a sustainability perspective worthy of the name demands that *capability for imagination* that Nussbaum recognized as key to the development of humankind. Sustainability also requires nourishing imagination as a capability in dialogue with critical thinking, which is needed to accurately evaluate the present. The interviews collected at the end of the project revealed that the whole process represented a learning opportunity for the students. Having to compare their own creative ideas with elements of reality and constraints, such as the legal, economic, and factual aspects connected to the realization of their proposals, represented for the students the opportunity to experience the interconnection of many variables involved behind the management of the public space. Adults were asked to join in the exploration of creative ideas with students, in a process of cooperation where all stakeholders agreed to let them lead the process. In this sense, the difficulties encountered (in terms of practical decisions, evaluation of costs-effectiveness of the actions to be implemented and so on) were not perceived as obstacles imposed by adults but as an

integral part of the planning process that required everyone, young people and adults. Clearly, the relationship between adults and children will never be a peer relationship, as the differences in terms of responsibilities—and power—are always present as variables of the dynamics of such relationships. However, the agreement around the centrality of students voices was a fundamental part of the community path at the beginning of the whole process, and must be considered as a key aspect of a participatory approach. Further considerations around the hidden dynamics of power underpinning the cooperation between children and adults, which certainly offer an interesting perspective of study, cannot be further explored in this paper, although they represent a possible future path for our research.

In general, the project achieved this, first by proposing listening to the needs of children and youths not only with a view to “gathering” information but also as a means of ‘stimulating’ the participants, via the deployment of expressive and artistic languages and approaches that allowed them to *imagine a need* still before identifying it. Amartya Sen argued that, even in a capabilities approach, rights remain key to ensuring the freedom to imagine future needs. Thus, education for sustainability means educating to the opening up of spaces of freedom that can generate new needs, that can transform the unexpected inspiration to draw a chessboard on the street into the need (and not just the right) to outdoor play on the part of the children who are still to come.

Author Contributions: “1. Introduction”, S.P.; “2. ESD between Universalism and Place-Based education”, S.M.; “3. Towards a CA framework for sustainability”, S.P.; “4. The Flying Carpet: a community-based education project”, “5. Reading a community-based education project through the lens of the Capabilities Approach”, E.B.; “6. Conclusion”, C.D.M. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Ethical review and approval were waived for this study, due to the fact that the community based and training project described was not promoted and realized by the University. The leading institutions have provided for their own ethical standards and regulations.

Informed Consent Statement: Informed consent was obtained from all subjects interviewed in the study.

Data Availability Statement: No new data were created or analyzed in this study. Data sharing is not applicable to this article.

Acknowledgments: The authors wish to thank Lucia Carriera for her support in collecting the preparatory materials for Sections 3 and 4.

Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

References

- Aguilar, Olivia M. 2018. Examining the literature to reveal the nature of community EE/ESD programs and research. *Environmental Education Research* 24: 26–49. [CrossRef]
- Alkire, Sabina, and Séverine Deneulin. 2018. The Real Wealth of the Nations. Available online: <https://www.sustainablegoals.org.uk/real-wealth-nations/> (accessed on 30 September 2020).
- Andrews, Elaine, Stevens Mark, and Wise Greg. 2002. A Model of Community-based Environmental Education. In *New Tools for Environmental Protection: Education, Information, and Voluntary Measures*. Edited by Dietz T. Thomas and Stern Paul C. Washington: National Academy Press, pp. 161–82.
- Beck, Ulrich, Anthony Giddens, and Scott Lash. 1994. *Reflexive Modernization: Politics, Tradition, and Aesthetics in Modern Social Order*. Cambridge: Polity Press.
- Coleman, James S. 1988. Social Capital in the Creation of Human Capital. *American Journal of Sociology* 94: S95–S120. [CrossRef]
- Dixon, Rosalind, and Martha Nussbaum. 2012. Children’s Rights and a Capabilities Approach: The Question of Special Priority. *Cornell Law Review* 97: 549–93. [CrossRef]
- Eizenberg, Efrat, and Yosef Jabareen. 2017. Social Sustainability: A New Conceptual Framework. *Sustainability* 9: 68. [CrossRef]

