



## Twinning of Education And Sustainable Development Goal

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### Abstract

Education plays a vivacious role in creating a sustainable world. It helps to understand knowledge, skills, thoughtfulness, values and actions which are in turn required to attain sustainability. It ensures environmental protection and conservation, promotes social equity and encourages sustainability. The teachers can provide simple ways or actions to make the things achievable towards some of the SDGs.

An essential role is played by the school and the teacher for the pressing need of sustainable development by defining relevant learning objectives and learning contents, introducing pedagogies that help the students. Actions that can be used in real life to make the goals achievable

This study was done in a school in Delhi to understand what the school and the teachers are doing to achieve the SDG. The role of school is not only to provide knowledge to students but to lead to the actions are taken by teachers in the classroom and how it can be integrated in the life of any student.

The results that irrespective of the subject being taught by the teacher, he/she has taken to the actions which can be carried in day-to-day life by the school authorities or the students. The initiates were very small in nature yet the impact was big and long lasting on the students. These initiates can make the children aware and responsible citizen and future ready for the country.

**Key words-** SDG, real actions, responsible citizens

### Introduction

The development that meets the needs of the present generations without compromising the ability of future generations to meet their own needs will last longer and will be sustainable, Sustainable Development is based on the three pillars Economic, Environmental and social.

The Sustainable Development Goals are designed to bring people together to improve life around the world. Created by the United Nations, they are a set of common goals to help us overcome global challenges like poverty, inequality, climate change, and more. They seek to harmonize three core components for the future: economic growth, social inclusion, and environmental protection.

In September 2015, the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) detailed therein were formally adopted at the United Nations (UN) Sustainable Development Summit. The SDGs succeed the Millennium Development Goals (MDGs) and guide the global path of sustainable development after 2015.

It is a plan of action for people, planet and prosperity, with countries and all stakeholders acting in collaborative partnership to implement this plan. The agenda seeks to strengthen universal peace and provides a common vision for peaceful societies. It is a unanimous call for 'a people-centred and planet-sensitive agenda to ensure human dignity, equality, environmental stewardship, healthy economies, freedom from want and fear, and a renewed global partnership for sustainable development'

### The 17 goals for sustainable development as laid by the UN are-

- 1.No Poverty – End poverty in all its forms everywhere
2. Zero Hunger – End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3. Good Health and Well-Being – Ensure healthy lives and promote well-being for all at all ages
4. Quality Education – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5. Gender Equality – Achieve gender equality and empower all women and girls
6. Clean Water and Sanitation – Ensure availability and sustainable management of water and sanitation for all
7. Affordable and Clean Energy – Ensure access to affordable, reliable, sustainable and clean energy for all
8. Decent Work and Economic Growth – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9. Industry, Innovation and Infrastructure – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
10. Reduced Inequalities – Reduce inequality within and among countries
11. Sustainable Cities and Communities – Make cities and human settlements inclusive, safe, resilient and sustainable.
12. Responsible Consumption and Production – Ensure sustainable consumption and production patterns.

13. Climate Action – Take urgent action to combat climate change and its impacts.
14. Life below Water – Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15. Life on Land – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16. Peace, Justice and Strong Institutions – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17. Partnerships for the Goals – Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Two goals in particular were studied in depth for this research

GOAL 6 focusses on clean water and sanitation for all people. This goal states that improving access to clean drinking water, sanitation and hygienic facilities needs to be addressed for a large portion of our world. This goal not only focuses on human consumption of water, but the quality and sustainability of water resources worldwide. This goal addresses access to water, managing our impact on water sources, protecting our ecosystems and supporting our communities to improve sanitation management.

Goal 7 aims to correct the enormous imbalance by ensuring everyone has access to affordable, reliable, and modern energy services. This goal states that Energy is power: power to do, participate and build. Energy also powers our economy, transportation, health and livelihoods. Harnessing and harvesting energy resources, like wind, solar, water, oil and gas, impacts our environment and the ability for future generations to do the same. This goal seeks to establish sustainable energy systems that reduce our impact on the planet, and address energy inequalities that constrain human and economic development.

