



INSPIRING STUDENTS FOR GREENING WITH TECHNOLOGICAL ADVANCEMENTS

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Abstract

Technology has become a huge part of everyday society's life. When societies know more about the development in a technology, they become able to take advantage of it. When an innovation achieves a certain point after it has been presented and promoted, this technology becomes part of the society. Digital technology has entered each process and activity made by the social system. The effects of technology on the environment are both obvious and subtle. The more obvious effects include the depletion of nonrenewable natural resources such as petroleum, coal, ores, and the added pollution of air, water, and land. The more subtle effects include debates over long-term effects e.g., global warming, deforestation, natural habitat destruction, coastal wetland loss. So, an initiative was taken to inspire students for greening with technological advancements by two highly motivating projects: Nokia- Planet ke Rakhwale and Microsoft: Create to Inspire School Programmes. This article presents the overview of these two projects and students' role in protecting our planet.

Keywords: Technology, Environment, Nokia- Planet ke Rakhwale, Microsoft: Create to Inspire School Programmes



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The word "technology" is a broad term and does not simply refer to high-tech inventions or computerization, which is actually the misconception. Technology comprises the crafting of materials and transforming them into implements that allow man to control or manipulate natural resources in order to meet his needs (Canatoria & Malburg, 2010). The first significant advancement in technology was the invention of fire around 1 million years ago, this enabled humans to cook food, and create other items such as spears and utensils. Technology now has improved sharply, and with TVs, MP3s, Computers etc., our way of life has changed. We have become the people of modern ideas and innovations & this shows our stinking richness (Gupta, M).

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innovation achieves a certain point after it has been presented and promoted, this technology becomes part of the society. Digital technology has entered each process and activity made by the social system.(Puricelli, F, 2011).

Technology provides an understanding, and an appreciation for the world around us. Advancements in technology brought the finer things in life, making it necessary for man to accelerate his economic growth. Technology was used to speed up production and manufacture of goods, to provide better transport and delivery as well as make the methods of communication not only faster but also, far reaching. Trade and commerce flourished at faster rates due to technological advancements and brought about globalization. As trade and commerce grew, the more it heightened the impact of technology on natural environment wherein air, land and water reached certain degrees of pollution, degradation and contamination (Canatoria & Malburg, 2010).

Most modern technological processes produce unwanted by products in addition to the desired products, which is known as industrial waste and pollution. While most material waste is re-used in the industrial process, many forms are released into the environment, with negative environmental side effects, such as pollution and lack of sustainability. Different social and political systems establish different balances between the value they place on additional goods versus the disvalues of waste products and pollution. Some technologies are designed specifically with the environment in mind, but most are designed first for economic or ergonomic effects. Historically, the value of a clean environment and more efficient productive processes has been the result of an increase in the wealth of society, because once people are able to provide for their basic needs, they are able to focus on less-tangible goods such as clean air and water.

The effects of technology on the environment are both obvious and subtle. The more obvious effects include the depletion of nonrenewable natural resources (such as petroleum, coal, ores), and the added pollution of air, water, and land. The more subtle effects include debates over long-term effects (e.g., global warming, deforestation, natural habitat destruction, coastal wetland loss.) Greenhouse gas emissions have brought us global warming, melting glaciers, rising sea levels, air pollution, ocean acidification, disrupted marine and wildlife biodiversity, groundwater contamination, soil depletion and a host of other adverse effects that stem from other technological innovations that were conceptualized without considering the consequences. All these effects are intertwined as a result of gas emissions that accumulated in the atmosphere. It eventually penetrated the ozone layer found in the Earth's stratosphere.

Each wave of technology creates a set of waste previously unknown by humans: toxic waste, radioactive waste, electronic waste.

One of the main problems is the lack of an effective way to remove these pollutants on a large scale expediently. In nature, organisms "recycle" the wastes of other organisms, for example, plants produce oxygen as a by-product of photosynthesis, oxygen-breathing organisms use oxygen to metabolize food, producing carbon dioxide as a by-product, which plants use in a process to make sugar, with oxygen as a waste in the first place. No such mechanism exists for the removal of technological wastes.

It has affected our lives. Have you ever think what happens to your old phones and laptops when you get a new one?

Computers are considered an important factor in our daily lives. In fact, it became all around in a short period of time. Now it can be seen in desktops, cars and cell phones. Since the creation of computers achieved an entire better approach to transmit and store data. Digital technology became commonly used for downloading music, and watching movies at home either by DVDs or purchasing it online. Digital music records are not quite the same as traditional recording media. Obviously, these digital ones are reproducible, portable and free(Katz, 2010). By 2014, smart phone markets are going to overtake computer users reaching 30% of the cell phone business worldwide (Hendery, 2009). For the continuous desire of wanting better quality in sound, signal and images, cell phones are now better than ever. It includes everything a person can think of featuring from blogging, recording and uploading to browsing the Internet. Notably, cell phones have been developed to become a mini computer including high-resolution user interface, digital images and video cameras, memory storage, pre-installed keyboard and applications, and even more applications that could be downloaded by the user(Cochrane & Bateman, 2010).

But the modern world gadgets use technology of radiations and other harmful rays that have immense affect on the environment. They imbalance all the processes in turn causing a great affect on the entire living world and also the eco-cycle(Gupta, M). Cell phones can cause brain tumors and computers cause problems with your hands and fingers, and posture. So is technology really helping us? Are the pros outweighing the cons. Should we take the risks?

