

Role Of School Education Towards Awareness About Sustainable Development Which Leads to the Academic Achievement of Senior Secondary Students

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ABSTRACT

Sustainable development is the development, which meets the needs of the present without compromising the needs of the future generations to meet their own needs. Therefore, one should be aware of this relationship between consumption and sustainability. This problem I took because education can only play an important role in attaining sustainability. Education encompasses teaching and learning specific skills, imparting knowledge, and positive judgement towards environment for judicious use of resources. Sustainable development demands ways of living, working and enabling people to lead healthy, fulfilling and economically secure lives without destroying the environment and endangering the future welfare of people and the earth.

The purpose of this research is to understand education to be a collaboration of content and pedagogy that engages students in a study of the environment, encourage behavioral change and action. The objective of study of my topic is to explore the learning situations and learn the meanings on their own by connecting their knowledge with background experiences and the local knowledge in the senior secondary students. In the process of learning they attempt to negotiate, share ideas and participate effectively in the group task and in turn develops the inquiry and critical thinking abilities. Purpose of this study is focused on raising senior secondary students awareness for sustainable development from a balanced perspective, that is, one which gives equal consideration to the social and economic aspects as well as the environmental aspects. This paper aims to discuss environmental issues by critical thinking, problem-solving attitude and inculcation of values towards sustainable development. The aim of the study was to determine students perception about sustainable development. This paper focuses on the outcomes of developing students understanding of sustainability and

sustainable management. It describes the content and pedagogy of sustainability. It need to account students initial perceptions of sustainability to determine whether there is a bias towards environmental sustainability at the expense of a more balanced view which includes economic and social sustainability.

The main purpose of the research is to determine the direct and indirect perception and how much senior secondary students are involved in environmental protection on a local and regional level.

The present study is about the role of education on students awareness for sustainable development by providing proper knowledge, critical thinking, problem-solving attitudes and values. A curriculum was developed by integrating the concepts of sustainable development into science and social science NCERT Syllabus and designing various pedagogical strategies. Teaching and learning methods generated knowledge in the minds of students to be engaged in sustainable practices for future.

The results suggested that there is a need to specifically address students by understanding of key terms like global warming, deforestation, depletion of resources and biodiversity, acid rain, conservation of natural resources and other natural calamities, by critical thinking, problem solving attitudes and acquisition of values so that they can broaden the sources of their knowledge acquisition. Part of the pedagogy was used to frame the course involved developing the meta cognitive practices of the students. Pedagogy describes the practice or method of teaching.

This research paper has shown that the analysis of students reflective journals is a powerful method for assessing the changes in students awareness about sustainable development. Thus, further studies with students from different disciplines are needed to determine whether they come with the same awareness of sustainability.

In conclusion, school education are playing a crucial role in sustainable development and education coexist with sustainable development.

KEYWORDS:- School Education, Academic Achievement, Sustainable Development.

INTRODUCTION:-

Sustainable Development demands ways of living, working and enabling people of the world to lead healthy, fulfilling and economically secure lives without destroying the environment and without endangering the future welfare of people and the planet.

Human beings has started the exploitation of the environment since he came into existence on earth. The exploitation of nature can be seen when he started to live in caves, nomadic life and settled and practiced agriculture. For the satisfaction of his basic needs and greed, he started to exploit the environment by cutting trees, destroying forests, land, constructing buildings, depleting of natural resources using various modes of transportation, development in technology, all this happened only due to population explosion. The consequence of this devastation can be seen in many places in the form of deforestation, different types of pollution, ozone depletion, Greenhouse effect, acid rain, and other various natural calamities. Number of plants and animal species has started to become extinct. Pollution, deforestation, loss of biodiversity, ozone hole, global warming are some of the environmental problems that are faced by the world today.

Environmental degradation refers to the diminishing of a biosphere as a whole, due to human activity, which may cause unsustainability of human population. Sustaining human population is a part of sustainable development.

Since 1970, there have been clear signs of planet deterioration, thinning of the ozone layer, global warming, acid rain, water, air and soil pollution. People began to understand the need to behave more responsibly towards nature but the responsibility of man for the protection of the environment is both individual and above all collective. Nature protection engages mutual collaboration and support on the ground, local, national and international levels.

The purpose of this research is to understand education to be a collaboration of content and pedagogy that engages students in a study of the environment, encourage behavioral change and action. Environmental education is an important pillar of sustainable education because it is at an early stage of innovation. It directly or indirectly play an important part in measuring and maintaining the necessary conditions to maintain a balance between the dynamics of humans and nature. The other sustainability pillars are people, planet and profit. Through the combination of these elements, sustainability can be successful as a function of people's ability, environment education and profit of green and healthy environment for generation.

Sustainable development is the development, which meets the needs of the present without compromising the needs of the future generations to meet their own needs. Therefore, one should be aware of this relationship between consumption and sustainability. This problem I took because education can only play an important role in attaining sustainability. Education encompasses teaching and learning specific skills, imparting knowledge, and positive

judgement towards environment for judicious use of resources. Sustainable development demands ways of living, working and enabling people to lead healthy, fulfilling and economically secure lives without destroying the environment and endangering the future welfare of people and the earth.

