

Policy brief: Learning from Italy to promote sustainability education in Hong Kong

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Abstract

Education is recognised as an integral part of building the capacity of all ages to drive the transformation toward sustainable development. While the Hong Kong government aspires to achieve carbon neutrality by 2050 and has ramped up efforts to integrate sustainability into school curricula and raise public awareness through educational activities, this policy brief argues that Hong Kong's existing measures failed to empower and motivate individuals and the community to keep pace with its climate action ambition. Drawing on Sterling's framework of education for sustainability (EFS), this paper presents a diagnosis of Hong Kong's major problems in sustainability education policies and suggests that the Hong Kong government should learn from the Italian experience to take a more systemic, empowering, and democratic approach in advancing its EFS policies.

Keywords: climate change education, education for sustainable development, Hong Kong, Italy, 2030 Agenda

Context

Sustainable development is one of the most important policy focuses of the recent decade. In 2015, the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) were adopted by all member states of the United Nations (UN) as an urgent call for global actions to build a sustainable economy, society, and environment (United Nations, 2015). Although Hong Kong is not a nation, it has never shied away from global responsibility. Early in 1999, the Hong Kong government put sustainable development on its policy agenda, focusing on environmental management (EEB, 2023a). Riding on the wave of international cooperation to tackle climate change through the Paris Agreement, the Hong Kong government shifted its strategies towards decarbonisation and set out the “Climate Action Plan 2030+” in 2017 and further committed to achieving carbon neutrality by 2050 in its “Climate Action Plan 2050+” in 2021 (HKSAR Government, 2021).

Ironically, regardless of the government's ambition to address the climate crisis, it seems that Hong Kong people are not fully aware of the urgency. A recent public opinion survey discovered that only 16% of interviewees believed that climate change will cause a significant impact when compared with other factors such as recession or public health (Lu, 2020). The transformation towards sustainable development requires broad participation from different industries, social sectors, and individuals; without sufficient public consciousness and support, it is less likely to implement sustainability policies effectively (Drews & van den Bergh, 2016). Therefore, if the Hong Kong government were to achieve its sustainability goals, it is necessary to

increase the public's awareness of climate urgency and cultivate more comprehensive support for its policy initiatives.

Education is recognised as the foundation of nurturing public sustainability consciousness and transforming into a sustainable future (Savelyeva, 2022; Smaniotto et al., 2023). In recent decades, UNESCO has been putting tremendous effort into advocating Education for Sustainable Development (ESD) through providing various support and guidance to its member states (UNESCO, 2023). However, ESD is implemented differently from one country to another, depending on their unique context.

In Hong Kong, the regulatory role of integrating sustainable development into education is played by the Council for Carbon Neutrality and Sustainable Development (CCNSD), the Education Bureau (EDB), and the Environment and Ecology Bureau (EEB). CCNSD is appointed by the Hong Kong Chief Executive to offer advice on decarbonisation initiatives and promote the community's awareness and understanding of sustainable development (CCNSD, 2023). EDB's primary responsibility is to formulate educational policies and develop curriculum guidelines for preschool, primary, secondary, and post-secondary sectors. The Sustainable Development Division of EEB is responsible for launching public education activities such as school outreach programmes, school infrastructure greening programmes and providing funding support to NGOs (CCNSD, 2023; EDB, 2023; EEB, 2023b).

Purpose

While various departments of the Hong Kong government endeavour to contribute to the SDGs, it is questionable whether these strategies are well coordinated. It is clearly stated that the work of CCNSD is based on the Government's climate action plan with the goal of carbon neutrality as committed to in the Paris Agreement. However, integrating sustainability into school curriculums is guided by EDB's own learning goals, while EEB follows its blueprints for environmental protection activities. In other words, the formulation and implementation of interventions around ESD are highly fragmented, making them difficult to deliver to build community capacity towards sustainability, which may hamper the delivery of the whole climate action plan and the long-term sustainable development of the city. Therefore, the question "In what ways can sustainability education be promoted?" needs the government's urgent attention. The main aim of this policy brief is to evaluate Hong Kong's current forms of education initiatives associated with ESD and make suggestions based on some best practices from Italy to promote a strong sustainability education for Hong Kong.

