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Encouraging Future Generations with Environmental Education

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Abstract: Schools are crucial to environmental education because they shape the attitudes of future generations. When sustainability is included into the curriculum, children are exposed to concepts such as conservation, climate action, and renewable energy from an early age. Nowadays, public spaces are paying a lot of attention to environmental issues. Discussions concerning climate change, sustainable development, Antarctic glaciers, and many other topics are still going on. In order to achieve the Sustainable Development Goals by 2030, the United Nations originally established them in 2015. Both resource conservation and balanced resource usage are replicated in the goals. Environmental problems like drought, man-made floods, water shortages, global warming, and many more are currently plaguing us all. Environmental research is very crucial in today's world. Understanding how communication could promote environmental consciousness among young people in the Indian state of Assam is the aim of the current study. Since young people will make up our generation in the future, it is important to raise their understanding of environmental issues. This is why the study takes them into consideration. The study recognizes the biodiversity of Assam and its vulnerability to calamities like earthquakes, floods, soil erosion, and many others.

Keywords: Environmental; Utilization; Education; Generation; Community.

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I. Introduction

By integrating environmental education into a variety of subjects, such as social studies, geography, science, and ethics, a thorough approach to sustainability education can be accomplished. Environmental education is critical to the development of a sense of planetary ownership and responsibility. Through active engagement with nature through hands-on experiences, including wildlife conservation, outdoor education, and community-based environmental projects, people are able to establish a deep personal relationship with the environment. This relationship can instill a lifelong passion for environmental protection, developing a generation that is emotionally and intellectually committed to sustainability (Stanišić, 2016). Augmenting the standard classroom lessons, the experiential learning activities such as nature walks, community cleanups, and wildlife watching can enhance the students' perception of their impact on the environment. Such activities foster the learn-by-doing environmental education approach, which enables children to acquire lifetime environmentally friendly habits. Though the next generation needs environmental education, adults too have a significant role to play in shaping a sustainable future. Environmental education programs for adults can ensure sustainable lifestyle practices through community classes, online sessions, and public campaigns. With the involvement of adults in environmental education, we can develop a culture of sustainability that will continue across generations (Kopnina, 2018).

Environmental education can evoke direct behavioral change, for example, adopting composting, conserving energy, or using environmentally friendly transport. It is necessary for children and adults alike to develop sustainable practices and habits. In short, environmental education is the building block of a sustainable future. Through awareness, connection with nature, and the equipping of people with the knowledge and capability to make a difference, environmental education pushes the systemic changes required to combat the globe's most urgent environmental issues (Paradewari et al., 2018). Too frequently underemphasized in the battle against global warming is the importance of education. As much as worldwide commitments and legislative change are needed to slow the acceleration of global warming, improving education is the initial step towards realizing our aspirations. Environmental education can also reduce climate anxiety, or "chronic fear of environmental doom," which can be fueled by a lack of

knowledge. By presenting students with detailed educational resources that describe the underlying mechanisms of global warming, they are more empowered to act against climate change, feel more in control, and gain a greater appreciation for the resources of the planet. Environmental education also helps build critical thinking, communication, and problem-solving capacities that students of today must employ to analyze the long-term consequences of social, economic, and ecological policy choices. Eventually, mitigating climate change calls for global collaboration, and efficient activism depends upon deep insight into the issue as well as influencing other people to move into action.

II. Review of Literature

Tiwari and Singh, (1980). The dynamic human-environment relationship is an interesting field of study. Humans have an incredible capacity to live in varied ecological niches and adjust to shifting environmental conditions. This plasticity allows humans to shape and reshape their environments, including physical, biological, and societal components. The relationship between human beings and their environment is dynamic and complex with many determinants that can change this interaction. Recognizing the intricate dynamics of this relationship is important in resolving many environmental, social, and economic issues created by human-environment interactions (Vladova, 2023).

The first study along these lines was carried out by Escemmal (1980), who used a number of models to evaluate the efficacy of the environmental approach to teaching. The results were excellent. The environmental approach was found to perform better than the formal strategy. In addition to this surprising finding, students from rural and low-SES groups fared far better in forfeiting from this type of instruction than their urban and high-SES peers.

Das, (1980). Population, Science, Technology, Environment, Food, and Energy. A hopeful strategy for reducing poverty. Every society should aim for scientific and technological advancements that are consistent with the resources found in the environment. The term "development" is fairly broad and encompasses advancements in industry, agriculture, and the economy. More than just development, development comprises a variety of factors, including people's organization, discipline, health, diet, education, and honest labour.

