

Education for Sustainable Development in Schools - A Case Study

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Abstract: EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD) emphasizes the need for stimulating a holistic, integrated and interdisciplinary approach to developing the knowledge, skills and habits needed for a sustainable future as well as changes in values, thinking, and lifestyles. Sustainable development generally has three components: environment, society and economy. A project GREEN DREAM was implemented for the students of Cygnet Public School, Hadapsar, Pune between the age group 11-15 years to assess their knowledge about sustainability. During the course of the implementation of the project surveys were conducted to assess their base level knowledge and sessions were then designed for one and a half hours based on the knowledge of the students. The sessions consisted of three major components: Green buildings, Waste management and ecological footprint. By the end of the implementation 75% of the students claimed to have understood the concept of green buildings, 69% knew about ecological footprints and 77% understood waste management.

Keywords – ESD, Sustainable development, Pune.

I. Introduction

1.1 Sustainable Development

Sustainable development is continually evolving, which makes it difficult to define. One of the original descriptions of sustainable development defined by the Brundtland Commission: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Sustainable development generally has three components: environment, society, and economy. The well-being of these three areas is interlinked and not separate.

1.2. Education for Sustainable Development (ESD)

There is a difference between education about sustainable development and education for sustainable development. Education about sustainable development simply discusses the topic and awareness of the issues. While education for sustainable development involves application and solution to design sustainable systems, education for Sustainable Development allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future.

Education for Sustainable Development emphasizes on including key sustainable development issues into teaching and learning for example, climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption. It also should involve participatory teaching and learning methods to motivate and empower learners to change their habits and take action for sustainable development. Education for Sustainable Development promotes skills like critical thinking, imagining future scenarios and making decisions in a collaborative way.

ESD promotes efforts to restructure the education curriculum with the changing environmental scenario.

II. Literature review

One of the findings of 2005-2014 United Nations decade for Education for Sustainable Development (DESD) is that Young people are seen as key agents of change in moving towards a more sustainable world. They are growing up in the digital age, which engenders new connections, access to unlimited information and new possibilities for creating agency and change. Bilec and others have concluded that creating sustainable solution offers many challenges. A strong education, mentors, and informed stakeholders will provide necessary foundation toward a sustainable future.

III. Problem statement

Are the students aware of the present environmental scenario, global warming, climate change and do they consciously take steps in achieving sustainable future? The students have superficial knowledge of such disciplines. Although they study these topics in their curriculum the practical applications are however neglected.

Youth is the greatest treasure of the world. It is an inexhaustible source of energy. An effort has been made to educate them in the importance and urgency of sustainable development and motivating them to accept sustainable habits and lifestyle and commit themselves to it in the future. The students today will be decision makers of tomorrow and this project aimed at empowering them to take the right decisions.

IV. Methodology

Educating students can have a great positive impact on sustainability. The identification of the target age group was done and a baseline survey was conducted by distributing questionnaires to determine the existing knowledge of the students. The sessions were then conducted on the three components: green buildings, waste management and ecological footprint along with discussions of the practical applications. A Sustainable Development Club was established to further concrete the efforts.

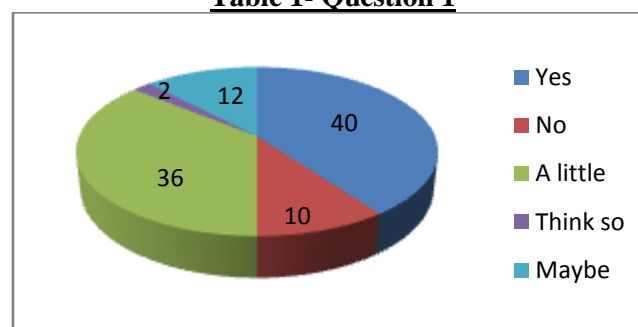
Project GREEN DREAM reached to over five hundred school students between the ages 11-15 years. This project was innovatively structured to impact the young generation regarding the importance of sustainability and ways to achieve it in day to day lives. An integral part of the project was conducting sessions for the school children. The sessions essentially threw light on Sustainable Development as a concept, and green buildings, Waste Management and Ecological Footprints as methods or tools to achieve it. The sessions comprised of short films, video clips, pie charts, power point presentations etc.

4.1 Baseline survey analysis

A baseline survey was conducted before the sessions to gauge the knowledge of the students. The students were given a questionnaire. A quantitative study of the responses is detailed below. It shows that 40% of the respondents knew what sustainable development is.