What we know

Under the advocacy of UNESCO, ESD has gained broad attention worldwide. However, it is not a fixed concept with a standardised design and implementation criteria. Back in the 1990s, the emerging ideas of "education for sustainability", "development education", and "environmental education" were still in the early stages of debate. One of the most influential thinkers in the field of environmental and sustainability education is Stephen Sterling, who laid the foundation for the policy development for ESD. In his early work, he argued that the thinking of education for sustainability (EFS) should lead to a rethinking of the meanings of sustainability and a reflection of

the unsustainable practices in the existing education, including the philosophical roots, pedagogies, curriculum contents and organisational structure (Sterling, 1996).

Built on the ideas of education *in*, *about* and *for* environment, Sterling (1996) categorise EFS into two broad forms: weak EFS and strong EFS. By weak form, he means the education that intends to develop learners' cognitive understanding, awareness, norms, and technical skills in sustainability and building a sustainable learning environment, for example, education for knowledge about climate change (education *about*) or enhancing green infrastructure (education *in*). While he agrees that this knowledge is valuable and necessary, this form of education “supports a technocratic approach to sustainability and an unproblematic view of sustainable development” (Sterling, 1996, p.28). On the other hand, a strong form of EFS encourages a systemic approach that builds capacity for learners of all ages in both formal schools and other settings. It also encourages the vertical and horizontal integration of knowledge, i.e., a trans-/interdisciplinary contextualise curriculum that pays attention to the linking of personal and community value to nurture the sense of responsibility, an empowering and ownership pedagogical approach to activate the sense of citizenship among individuals and the community, and a transformation of structure that enable democratised reflective interaction among individual, institutions and communities (ibid).

It is acknowledged that there is a difference between ESD and EFS, yet it is not the intention of this analysis to differentiate them. Sterling's (ibid) critical reflection on EFS is most suitable for this study because it offers a measurement to evaluate the current policy on “how far do the policies go towards EFS” instead of simply identifying “are these EFS policies or not”.

Lifelong learning is another crucial element in ESD (Smaniotto et al., 2023; UNESCO, 2023). In today's unprecedented world, it is vital for everyone to keep up to date with updated knowledge and skills. Thus, learning for sustainability should not be limited by age and place (Smaniotto et al., 2023). While integrating sustainability in curriculums of all year levels for *formal learning* is fundamental, *non-formal learning* in educational activities for various communities organised by other institutions such as NGOs, and unstructured, *informal learning* in everyday life such as museums exhibitions can also be an important part for promoting ESD to all members of the society (ibid). Therefore, it is necessary to identify policy initiatives as formal, non-formal, and informal learning activities to examine the breadth of the current ESD interventions.

Critical analysis

The following analysis will examine the current interventions initiated by the three agencies of the Hong Kong government with the policy responsibility of EFS. The evaluation is based on the depth (i.e. weak or strong) and breadth (i.e. formal, non-formal, or informal) of the EFS policies. In addition, the section will draw on the practices of Italy, a pioneer in implementing EFS, to identify some learning points.

Current EFS strategies in Hong Kong

Information about educational projects and initiatives for sustainability initiated by CCNSD, EEB and EDB can be openly accessed on their official websites, as summarised

in Table 1 (CCNSD, 2023; EDB, 2023; EEB, 2023b). It is observed that the Hong Kong Government has been supporting a wide range of structured educational activities that are implemented in schools, universities, and NGOs to students, parents, teachers, and a wider community. In addition, the government also placed efforts in informal activities that encourage sustainable lifestyles to the public. However, most initiatives emphasised decarbonisation and environmental protection and placed little attention on the economic and societal dimensions, which misaligned with the ecological approach inherent in the concept of sustainable development.

In terms of the school curriculum developed by EDB, its primary focus is on disseminating propositional knowledge about the earth's environment on a subject base instead of an interdisciplinary base. More importantly, Savelyeva (2022) reviewed the evolution of sustainability education in Hong Kong's secondary school curricula and discovered that the latest redevelopment of the Civic and Social Development subject has not only reduced the study time for sustainability topics in favour of increasing teaching hours for the One Country-Two Systems of Hong Kong subject but also replaced independent inquiry study with a mandatory field trip to Mainland China and changed the open essays assessment method to multiple choice questions. These changes were made for a clear political purpose as they were implemented two years after the social unrest in 2019, when the critical thinking component in school curricula was blamed for causing an anti-government mindset in young students (Savelyeva, 2022). As a result, sustainable development components in the curriculum are further marginalised.