Ghose, Gauri Rani, 1988. Know which plants are in your near surroundings. self-directed education. Instead of flooding children's brains with information, it aims to assist the development of their senses so they can observe their environment and have richer experiences. construction of a plant handbook that covers the tales and folklore surrounding the plants as well as their applications. Following the selection and listing of 70 common plants related to 29 facets of daily life, a helpful key to the families of these plants was produced, together with their floral diagrams.

Sharma, Munishwar Kumar, 1990. An examination of the personalities, attitudes, and scientific literacy of teachers and students. The personality traits, attitudes toward science, and science literacy of particular student and instructor groups are examined in this study. Finding out how scientifically literate different student and teacher groups were, as well as their attitudes toward science and other personality traits, were the objectives of the study (Onopriienko et al., 2021).

Environmental Awareness and Status, Aggrawal and Agrawal, 1996. Being conscious of the physical world is by no means a new phenomenon. Man has been assimilating into his environment from the beginning of time. When primitive man had the leisure to observe nature, he was enthralled with its unspoiled beauty and splendour and fascinated by the mystery that aroused his interest and amazement. This marked the start of the remarkable merging of the physical world and the individual soul.

III. Importance of Environmental Education

Environmental education may empower tomorrow's decision-makers and raise public knowledge of climate change. However, it may be difficult to provide students with the knowledge they need to

understand global warming, particularly if they live in a nation such as the United States where climate change is seen as a contentious "political" problem.

By allowing their children to play outside in natural environments, environmentally conscious parents can teach their children about climate change. Natural playgrounds, such those made of sustainable materials and found artifacts, are perfect for talking about environmental preservation and the importance of stewardship over the planet's resources.

Setting an example of sustainable living at home may be a crucial part of teaching children about the environment. Parents can help their children learn the value of sustainability and lessen their household's carbon footprint by implementing eco-friendly activities in the home. Easy sustainable actions, like upcycling pieces of furniture, composting food scraps, and educating kids on recycling, have a huge impact in lowering our personal emissions and encouraging eco-responsiveness, building a culture of sustainability and leading the way to a greener future (Mondal & Khan, 2024).

3.1.Principles of Environmental Education

Environmental education is informed by a number of key principles that direct its methodology and efficacy. They are:

- Multidisciplinary learning, an appreciation of the complexity and interconnectedness of environmental problems, with the inclusion of disciplines like biology, chemistry, economics, politics, and ethics.
- Action-based learning, theoretical knowledge integrated with practical experience and active involvement in environmental activities so that communities and students can see the real difference their actions can make.
- Critical thinking, which teaches students to challenge the established order, think critically about issues, and consider various points of view, promoting an inquiring attitude and informed decision-making.
- Equity and social justice, which highlights the necessity to recognize the unequal impact of environmental problems on the disadvantaged, advocating for equitable access to resources, information, and decision-making.
- Global and local frames of reference, which recognizes the world nature of environmental problems but also the need for local action and community involvement.
- Through these principles, environmental education enables individuals to build a more profound knowledge of environmental problems, to think critically, and to act for a more sustainable future. When people are aware of the particular environmental problems in their communities and how local initiatives can impact global change, they grow to feel a feeling of shared responsibility.

IV. Results and Analysis

The World Commission for Environment and Development defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This idea and definition of sustainable development may be related to J.S. Mill's Principle of Liberty, which holds that the pursuit of liberty must be compatible with a similar liberty for everyone. According to the sustainable development principle, the objective of quality of life must coexist with a similar equality of life for all, including future generations. This concept seems to protect the future of the ecosystem (Chavula et al., 2024).

Sustainable development's environmental component protects its basis and stops excessive use of natural resources. This involves maintaining soil productivity, biodiversity, atmospheric balance, and other natural

systems that are generally classified as noneconomic resources. When discussing concerns pertaining to sustainable development, environmentalists usually focus on what are known as environment borders. As a concept, it suggests that all natural systems have limits that should not be exceeded by excessive use since doing so will degrade them. Therefore, from an environmental standpoint, sustainable development means setting limits on inefficient industrial practices like water waste and deforestation as well as pollution, population growth, and consumption.

Table 1: Reflective Measurement Models

Elements that the indicator capture	Outer Loadings	Indicator Reliability	Composite Reliability	AVE
How can environmental education programs be tailored to meet the needs and interests of diverse student populations?	0.900	0.810	0.929	0.767
	0.926	0.857		
	0.820	0.672		
	0.853	0.727		
What are the essential components and best practices for designing effective environmental education programs?	0.910	0.828	0.939	0.885
	0.971	0.942		
	0.740	0.547	0.848	0.651
	0.843	0.710		
	0.833	0.693		
What is the relationship between environmental education and students' emotional connections to nature and environmental stewardship?	0.708	0.501	0.838	0.636
	0.905	0.819		
	0.769	0.591		
How do environmental education programs influence students' career choices and aspirations related to environmental fields?	0.866	0.749	0.880	0.647
	0.782	0.611		
	0.765	0.585		
	0.803	0.644		
How do environmental education programs impact students' critical thinking, problem-solving, and decision-making skills related to environmental issues?	0.931	0.866	0.925	0.860
	0.924	0.853		
What are the demographics and characteristics of students who participate in environmental education programs?	0.944	0.891	0.913	0.780
	0.935	0.874		
	0.759	0.576		

