

Green Schools for Sustainable Future

Mr. Varish, TGT Mathematics,
Directorate of Education, NCT of Delhi Bharat.
Mr. Deepak Sharma, TGT Natural Science,
Directorate of Education, NCT of Delhi Bharat.

Abstract

This paper is an attempt to discuss the concept of Green School from contemporary worldwide practices. A range of countries have adopted this system of Green Schools and integrated it in their education system. It is observed that the idea of sustainability is at the core in development and functioning of Green Schools. The stake holders. Who are part of Green Schools, are educating the young minds with principle of sustainability. It is observed that the main aim of these green schools is to inculcate sustainable behaviour through education for sustainable development. They provide students with opportunity to connect with nature and promote leadership for affirmative actions for environmental conservation. This paper further attempt to brings out the historical developments in national policies and education system which paved the way for Green Schools. There are organisations and recognised bodies which are promoting the principle of sustainability via promoting and certifying the Green Schools. The critical analysis of parameters used by these bodies for certifications showed that the role of teachers still needs acknowledgment. The ideas of green school indeed not new for India but it need more acceptance and promotion at national level. The awareness regarding Green Schools is need of the hour. The green school will surely promote environmental sensitive behaviours in youth. The sincere efforts from teachers, local administration, parents, school authorities and other stakeholders are key pillars of Green Schools. Their sincere and committed efforts will make our youth responsible environmental citizens or adults (Shimray, 2016).

Keywords: Green Schools, Sustainability, Environmental Sensitive Behaviour, Teachers, Students, Environmental Citizens etc.

The 27th Conference of the Parties (COP) of United Nations Framework Convention on Climate Change (UNFCCC) concluded in Egypt. There are different other environmental initiatives in function apart from this. UNFCCC has 198 countries as party to different operating mechanisms. UNFCCC is well acknowledged for bringing out two major agreements namely Kyoto Protocol and Paris Climate Agreement. These agreements at International level surely indicate that climate change is reality and a matter of great concern to the world. These climate issues certainly require interventions from all sphere of world. These conferences were focused on air pollution and its control for controlling ozone depletion. Since its inception year 1994 to till date UNFCCC has

been working towards controlling of Green House Gases. On the other hand, United Nation also established an international body called United Nations Environmental Programme (UNEP) in 1972 at Stockholm Conference for action plan to study the potential threats to Earth's environment. It was the initiative of UNEP that in 1992 UN Conference on Environment and Development – the Earth Summit-in Rio de Janerio defined the idea of sustainable development. The themes of sustainable development were identified. This paved the way and a hope for protection of environment and saving the nature. Countries were working on different ideas of sustainability or action plans to promote sustainability in the citizens. It was in 2002 at the World Summit on

Sustainable Development (WSSD) held in Johannesburg which formulated the concept and need of Green Schools.

This is evident from the international and national initiatives pertaining to climate mitigation that sustainability is the key virtue to be ingrained in every citizen for a peaceful life. It is quintessential to promote the idea of sustainability in every individual in order to promote conscious and judicious use of resources. The concept of sustainability cannot be acquired in a day. It requires multiple and timely actions with an intent to promote sensitivity in a person towards the nature and others. In order to promote sustainable behaviour among all individual then it must come through agents of socialisation.

After family, schools are considered to be the best place for promoting sustainability in young minds. The famous sociologist Talcott parsons (1961) also argues that the school acts as an agent of secondary socialisation. The students get an opportunity to learn not just the particularistic values of their own family, but also the universalistic values of the whole of society.

The idea of sustainability is indeed a universalistic value which is essential for the inclusive growth of the society. In order to promote this virtue of sustainability, the green school can play a crucial role. The green school are not mere concepts. They exist world-wide. Different countries and nations have developed their own aims and objectives to be achieved through Green Schools.

Green School: A World view

Many countries in line with 'UN decade of Education for sustainable development tried to spread awareness, influencing policy and generating good practices in education at international level. These developments for working towards environment lead to such initiatives like the idea of Green Schools. Such activities can be seen on the global landscape and today their relevance can understand very well.

Green School in China

In 2000, nearly 105 schools were granted National Green Award. These schools were awarded to acknowledge their efforts towards conservation of environment by promoting environmental education (EE) (Wu, 2002). These schools facilitate environmental education (EE) in primary and middle schools of China. The school principal focus on integrating environmental

education into school administration and teaching. Teacher and students constitute an EE committee which prepare an EE plan for whole school by identifying themes. They try to bring relevant themes of environmental conservation in the classrooms through classroom study and extracurricular activities. The school thrive to inculcate EE capabilities both in teacher and students. This result in high environmental awareness among teachers and students.

Green Schools by Centre for Ecoliteracy, Berkeley, California

Centre for ecoliteracy defines Green Schools as those which prepare students to become leaders and citizens who understand how the natural world works, see the patterns that connect human activity to nature, and have the knowledge, values, and skills to act effectively on that understanding.