- Frémont, Armand. 1976. *La Région Espace Vécu*. Paris: PUF.
- Grosseck, Gabriela, Tîru Laurentiu Gabriel, and Bran Ramona Alice. 2019. Education for Sustainable Development: Evolution and Perspectives: A Bibliometric Review of Research, 1992–2018. *Sustainability* 11: 6136. [CrossRef]
- Gusmão Caiado, Rodrigo Goyannes, Filho Walter Leal, Quelhas Osvaldo Luiz Gonçalves, de Mattos Nascimento, Daniel Luiz, and Ávila Lucas Veigas. 2018. *Journal of Cleaner Production*. [CrossRef]
- Huckle, John, and Arjen E. J. Wals. 2015. The UN Decade of Education for Sustainable Development: Business as Usual in the End. *Environmental Education Research* 21: 491–505. [CrossRef]
- Iori, Vanna. 1996. *Lo spazio vissuto. Luoghi educativi e soggettività*. Firenze: La Nuova Italia Scientifica.
- Jickling, Bob, and Arjen E. J. Wals. 2008. Globalization and Environmental Education: Looking beyond Sustainable Development. *Journal of Curriculum Studies* 40: 1–21. [CrossRef]
- Lessman, Ortrud, and Felix Rauschmayer. 2014. *The Capability Approach and Sustainability*. London: Routledge.
- Nussbaum, Martha, and Amartya Sen. 1993. *The Quality of Life*. Oxford: Clarendon Press.
- Nussbaum, Martha. 2000. *Women and Human development*. Oxford: Clarendon Press.
- Nussbaum, Martha. 2011. *Creating Capabilities: The Human Development Approach*. Cambridge: Belknap Press of Harvard University Press.
- Reunamo, Jyrki, and Anita Pipere. 2011. Doing Research on Education for Sustainable Development. *International Journal of Sustainability in Higher Education* 12: 110–24. [CrossRef]
- Robeyns, Ingrid. 2017. *Wellbeing, Freedom and Social Justice: The Capability Approach Re-Examined*. Cambridge: Open Book Publisher.
- Sauvé, Lucie. 1996. Environmental Education and Sustainable Development: A Further Appraisal. *Canadian Journal of Environmental Education* 1: 7–34.
- Sen, A. 2009. *The Idea of Justice*. London: Allen Lane.
- Sen, Amartya. 1980. Equality of What? In *The Tanner Lectures on Human Values*. Edited by McMurrin S. Salt Lake City: University of Utah Press, pp. 196–220.
- Sen, Amartya. 1998. Individual Freedom as a social commitment. *India International Centre Quarterly* 25/26: 53–69.
- Sen, Amartya. 1999. *Development as Freedom*. New York: Knopf.
- Solow, Robert. 1992. An Almost Practical Step toward Sustainability. Available online: <https://www.resourcesmag.org/common-resources/almost-practical-step-toward-sustainability/> (accessed on 13 December 2020).
- Steiner, Gerald, and Alfred Posch. 2006. Higher Education for Sustainability by Means of Transdisciplinary Case Studies: An Innovative Approach for Solving Complex, Real-World Problems. *Journal of Cleaner Production* 14: 877–90. [CrossRef]
- Sterling, Stephen. 2016. A Commentary on Education and Sustainable Development Goals. *Journal of Education for Sustainable Development* 10: 208–13. [CrossRef]
- Tilbury, Daniella, and Micheal Williams, eds. 1997. *Teaching and Learning Geography*. London: Routledge.
- UN General Assembly. 2015. *Transforming our World: The 2030 Agenda for Sustainable Development, 21 October 2015, A/RES/70/1*. New York: UN General Assembly.
- UNESCO. 2014a. Roadmap for Implementing the Global Action Programme on Education for Sustainable Development. Available online: <http://unesdoc.unesco.org/images/0023/002305/230514e.pdf> (accessed on 20 August 2020).
- UNESCO. 2014b. Aichi-Nagoya Declaration on Education for Sustainable Development. Available online: <https://unesdoc.unesco.org/ark:/48223/pf0000231074> (accessed on 25 October 2020).
- UNESCO. 2017. Education for Sustainable Development Goals. Learning Objectives. United Nations Educational, Scientific and Cultural Organization. Available online: https://www.unesco.de/sites/default/files/2018-08/unesco_education_for_sustainable_development_goals.pdf (accessed on 13 August 2020).
- UNESCO. n.d. UN Decade on ESD. Available online: <https://en.unesco.org/themes/education-sustainable-development/what-is-esd/un-decade-of-esd> (accessed on 21 October 2020).
- Zutshi, Ambika, Andrew Creed, and Brian L. Connelly. 2019. Education for Sustainable Development: Emerging Themes from Adopters of a Declaration. *Sustainability* 11: 156. [CrossRef]