The economic aspect of sustainable development involves ensuring both current and future economic well-being while paying more attention to "natural capital," which encompasses elements such as plants, soil, fish, animals, and bio-environmental systems. Economic sustainability can result from the best possible allocation of goods and services. Reducing poverty and generating revenue are the main issues in this subject. Economic sustainability reflects the need to balance economic activity's benefits and drawbacks while adhering to the environment's carrying capacity. Economic progress shouldn't come at the expense of intergenerational justice. Thus, it is important to avoid overusing resources to the degree that it hinders their ability to regenerate.

Development is considered socially sustainable if it eradicates poverty, achieves social justice through fair resource distribution, and provides social services like health and education to all members of the community, particularly the most vulnerable. The social dimension of sustainable development is therefore based on the notion that people are an essential part of development and its main objective, and that they ought to endeavour to make this concept a reality for both the present and the future generations. The social dimension of sustainable development includes the upholding of political and communal values, as well as societal norms and values that influence social relations, including language, ethics, value systems, education, work attitudes, and class structures. Providing for societal needs like food, shelter, and clothes is another aspect of sustainable development's social dimension. The sustainability of societal demands and ideals is a measure of the quality of economic growth. Equitable property distribution is essential for social sustainability.

The cultural component could be defined as a compromise between cultural variety and common ideals. The preservation of numerous cultural identities is the key to cultural sustainability. Some academics believe that this is a part of the social dimension. However, social and cultural issues are obviously distinct when it comes to sustainable development. The cultural dimension of sustainable development aims to increase the significance of culture and its elements on a local, regional, and global level. Culture is an important part of sustainable development because it describes how we comprehend and value natural resources and each other. However, the role and importance of culture in the framework of sustainable development are not well understood in either science or policy. Culture has been seen as a component of social sustainability and, on occasion, as a fourth pillar, in addition to being an essential component of sustainable development. However, the term "culture" becomes more influential as the ecological, economic, and social obstacles to attaining sustainability goals rise. Cultural sustainability, which is widely recognized as having a distinct, significant, and autonomous role in sustainable development, is quickly replacing social sustainability.

4.1.Future Generation Environmental Education

The World Commission on Environment and Development defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This theory holds that increasing one's standard of living must be compatible with guaranteeing that everyone, including future generations, has an equal chance at life. Such a notion seems to protect the environment and future generations (Barata et al., 2017). According to this idea, we have a responsibility to protect natural resources since they are essential to all human life, both now and in the future. In this case, the moral significance stems less from our obligations to other species or to nature itself and more from our duties to nature as a result of our promises to future generations. Even if obligations to future generations are crucial, they can also have an impact on choices that don't directly impact them. For example, if given the chance, funding preventive programs might be given priority over medical programs that offer acute care to individuals who are now ill out of a sense of obligation to future generations. One of the issues facing this new decade is the shifting attitudes and behaviours of individuals toward the environment. Increasing public knowledge and comprehension of environmental issues is a necessary condition for such a shift. People need to realize that they are a part of the ecosystem as a whole, which depends on the planet's natural resources to live. People need to understand that all living and non-living things are interdependent and interconnected, and that upsetting the natural order puts both the environment and their own survival in jeopardy.

V. Conclusion

They all depend on a proper understanding of the intrinsic value of nature. Investigating how people in general connect to environmental ethics and preservation is essential, as is examining how both scientists and non-scientists can contribute to bettering the environment for present and future generations. What we need in this endangered time is not so much a new environmental ethic as a new environmental ethos—an attitude that is as fully appreciative of the natural world as is consistent with our need to survive in it, and that expresses horror at any activity that results in the needless or unnecessary destruction of non-human nature. Everyone wants to breathe clean air, drink clean water, and eat food free of carcinogens. It could be argued that this way of thinking is simply a more advanced kind of self-interest. The human population is growing increasingly satisfied with regard to the rest of creation and issues such as the extinction of non-human species. Since some environmental indicators, including carbon dioxide emissions and solid waste, seem to be positively connected with economic growth, it has been hypothesized that, practically speaking, environmental preservation and economic expansion may not be compatible. Nonetheless, there is much space for debate on this subject in light of sustainable development.

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