One of the fundamental aspects of education is imparting culture from generation to generation. Education for sustainable development should be aimed to satisfy the needs of future generation of people which is lacking in the present scenario. Awareness in the minds of students towards sustainable development is must which was lacking in previous knowledge of students.

The objective of study of my topic is to explore the learning situations and learn the meanings on their own by connecting their knowledge with background experiences and the local knowledge in the senior secondary students. In the process of learning they attempt to negotiate, share ideas and participate effectively in the group task and in turn develops the inquiry and critical thinking abilities. The scope is to develop the mental processes which will strengthen the capacity to transfer the knowledge to new situations. Therefore, the learning should involve an approach that will help the students to think critically and develop various skills like inquiry, problem- solving, participatory decision making ability etc. A person who thinks critically can ask appropriate questions, gather relevant information, sort this information efficiently and creatively, reason out logically from this information and come to reliable and trustworthy conclusion about the world that enable one to live and act successfully in it.

Certain set of values are underlined like freedom to live their lives, equality, solidarity, tolerance, respect one another, culture of peace among all civilizations and respect for nature. Sustainability will allow all students to develop an appreciation of the need for more sustainable patterns of living and to build the capacities for thinking and acting that are necessary to create a more sustainable future.

Purpose of this study is focused on raising senior secondary students awareness for sustainable development from a balanced perspective, that is, one which gives equal consideration to the social and economic aspects as well as the environmental aspects. This paper aims to discuss environmental issues by critical thinking, problem-solving attitude and inculcation of values towards sustainable development. The aim of the study was to determine students perception about sustainable development.

This paper focuses on the outcomes of developing students understanding of sustainability and sustainable management. It describes the content and pedagogy of sustainability. It need to account students initial perceptions of sustainability to determine whether there is a bias towards environmental sustainability at the expense of a more balanced view which includes economic and social sustainability.

The main purpose of the research is to determine the direct and indirect perception and how much senior secondary students are involved in environmental protection on a local and regional level.

METHOD:-

The present study is about the role of education on students awareness for sustainable development by providing proper knowledge, critical thinking, problem-solving attitudes and values. A curriculum was developed by integrating the concepts of sustainable development into science and social science NCERT Syllabus and designing various pedagogical strategies. Teaching and learning methods generated knowledge in the minds of students to be engaged in sustainable practices for future. Sustainability will allow all students to develop an appreciation of the need for more sustainable patterns of living and to build the capacities for thinking and acting that are necessary to create a more sustainable future. To identify the students pre and post perceptions about sustainability secondary data was used. The readings related to sustainability were sourced from book chapters, journal and newspaper articles. This paper focuses on reporting the findings from the analysis of the students final entries in their reflective journals. Among male and female students majority of students considered that sustainability mostly concerned conservation or preservation of nature and natural resources. In this study three questions were focused on students views about sustainable development.

R.Q.1 What do students think sustainable development is ?

R.Q.2 Did students perception changed about sustainable development after participation?

R.Q.3 Did students develop a balanced view about sustainable development?

The first two questions however provided invaluable information about students perceptions. However, the third question developed a balanced view of sustainable development. The importance of this last question rests on the view that sustainability is about giving equal

consideration to the economic, environmental and social aspects. A range of learning and teaching strategies was used during the course including reflective journals.

The remainder of this paper focuses on the analysis of the students final reflective journal entry to determine whether their awareness about sustainable development changed and whether they held a balanced view of sustainability. Achieving a balanced point of view about sustainable development was central to the teaching. An analysis of students final entries in their reflective journal was used to explore whether their views on sustainability reflected a balanced view. The findings of this research confirmed previous studies which showed that initially students do have an enviro-centric bias. It also showed that despite experiencing a pedagogical approach which challenged views by encouraging discussion, debate and reflection which provided what was considered to be a balanced view of sustainability, many of the students still leaned towards environmentally focused perspective of sustainability. The study was necessary because we want to know what students can do in their daily activities, and their behavior in and towards the environment.

Hence, the new generation must find new methods to identify instruments and modern tools to keep, maintain and preserve the environment.

RESULT:-

The results suggested that there is a need to specifically address students by understanding of key terms like global warming, deforestation, depletion of resources and biodiversity, acid rain, conservation of natural resources and other natural calamities, by critical thinking, problem solving attitudes and acquisition of values so that they can broaden the sources of their knowledge acquisition. Part of the pedagogy was used to frame the course involved developing the meta cognitive practices of the students. Pedagogy describes the practice or method of teaching. It doesn't describe what students learn, but how they learn. Such practice was encouraged through the use of a reflective journal. This paper focuses on the students final journal entries in which the students were asked what was their thinking about sustainable development. The final journal entry encouraged the students to consider their learning as a whole and whether the aim had been achieved. It also determined if the students had developed a more balanced perspective of sustainable development. A reflective journal is a meta cognitive tool that supports students to reflect on their learning over a period of

time. It also provide what students are learning and the depth of their understanding of what, if any there is role of the education upon student's thinking about sustainable development.