Communities take extra effort to green their lifestyle and lessen the negative impacts of technology on natural environment. On a brighter side, new technology brought about what will be known in man's history as the Computer Age. This era will become significant not

only in greatly improving trade and commerce but also in bringing forth instruments that will lessen the accumulated negative effects of technology on the Earth's natural resources.

Green technology has come up with better solutions of generating heat and energy. The sun's powerful UV rays are being harnessed through solar panels instead of the wood burning process. The kinetic powers of wind and water currents are being utilized to produce electricity that can lessen the demands for coal and fossil fuels.

Present day Green technology is decisively geared at lessening if not reversing all the negative impacts of technology since millions of people especially children have come to develop respiratory diseases as chronic illness (Canatoria & Malburg, 2010). So, not only adults, it has also affected lives of children. With the introduction of Mp3s, TVs and computers, life for humans have become easier but also lazier. Obesity in children is at peak levels in India, United States, etc. Kids are preferring to stay at home and play computer games rather than going out and socializing like they used to. Quite simply kids are losing their social life, getting fatter and are having low academic achievements all because of their addictive games on Xboxes, Play Stations etc.

Modern technologies have made instructive information for classrooms and home assignments easier and simpler. It provides children, who have difficulties in learning the traditional way, with educational games that would help them in the process of learning. Alternatively from attending classes, online courses are offered to college students in advantage. The progress of the innovation of technology is continuing to improve the education sector for coming generations. Students today are called 'screenagers', 'digital natives' or 'digital kids' because they were born in a complicated digital world based on technology. Children are an asset to nation and future of a nation depends on them. So, 'EARTH' NGO selected school students to inspire them to grow along with nature. Since last 8 years various projects has been undertaken by the organization to draw the attention of the students and the society towards different environmental issues. Two of them are discussed below.

“Nokia- Planet Ke Rakhwale” Campaign

EARTH NGO in collaboration with Nokia, completed a project on E-waste Awareness named “Nokia-Planet Ke Rakhwale” which was done in 32 Schools in Rohtak and Mandi Adampur Tehsil of Hissar District of Haryana from Nov 2011 to August 2012. Under this project, the school students were sensitized toward the harmful effect caused to the nature due to technological advancement and irrational usage of natural resources. In this project, school students were shown the short films on hazardous impact of advancement on natural

resources, the illegal and irresponsible recycling practices and how we can help in conserving the natural resources by responsible recycling of e-waste. In 11 Schools of Rohtak e-waste collection bins were placed and 144 Mobile phones, 296 chargers and 205 batteries along with 235 leads and headphones were collected and sent for recycling.

Microsoft Create To Inspire School Programme:

Microsoft Create to Inspire School Programme was done from 1 July 2014 to 30 January 2015. Under this programme the Teachers of the selected schools of Rohtak Block of Haryana were trained for 14 modules related to different Environmental issues. On regular basis the coordinators from EARTH NGO visited the schools and help in the implementation of programme. Showcase workshops were being organized for interaction and inspiring Teachers of different schools and which in turn inspires the students. Basically the main concept of this programme was to create an environment which inspires the students to develop ideas how they can help the society in developing by moving along with nature instead of developing against the nature. In this programme various Government departments were also involved for better implementation of the project. The summary of the project is as mentioned below:

Type of School	No. of Schools
Government Schools	57
Private Schools	52

Status Update:

Total No. of Schools Enrolled	109
No. of Schools who completed the project (i.e finished 7 or more toolkits)	62
No. of Schools who participated (all those schools who did less than 7 toolkits)	12
No. of dropouts (schools which enrolled but did not do any toolkit)	35

Status of Tool kits done by Schools:

Sr.	Toolkit Name	No. of Schools who finished Tool Kit
1	Value of Nature	59
2	Lessons for design – bio mimicry	19
3	Turn off Save On	68
4	Carbon Footprint	24

5	Product Design	32
6	Think before buying	41
7	Waste Journey	47
8	Packaging waste	53
9	E-wareness	69
10	Be Fuelish or Be Smart	38
11	Environmental Career	22
12	Environmental Petition	12
13	Water Water Everywhere	52
14	Go Organic	31

Deatil of e-waste Collected:

No. of Mobile Handsets	391
No. of Mobile Chargers	1283
Accessories	463

Government and Institutional Partnership:

1. Additional Deputy Commissioner, Rohtak- In Initiation of Project in Government Schools
2. Block Education Officer- In Execution of Programme in Govt. School
3. Assistant Project Coordinator Sarvshiksha Abhiyaan- In Coordination of Programme in Govt. Schools.
4. Haryana State Pollution Control Board
5. Forest Department- In Providing Plants.

This project was although done with the school for 07 months, but it's a continuous and ongoing project as the teachers are trained to work on 14 environmental issues and students sensitized and motivated under this project will continue to work for the betterment of environment around them.

It is rightly said that "Technology, when misused, poisons air, soil, water and lives. But a world without technology would be prey to something worse: the impersonal ruthlessness of the natural order, in which the health of a species depends on relentless sacrifice of the weak. " Thus the need of the hour is to adhere to more environmentally friendly practices such as switching to fluorescent bulbs and driving electric cars which is referred to as Going Green. Recycling material goods, using alternative energies and buying local goods are all

components of the Green lifestyle. Nowadays, jute & paper bags are encouraged rather than plastic bags to carry various materials Technology will inevitably continue to grow, but we have to ask- Is technology doing more good than harm?

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