Moreover, the current activities and funding allocation tended to favour technical innovations, i.e. solar harvesting, energy monitoring, and waste recycling, as the major mechanisms for environmental management. Although value education for raising sustainability awareness and global citizenship has been touched on in formal, non-formal and informal activities, the interventions show no sign of critically reflecting on the existing pedagogy and assessment methods that are able to empower learners, nor a sign of transforming the top-down interaction and decision-making structures into a democratised way. Therefore, while the current EFS strategies implemented by the Hong Kong government have covered a broad audience with a variety of activities, this technocratic approach can be considered a weak intervention and insufficient to generate a transition towards sustainability.

Table 1: Summary of Hong Kong's current education initiatives related to sustainability

	Weak		Strong
	Education about sustainability	Education in sustainability	Education for sustainability
Formal	<p><i>School Curriculum Development</i></p> <p>Contents about sustainable development is integrated in primary and secondary school subjects.</p> <p>In Primary 1-6, SD-related contents are embedded in the 'People and Environment strand' of the General Studies Curriculum, with a focus on a basic understanding of nature and its interdependent relationship with humans to nurture students' sense of responsibility to environment conservation.</p> <p>At secondary levels, SD contents are integrated into the Interconnectedness and Interdependence of the Contemporary World strand of the Citizenship and Social Development curriculum, which focuses on learning the rationale and practical experience of environmental conservation.</p> <p>Scientific knowledge regarding energy, earth, life and living are also taught in the Science Curriculum throughout primary and secondary.</p>		
	<p><i>Teacher Training</i></p> <p>Professional development programs, seminars and field trips around green living, green building, climate change mitigation, sustainable fuel in transportation, sustainable seafood, marine life stranding, etc., were organised for all schoolteachers.</p>		
	<p><i>Sustainable Development Ambassador Program</i></p> <p>Provision of training to develop a pool of environmental protection ambassadors with further knowledge on sustainability issues and encourage them to promote</p>		

	Weak		Strong
	sustainable development to their peers at school.		
	<p><i>GreenLink Environmental Education Support Programme</i></p> <p>Assist schools with the administrative arrangements for organising various environmental education activities to enhance school and students' engagement in activities that raised awareness and knowledge of carbon neutrality.</p>		
	<p><i>The Sustainable Development School Award Programme</i></p> <p>Encourage schools to participate in environmental management and SD-related activities/projects with at least one activity related to decarbonisation.</p>		
		<p><i>The Green School Programme</i></p> <p>Provide funding and technical support to schools to improve their infrastructure and implement environmentally friendly policies, including installing small-scale solar energy generation systems, LED lighting, real-time energy monitoring systems, drinking water dispensers, and food waste composters, and launching waste separation and recycling and plastic-free school lunch policy.</p>	
		<p><i>The Green Tech Fund</i></p> <p>A five-year scheme to provide funding support to research projects with a focus on decarbonise and environmental protection technologies for local universities and research institutions.</p>	
Non-formal	<p><i>Sustainable Development Community Project Award</i></p> <p>Encourage schools to organise SD promotion activities/projects for parents and the wider community.</p>		

	Weak		Strong
	<p><i>Environment and Conservation Fund</i></p> <p>A long-term funding scheme to support local universities, schools, and NGOs to organise education activities that enhance environmental awareness in the community and mobilise the public to engage in environmental protection actions,</p>		
Informal		<p><i>GREEN@COMMUNITY</i></p> <p>Promote community recycling by setting fixed and mobile recycling stations/points that closes to residents at each district to encourage waste recycling and green lifestyle.</p>	
		<p><i>I love Hong Kong, I Love Green</i></p> <p>A series of marketing activities, including TV advertisements, posters, and social media platforms to promote a green lifestyle to the public.</p>	

Source: Summarised by the author based on information on the official websites of CCNSD, EEB & EDB as of 28 August 2023.