The most significant change in thinking was that growth is not sustainable. Now I clearly see how society is based upon growth. We cannot achieve sustainability until we determine no growth systems. This relates to all parts of the social, economic and environment issues.

Social- We cannot continue to consume so much and grow our populations.

Economics- It is bounded by the limits to society and the environment, reduction in consumption.

Environment- We are bound by the limits of the environment. We only have one planet and it is not growing in size or fertility.

Despite this approach the analysis was not always a straightforward task. For example, this students reflections give some indication of the complexity of analyzing journals. It is clear that there has been a change in the students thinking, but it is not clear that it is more balanced, or bias towards the environment has significantly changed.

On consideration, it is not surprising that the students responses were wide ranging given the diversity of their backgrounds. However, themes such as an increased awareness of the complex nature of sustainability, and the need for a balanced approach were variously addressed. Unexpectedly, it was the social impact rather than the environmental impact which many of the students commented on. These comments included an increased personal, community and global social awareness.

DISCUSSION:-

This study was found that dealing with sustainable development issues is complex and confirms the importance of acknowledging competing value positions and interests. It has shown that the students had come with an environmentally focused view of sustainability. However the reflective journal entries have clearly demonstrated that when students are actively involved in their own learning, they can develop a more balanced perspective on sustainable development. Students should demonstrate a balance of environmental, social and economic aspects by analyzing the qualitative data within the final reflective journal entry.

In future by organizing role plays, mini-debates, and other activities students can develop awareness about sustainable development . For eg. The whole class debate about the use of nuclear power involved a circular arrangement in which students moved to different positions

in the circle depending on their viewpoint as the debate ensued. It is important to emphasize that particular topics are initially planned for the flexibility nature of the study, which can be adapted or replaced to complement students' interest during the activity.

Teaching institutions should adapt the curricula cultivating a new type of education to induce students' passion for environment education, using abilities and labs and develop their service and practical exercises in nature. For example, learn about plants and the seasons, influence on environment attitude and behavior activities of society, cleaning actions in parks, rivers, recycling the garbage from touristic roads, plant as practical lessons and the influence of different external factors. Creative thinking can be used to create from garbage some state-of-the-art fashion, art paintings, or design architecture.

Education can only encourage students to create and keep their own shape of the internal environment (School Campus) which is the majority of their learning space. Therefore, they can use non-polluted energy, for example, solar and wind energy they can use green letter etc. Deeper discussions to re-clarify, to criticize, and to compare some factors or attitudes towards nature and the environment, training about some specific situations and the solution taken to protect and preserve the environment for the future. Students can be encouraged to sustain their opinions to respond to environmental problems in daily life, to express freely their opinions and personal ideas, to be involved in critical situations and to find solutions in limited situations. We can use the online platforms to create the virtual environment and identify the solutions or habitats for the risk situation and develop the ethics and effects upon the environment.

Additional studies on environmental education could help to redefine and redesign the cultural factors with an impact on environmental decisions, transfer of good practice and results in environmental education establishing research and examining common topics and cultural norms with positive impacts on nature.

The fields of environment and cross-cultural research can result in effective strategies for sustainability with solutions to the environmental problems facing our society.

CONCLUSION:-

To provide students with the knowledge and skills to make a significant contribution to the achievement of a sustainable future will require the development of an understanding of what sustainability means.

This study indicated that the key to offering a balanced perspective of sustainability was to use an approach to learning which focused on students engagement, interaction with topics and reflection on learning. They need to account approaches that encourage more active learning, including an inquiry based approach, problem-solving approach and value-based conversations which provide an opportunity to broaden perspectives through the exploration of cross disciplinary practices.

Education empowers learners to assume responsibility for creating and enjoying a sustainable future. Therefore education is the driving force of establishing sustainability since it is one of the main communication vehicles and the basis for the "sustainability mindset ". Impact of education for sustainable development is to achieve that students can think and act for themselves and with others to work on a more sustainable future. For this students need to be able to think and act critically, holistically and collaboratively. Learning content describes what students learn. The goal is that students learn about topics in an interdisciplinary way, from an economic, social and environmental perspective.

This research paper has shown that the analysis of students reflective journals is a powerful method for assessing the changes in students awareness about sustainable development. Thus, further studies with students from different disciplines are needed to determine whether they come with the same awareness of sustainability.

Taking into consideration the students attitude and their behavior regarding the environment possible factors are:- The importance of environment, concerns about environment, culture environment, participation and recycling can make changes towards sustainable development. Environmental education can be adapted and harmonize with the new environmental, political, economic and cultural realities. The support for sustainable development can be in the form of education for the environment through lectures, good practices, education in the environment (through trips, planting trees, cleaning water etc.) and education about the environment (awareness about sea disaster, storm, climate changes due to global warming.)and education to the environment.

In conclusion, school education are playing a crucial role in sustainable development and education coexist with sustainable development. Lastly I would like to focus my view on values which means respect the Earth and life in all its diversity. There should be a promotion of culture of tolerance, nonviolence and peace in the awareness of students. Treat all living

beings with respect and consideration. Secure the Earth 's beauty for present and future generations. Care for the community of life with understanding compassion and love.

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