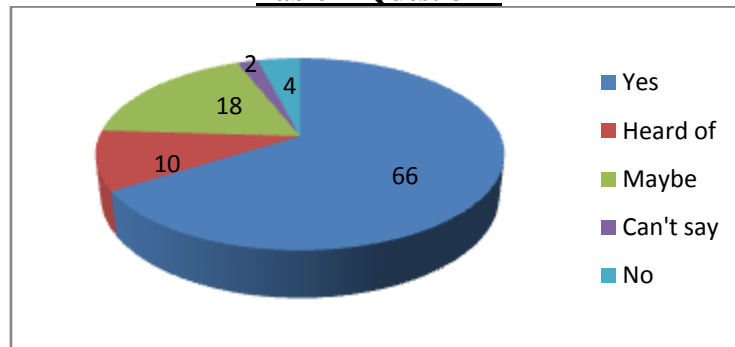
Question 1. Do you know what sustainable development is?

Table 1- Question 1



Question 2. Do you know the concept of green building?

Table 2- Question 2



4.2 SUSTAINABLE DEVELOPMENT CLUB (S.D.Club)

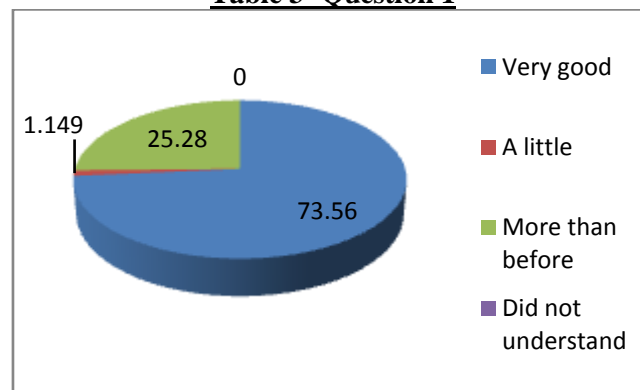
S.D. Club is a unique concept and first of its kind to be implemented in the schools of Pune. S.D. Club is a group of like minded students who come together and work together towards understanding and practicing sustainable development. Students were helped to establish their clubs with specific guidelines ensuring that the knowledge acquired through the sessions is put into practice. One S.D.Club has already been established with 120 members who implement and inculcate sustainable habits. This makes sure that the understanding of concepts by the students is clear.

4.3 Feedback Analysis

A feedback survey was conducted after the session to gauge the perception of the students about the concepts explained in the talk. A quantitative study of the responses is summarized in the following pie charts.

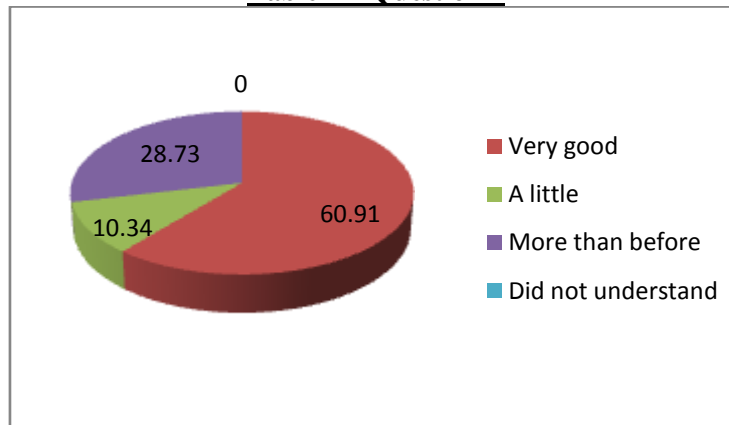
Question 1. How well have you understood the concept of green building?

Table 3- Question 1



Question 2. How well have you understood the concept of ecological footprint?

Table 4 – Question 2



V. Conclusion

The study found out that even though the schools taught the theoretical part of Sustainable development students were not committed to work towards it consciously. After the sessions almost 75% students were able to tell the habits they can inculcate to consciously work towards an emergent sustainable future.

Sustainable practices must be included in the school curriculum so that there is a definite guideline for the students to work accordingly. This will imbibe in them the values and lay the ground work for a sustainable future.

References

- [1] United Nations 2005-2014 Decade for Education for Sustainable Development report.
- [2] Sustainable development and green design by Melissa Bilec, Robert Ries, H. Scott Matthews ASCE.