It furthers says that there is no blue print of a green school and the hallmark of this movement is its diversity being a green school is evolving process.

The centre for Ecoliteracy has identified four areas that are particularly fertile for learning about sustainable living: food, the campus, community, and teaching and learning. A close interaction between them and better understanding to manage these four areas can surely help in becoming a green school.

Green school programme by Ministry of National Education and Ministry of Environment, Indonesia

A resource material on strategic roadmap for developing Green Schools programme was brought out by UNESCO for Indonesia in 2011.

Here the idea behind this Green school programme was to strengthen the pre existing Green school initiative i.e. Adiwiyata Programme.

In this the idea of Green school is that which support environmental sustainable development i.e. ESD, explicitly integrating social, environmental and economic dimensions while capturing the value of resilience, in its students, which is immensely in Indonesian context due to its vulnerability to natural disaster.

These school works under certain goals like to increase awareness and understanding, among students, communities, and all the stakeholders, both internal and external, of interrelationships and interdependencies between natural and

human systems. They also promote capacity to understand and make decisions about the key issues affecting an individual, surrounding and their environment.

Green Schools for Green Bhutan

Bhutan's idea of green school was influenced by their change in political ideology. Here the main shift was to move from Gross Domestic Product index as development indicator to Gross National Happiness index as sole indicator of development.

In light of this Bhutan Ministry of education launched a nation-wide reform initiative called Educating for Gross National Happiness (Drukpa & Brien, n.p,13).

This leads to establishing Green Schools for green Bhutan. The idea behind a green school is that it nurtures and shape a child's development in the school system through eight greenery dimensions: environmental, intellectual, academic, social, cultural, spiritual, aesthetic and moral. These schools also take care to build and promote a cordial relation with parents and community and make them actively involved in the education of their children. They also consider the aspect of inclusive education as these schools ensure that all children from the community get equal chance of attending the school. A green school also caters to the needs of children with special needs. In addition to all these, a green school here ensure the basic needs of a child, ensure safety and maintaining and monitoring each individual's health, hygiene and growth.

Above all a green school provides respect, care, warmth, and delight in school. Teachers and students treat each other fairly and value everyone's uniqueness and contributions to school growth.

This list of green school and phenomenon of green school doesn't end here. There are different countries who are also promoting and encouraging their citizens to work toward green school through policy transformations.

Looking for similar concepts of school in India is not new. There are historically policy interventions and updates which resulted in creating a platform for green practices (pro environmental activities) as integral part of school. Some of the historical development in Indian education system needs to be discussed before understanding Green Schools in India.

Historical Roots of Green School in India

It was the historical Conference on Human Environment in 1971 at Stockholm which resulted in establishment of National Council of Environmental Planning and Coordination in India for amalgamating environment and development. After this the Department for Environment was set up and converted into a full-fledged Ministry. Legal frameworks for environmental conservations were developed thereafter. One of the major work was National Forest Policy of 1988 which set aside the earlier forest policies of colonial times.

Simultaneous efforts were being made in education system ranging from Mahatma Gandhi's Basic Education and recommendations by the Education Commission (1964-66) and the National Policy on Education, 1986 (including Programme of Action, POA-1992) emphasizing on the need of addressing and including environmental concerns at all levels of schooling. To quote, the National Policy states 'There is a paramount need to create a consciousness of the environment. It must permeate all ages and sections of society, beginning with the child. Environmental consciousness should inform teaching in schools and colleges. This aspect will be integrated into the entire educational process.' Consequently, Environmental Education (EE) has been one of the priority areas of concern in all the curriculum development programmes at the NCERT (1975, 1988, 2000 and 2005).

A major boost came for EE by the Supreme Court of India which directed that EE should be an integral and compulsory part of the school curriculum.

National Curriculum Framework-2005 supported the infused and integrated approach to EE laying great emphasis on the habitat of students and its relation to learning.

The roots of initiatives like Green Schools, green buildings, environmental education in schools etc. can be traced back to the judgment of the honourable Supreme Court in 2003 where it gave direction to NCERT to embed environmental education in schools.

Some of these practices took start from there but they have not reached to that level which they should by keeping the current scenario in mind.

Green School practices in India

In initial steps towards greening the school campuses or accepting green practices in schools

in India can be traced back to the opening of Eco-Clubs in schools. Initially, the activities which were taken up by these clubs was just to make the environment of school clean and green with plantation drives or spreading awareness about saving the nature. These clubs still exist in schools and have broadened the arena of their working and consideration of environmental issues.

With the major change in types of environmental issues, it is very much expected from schools to take steps for the betterment of the environment. The least which we can expect from the school that they should start discussing these issues with their students and should bring these issues to a common discourse of day to day talks among students.