### Need for the Study

These goals can help engage students in becoming aware and responsible citizens of the society. Some benefits for the students are -

- It draws attention to some of the biggest environmental challenges in the world today. Sanitation, sustainability, pollution, and climate action are all addressed. Besides bringing awareness they break down each goal into a set of achievable sub-targets. Teachers can apply these sub-targets in their schools/classes so that students develop ways in which they can make an impact on improving the world that they live in.
- The SDGs deal with life-affecting human issues such as poverty, inequality, economic growth, peace, and justice. Many students might not be aware of these issues so it opens students' minds to different communities and experiences outside of their own as a result of empathy in the classroom.
- SDGs can be used to provide new perspectives and real-world context to various topic/subjects

UNESCO (2017) states that education for Sustainable Development can contribute in achieving the SDGs by, first, developing cross-cutting sustainability competencies that are needed to deal with many different sustainability challenges and to relate the different SDGs to each other. Second, Education for Sustainable Development (ESD) can equip learners with the specific cognitive, socio-emotional and behavioural learning outcomes that enable them to deal with the particular challenge of each goal. To make it possible for everyone around the world to take action in favour of the SDGs, all educational institutions must consider it their responsibility to deal intensively with sustainable development issues, to foster the development of sustainability competencies and to develop the specific learning outcomes related to all SDGs. Therefore, it is vital not only to include SDG-related contents in the curricula, but also to use action-oriented transformative pedagogy.

Keeping the sustainable development goals in mind globally a movement was started and as a researcher an effort was made to study them locally. A study was done in two government schools in Delhi to understand the efforts made by the school authorities and the teachers in these schools. Due to limitation of time only two goals out of the 17 were taken up for detailed study.

### The Objectives of the study were

- To evaluate implementation of Sustainable Development Goal 6 (SDG6): Clean water and sanitation in two government schools in Delhi.
- To evaluate implementation of Sustainable Development Goal 7 (SDG7): Affordable and clean energy in two government schools in Delhi.
- To understand the Integration of these goals in the Curriculum.

### Methodology

The study was done over a period of 4 months to understand the implementation of sustainable development practices in schools. Only two government schools in Delhi were taken up for the detailed study. The data was collected by naturalistic observations in non-participant setting, interviewing the principal and teachers of the school.

Sustainable Development **GOAL 6** and **GOAL 7** were taken up for the study because a lot of activities and practices in our schools were revolving around them.

Water is a basic need and similarly different energies are necessary for our survival. We thought that working on these goals at school level will help us know more about this goal and we will be able collect our data in a detailed way. In this way our findings and analysis will also be rich and detailed. It will also broaden our perspective and understanding on the topic.

All this made us select the topic of Education for sustainable development in schools (GOAL 6 AND GOAL 7)

### Tools Used

**A Structured interview** was conducted with the school principal. Initially 16 questions related to the goals of sustainable development were prepared for the interview however they were scaled down to 9 keeping in mind the most pertinent ones and to understand the polies/programs in depth.

**Naturalistic Observation** of the school premises and the classrooms

The researcher observed various activities, projects, competitions, assembly and board decorations etc in the schools. They can be of great importance in a classroom and a school.

For SDG 6 a few topics have been suggested about which learners should develop understanding

- ❖ The global water cycle and water distribution.
- ❖ The importance of equitable access to safe and affordable drinking water.
- ❖ The importance of adequate and equitable sanitation and hygiene,
- ❖ Water scarcity and water use efficiency.
- ❖ Water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.

For SDG 7 a few topics have been suggested about which learners should develop understanding

Following are the suggested topics about which learners should develop understanding: -

- ❖ Different energy types, especially renewable energies like solar, wind, water, geothermal, tidal.
- ❖ Energy efficiency and sufficiency in energy usage
- ❖ Strategies: Centralized versus decentralized energy production; energy self-sufficiency, e.g. via local energy supply companies
- ❖ Environmental impacts and issues of energy production, supply and usage (e.g. climate change, grey energy
- ❖ Peak of oil production and energy security – (over)dependence on non-renewable energies like oil
- ❖ Bridging technologies and technology for a ‘cleaner’ use of fossil fuels

### Findings

Both the schools and class rooms were observed for a period of 4 months. Two school principals and 10 teachers (5 from each school) were interviewed, based on that the following results were obtained