Learning from the Italian experience

Italy is a country that is highly committed to sustainable development. Similar to Hong Kong, the country places climate change as its EFS priority; however, it has a more proactive approach. In 2020, Italy became the first country to make climate change and sustainability education compulsory (UNESCO, 2020). It is required that at least 33 hours per year be allocated to topics related to climate change to be integrated into various subjects for students at all year levels.

Policy implementation is context-specific in nature (Bingham et al., 2019). Therefore, it is more important to learn “what conditions made a policy work” instead of simply borrowing a policy from another country. It is worth noting that before the legislation of making climate change a core part of the Italian curriculum, many consolidated efforts were made by the Ministry of Education, the Ministry of University and Research, and the Ministry of Environment, the three ministries that took the policy responsibility to advance EFS for the country (Smaniotto et al., 2023).

According to UNESCO’s (2021) global education monitoring report, the “Guidelines for Environmental Education and Sustainable Development”, which made climate change an official topic at the secondary level, was published in 2015 under Italy’s 2014-2020 National Operation Program for the School. In the 2017 National Curriculum Guideline, while climate change was officially integrated into the geography and biology curricula, SDGs were also linked to the curriculum design to

foster students' sense of global citizenship. EFS initiatives are also supported in post-secondary sectors (vocational education and training and universities) under the coordination of governance bodies such as the Higher Council for Public Education. Along with curriculum changes, the Italian government and the European Union partnered with non-governmental organisations to invest significant funding in school-based programs to promote climate change education as an integral component of global citizenship education (ibid). Compared to Hong Kong's fragmented EFS initiatives and marginalised EFS curriculum, these Italian national strategies and guidelines suggest that Italy was conscious of establishing links within its education settings at all levels so that EFS was promoted systemically and coherently.

Moreover, teacher training is emphasised in Italy's national guidelines. For example, the 2018 Strategic Plan for Citizenship Education specified the need for training to ensure educators have the knowledge, pedagogy, and resources to teach climate change (UNESCO, 2021). Such a strategy also comes with a substantial investment. To support the teaching of climate change education and teachers' training, a budget of 4 million euros has been allocated every year since 2020 (ibid). More importantly, to increase public awareness and participation in climate change education, a National Adaptation Plan was rolled out in 2014 to support the public's involvement in policy consultations, monitoring processes and public forums and the National Climate Change Adaptation Strategy was further implemented to develop climate change campaigns at different regional levels (ibid). While the Hong Kong EFS initiative tends to consolidate its top-down policy-making approach and discourage critical reflection in classrooms, the Italian's measurements demonstrate a definite capacity-building, empowering and democratising approach when promoting EFS to the whole society.

In summary, Italy's EFS strategies, including curriculum guidelines, public awareness and participation strategies, sector development guidelines and budget allocation, are well coordinated by national policy initiatives, which enable and empower different members of the society to be highly engaged in a more democratised way. The Italian approach not only displayed a strong form of EFS in formal, non-formal, or informal education settings but also created a policy synergy effect that finally led to the legislation of compulsory climate change education and, therefore, offered a number of important learning points for Hong Kong.

Recommendations

Based on the above comparisons between the EFS strategies in Hong Kong and Italy, several key changes need to be made for the Hong Kong government endeavours to promote EFS effectively. It is recommended that the CCNSD of Hong Kong:

1. be assigned as the leading agency of EFS to coordinate the planning and implementation of sustainability education initiatives by different departments to create policy synergy.
2. legalise and assert the public's involvement in policy cycles.
3. review the current climate change action plan and devise a complementary guideline about education for sustainability for relevant sectors towards the goal of making climate change education compulsory for all learners.

4. comprehensively review the curriculum guidelines for primary and secondary schools to integrate climate change and sustainability components into multiple disciplines.
5. reintroduce project-based inquiry pedagogy and incorporate critical thinking and open-answer assessment methods to develop students' thinking capacity.
6. allocate sufficient funding and resources to enhance teacher training in sustainability literacy, critical thinking literacy, and democratic pedagogies.
7. in the long term, expand education focus beyond climate change and extend to the sustainability of economic and social development.

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