Today schools have started taking initiatives on their own to tackle these issues. Some of such initiatives as follow:

Green School Programme by Centre for Science and Environment (CSE), Delhi

CSE is a Delhi based N.G.O who has started this endeavour. It is running this program in throughout the India.

According to CSE, a Green School is one which is a resource-efficient building, one that uses little water, optimizes energy efficiency, minimizes waste-generation, catches and recycles water and provides healthier space for its occupants as compared to a conventional building.

According to them a Green School works towards conserving and managing the air, water, land, waste, food and energy. So these schools are helping the environment in sustenance. (Shankar, 17).

Green School, Green School Alliance Global, Gujarat

Green School Alliance Global is a U.S based global association of Green Schools.

According to Rawat (n.d.), a Green school should not be treated as different as any school can be transformed into the same. They have designed their concept of green school based on five elements of nature i.e. Prithvi (earth)-sustainable campus, Vayu(air)- air quality in campus, Agni(Energy)- green energy resources, Jal (water)- water sourcing like rain water, Akash(Sky)- understanding and use of space and its related technology.

A green school prepare students to become leaders and citizens who understand how the

natural world works, see connection in human activities and Mother Nature, and have knowledge, values, and skills to act effectively on that understanding.

It further makes learning communities more sustainable, explores solutions related to daily environmental problems and take responsible action to protect the same.

Students of Green School learn sustainability from the teaching and learning practices of school.

Green Schools, Indian Green Building Council (I.G.B.C), Hyderabad

I.G.B.C is part of Confederation of Indian Industry which is a non-governmental organisation. It offers different services like developing new green building rating programmes, certification services and green building training programme.

In a handbook of 2015, I.G.B.C consider a school efficient to be a Green school if it addresses eco-education, health & hygiene besides the infrastructural facilities, energy efficiency, water conservation and waste management. Aspects like nutrition, physical activity and safety are also addressed. In India there are two agencies which are running a Green school certification programme, they are Centre for Science and Environment (C.S.E.) and Indian Green Building Council (I.G.B.C.) (Krishnan, 2016). Both of them certify and grade schools on the basis of the green activities which they follow in their schools.

Green School: Need of Sustainable Future

These worldwide anecdotes have shown us that our future is under threat and we need affirmative actions. A green school can prove to be the future saviour in this climate distress. These practices have indicated that a green school is visualized as a school which is guided by the principles of environmental sustainability. It mainly tries to create a conducive environment to fully utilize all resources and opportunities inside and outside the school campus to promote sensitivity in teachers and students for environmental sustainability through active involvement of the community. This demands on-going, continuous and synergistic efforts of all stakeholders towards improving the environment of the school and its surroundings (Sharma and Pandya, 2015).

A green school is conceptualised as a school where the environmental education is taught in

integrated manner and it is both part of academics and administration of school.

Figure 1. Conceptualisation of Green Schools



In Green Schools, students' learning experiences are not confined to their classroom but extend outside their classroom. These sites are resources and used as opportunities for students to engage in direct and first-hand experiences to connect them to the real world. These help students to

References:

1. Drupka, K. & Brien, K. (2013). Educating for Gross National Happiness: A New Paradigm for Education in Bhutan. *Antistasis*, 3 (2), 13.
2. Krishnan, N. (2016). A green curriculum. *Teacher, the professional development community for educators*, 10 (4), 44.
3. National Council of Educational Research and Training (2005). *National Curriculum Framework*, Author, New Delhi.
4. Parson, T. (1959). The school class as a social system: Some of its functions in American Society. *Harvard Educational Review*, 29 (4), 297-318.
5. Rawat, V. (n. d.). Retrieved from <http://www.virendrarawat.in/greenschool.html>
6. Shankar, A. (2017). *Green schools programme, A manual to assess the green performance of your school*. Center for Science and Education, New Delhi.
7. Sharma, K., & Pandya, M. (2015), *Towards a green school on education for sustainable development for Elementary schools*. NCERT publication
8. Shimray, C. (2016). *Teaching Environmental Education: Trends and practices in India*. New Delhi, India: Thousand Oaks: Sage Publications.
9. Wu, Z. (2002). Green Schools in China. *The Journal of Environmental Education*, 34(1), 21-25.

consolidate and apply knowledge, acquire a better understanding of environmental processes, look for inter-relationships and issues, acquire a number of life skills and help foster attitudes, values, and sensitivity towards environmental concerns. Such an education is holistic in nature and ensures the overall development of the students as it is integrated and embedded across all aspects of their school, encompassing formal and informal learning experiences inside and outside the school premises.

We can promote true spirit of sustainability in young minds by active engagements. We cannot put all the onus on the policy makers or curriculum developers for transformation in the mind sets of young individual. A sensitive and dedicated perspective towards sustainability can be achieved if all schools start greening their campuses.