- All were aware about the nation-wide campaigns being carried like- SARVA SHIKSHA ABHIYAN and SWACH BHARAT CAMPAIGN as a sustainable development goal.
- Drives related to air pollution, tree plantation, water conservation, poster making competitions use of dustbins, single plastic were being conducted to spread awareness among students.
- In one of the schools used notebooks, examination paper, charts and old newspapers were sold to the scarp dealer however in the other school they were reused in some way either by giving to a scrap collector or by promoting the idea of 3-R(Reduce, Reuse and Recycle). Collaborations with NGOs like Chintan and Jaguruti was also done. They collect the waste material and recycle it and in return give paper bags, writing pads to the school.
- In both the school’s morning assembly, street plays were organized to bring awareness amongst schoolchildren. In one of the schools the students used to march in a nearby residential area and make the residents near the school aware about energy conservation, cleanliness and sustainable consumption.
- Targets for Goal 6 states “Universal and equitable access to safe and affordable drinking water should be available for all”. In both the schools multiple water coolers were placed in the campus with RO facilities. The principal ensured that the water coolers were regularly cleaned and the date of last cleaning was written on the water purifiers. Safe drinking water was available to all in the school. So, it was being practiced in both the schools.
- Targets for goal 6 also that “equitable sanitation and hygiene for all” In both the schools’ separate toilets for boys, girls, male staff and female staff were constructed. Proper cleanliness and hygiene were maintained. Washrooms were washed twice a day one before the school began and once after the dispersal of students by the cleanliness staff.
- In both the schools rain water harvesting system was present keeping in view water as a scarce resource, water stored was used for watering plants in corridors and cleaning purposes. Target for goal 6 also states that “Sanitation -related activities and programmes, including water harvesting, desalination, water efficiency, waste water treatment, recycling and reuse” is a major target to transform the world. So, we can say that both the schools had awareness about major issue of water scarcity and had taken measure to save water by installing Rain Water Harvesting systems in schools.
- In the article “Sustainable foundations a guide for teaching the sustainable development goals” also states that “Learners should communicate and participate in strategies, ensure water access and implement water saving measures.” which was observed in an example where children were sharing the implementation water saving techniques at personal level.

*During one of the classes when the teacher was teaching the concept of VOLUME in mathematics to grade 3 she used water to explain the concept, after the class a child told the teacher that water should not be thrown rather it should be used to water the plants in the school garden. This shows that children had awareness about water conservation and reuse of water.*

- It was observed that children were responsible towards the water usage (objective 1) as they used to ensure that taps were not left open after using.
- It was observed that that objective 1 (clean water and sanitation) was being fulfilled in both the schools as there were various poster making interschool competitions were being organized on water conservation and save energy so that students understands its importance.
- Use of Alternative energy in school- In both the schools, solar panels were installed. They were installed keeping in mind the limited availability of fossil fuels. Further solar power is a free source whereas electricity is expensive and not available everywhere.

Apart from solar panels one of the schools had two compost pits. The manure produced from it is used in gardening and this helps in controlling soil pollution.

- Various awareness programmes /Inter school competition were organized so that the students could understand the need for energy saving especially *why electricity is important and why there is a need to save it.*
- Energy saving devices like LED's were being installed in classes.

Besides these it was observed that the students of the school had developed certain values over the period of time these were-

- Responsible hygienic daily habits and routines.
- Understand appropriate personal hygiene: washing hands, keeping the surroundings clean.
- Making informed decisions about water at an individual or societal level.
- Safe use of toilets and urinals, including cleansing and\ washing.
- Responsible and sustainable consumption.
- Understanding and acting responsibly on environmental issues related to maintaining and protecting water quality for all life systems on Earth.
- Conservation and safety.
- Environmentally sound ethics.
- Commitment to energy conservation.
- Daily living habits and behaviour for sustainable living.
- Reuse items such as plastic bags, glass jars, plastic containers, envelopes and paper.

### Conclusion

During the study, it was observed that both the schools were doing a lot of activities/provisions for the sustainability. Hence, we can say that "Education is an essential tool in addressing human resource capacity and developing ownership for improved water and sanitation, empowering individuals to change their behaviours and advocate wider change in infrastructure development and other active measures, and to build up a stronger voice at local level.

Though, it was observed that in both the schools' various initiatives were taken to develop water literacy, including knowledge of how to use judiciously use water. Yet, schools can take more such efforts to help fulfil sustainable development goals for better world

### References

- 1) Education for Sustainable Development Goals published in 2017 by United Nations.
- 2) Sustainable Foundation, a guide for teaching Sustainable Development Goals by Manitoba Council for International Cooperation.
- 3) A Curriculum Framework for the Sustainable Development Goals by Commonwealth published in July 2017.
- 4) 17 ways to transform our world by United Nations.
- 5) Human Rights and the 2030 Agenda for Sustainable Development <http://www.ohchr.org/EN/Issues/MDG/Pages/The2030Agenda.aspx>
- 6) OECD and the Sustainable Development Goals: Delivering on universal goals and targets <https://www.oecd.org/dac/sustainable-development-goals.htm>
- 7) SDG Indicators <http://unstats.un.org/sdgs/indicators/indicators-list/>
- 8) <https://swachhbharatmission.ddws.gov.in/>