

Standard IX

Action Research Project

Topic for 2019–20

Environmental Education For Sustainability (EEFS): Current Trends, Issues and Recommendations To Enhance EEFS in High Schools

Introduction

There is no compulsion for practicing sustainability and there is no punishment for damaging environment.

This is leading to more and more environment destruction. Making communities realize the benefits of sustainability has become one of the biggest challenges of education. We may not be able to change the mindset of present generation of adults. But we can educate and mould the young minds of the future generation.

This action research project is an attempt to achieve this purpose by means of reviewing the current trends in environmental education for sustainability (EEFS), issues and suggesting remedial measures to enhance sustainability.

It is through environmental education that the future environmental advocates, problem solvers and leaders are created.

Background

Subtle shifts from environmental education to education for sustainability began during the 1980s and got more momentum in the 1990s. The concern of sustainability eventually percolated in the field of education. Education was always seen as the main agent to bring about change and to educate the people. The Earth Summit in 1992 (UNESCO), Agenda 21, called for governments around the world to educate for sustainability with the objective to achieve environmental and ethical awareness, values and attitudes, skills and behaviour consistent with

sustainable development. Appropriate education and public participation were recognized as one of the pillars of sustainability.

The Supreme Court has given verdict regarding the subject Environment Education. At present environmental education is a compulsory part of the new syllabus. Now it is considered as an integral part and is introduced as integrated and interdisciplinary course in all the subjects.

Environmentalism is “not an option like choosing one’s religion or political affiliation, but a fundamental value.” (Saylan and Blumstein)

Definitions

Environment Education: Is a process that allows individuals to explore environmental issues, engage in problem-solving, and take action to improve the environment. As a result, individuals develop a deeper understanding of environmental issues and have the skills to make informed and responsible decisions.

- **Trend:** State/Condition/Situation.
- **Issues:** Problems.
- **Recommendation:** Advice.
- **Sustainability:** The quality of not being harmful to the environment or depleting natural resources, thereby supporting long-term ecological balance.
- **Enhance:** Elevate, Improve.
- **Conservation:** Official supervision of natural resources in order to preserve and protect them through prudent management.

Some aspects/parameters relevant to EEFS

- Expectations from the EEFS programme and whether it is in sync with the changing needs of the times
- The suitability of the content with respect to the local needs and the background of students, students' age group
- Approach, methodology, objectives, presentation, teaching-learning process of EEFS
- The place in the curriculum
- Time allotted
- Availability of study material
- Inclusion of activities and life skill education
- Follow-up pattern
- The extent to which EEFS programme is at par with the programme of other places like urban/rural/states/educational boards etc.

Some essentials of the EEFS programme

- Focus should be on attitude formation rather than knowledge expansion
- The outcome of EEFS has to be eco-friendly citizens
- Students should be encouraged to study EEFS by making it useful and interesting
- Thinking, feeling and doing is important - heart, heads and hands have to be involved
- What the student is going to learn is more important than what the teacher is going to teach. Therefore, EEFS should be application and action-based. Activities, projects, self-study lessons, field experience should be given to students
- Conservation has to be acted upon more than talked about need to experience the nature rather than read about it in books
- EEFS is to be related to socio-economic and cultural aspects.

Some recommendations based on the following objectives of environmental education

- **Using constructive approach:** By giving life experiences to extend knowledge.

- **An issue-based approach:** The first step would be towards identifying 'issues', investigation of the issue, looking for solutions, connect possible actions to it.
- **A holistic approach:** Based on social, historical, aesthetic, creative, linguistic, literature, mathematical, moral, physical, scientific, and technological areas. All traditional subject teachers should be prompted to think about the way they are teaching their contents.

Example:

The craft teacher uses eco-friendly material instead of plastic. Language teacher uses internet for communication instead of paper.

- **Training in life skills:** By giving projects, experience of field visits, by conducting practical sessions outside the laboratories.
- **Education in stress management:** By making EEFS interesting and child-centred.
- **Value education:** Enhancing eco-friendly attitude, preserving environment for the future.
- **Education to enable students to face the challenges of:** Liberalisation, privatisation and globalisation. Making them self-reliant by self-study, project work and community work.
- **Creating consumer awareness:** Making them knowledgeable regarding resource audit.
- **New areas of environment care:** Via project work and learning innovations in environmental sciences.

What students have to do?

- Review the current need of EEFS with respect to the society and the immediate environment
- Review the current trends in environment education curriculum and EEFS given to V to X grade students of your school/any other school with prior permission of the concerned authorities. Use various data collection techniques.
- Analyse the observations and draw conclusions from your review
- Identify the issues

- Suggest remedial measures / solutions / activities / practices to enhance EEFS
- Implement the measures / solutions
- Evaluate the effect of implementing the remedial measures
- Improve your recommendations / solutions if required
- Write a report.

Note: Use your discretion as per your requirement to carry on your work. You may focus on one aspect/grade/school/solution etc and work in depth or several aspects in several groups. Try to do some splendid work by eradicating ignorance about sustainability wherever it prevails.

Some examples

Sample questions for students:

- Is studying EEFS essential for survival? How?
- Do you feel that EEFS should be made compulsory for everyone in your society? Why?
- What do you do to exhibit your love for nature?
- Do you feel that the nature trips and field trips should be made compulsory for EEFS? Why?
- Do you/your family members practice sustainability? How?
- At which all places have you noticed ignorance about sustainability? Explain. How can you overcome it?

Sample questions for teachers:

- What measures are being taken to make your school a green school?
- Do you involve the PTA/society/street children/rural areas/tribal areas in EEFS?
- Can the programme be completed as per schedule? How do you plan it?
- Is it based on work experience and activities? Give some examples!

- What challenges/issues do you face while giving EEFS?

Some challenges for EEFS in schools:

- EEFS cannot be effectively implemented without discussion amongst all involved about the goals, purposes, and meanings of EEFS for local contexts
- Other issues can be availability of professionals to enhance knowledge, the provision of resources, time availability, planning, action execution and funding, overcrowded curriculum and the non-mandatory status of EEFS
- Support from the school, principal, senior management for smooth execution of EEFS activities.

Examples of some measures to enhance EEFS

Setting a nature conservation education centre with the following objectives:

- Initiate Nature Conservation Drive
- Protect some agricultural or forest land and enrich the biodiversity
- Preserve this land for city students to experience the feel of natural surroundings / habitat
- Cultivate botanical garden
- Provide a common camping ground for educational purpose
- Provide a field area for experiments in sustainability
- Provide a base camp location to explore the surrounding area
- Ensure child-centred education.

Starting Eco Friends' Club:

Like Science Club and Nature Club schools can start 'Eco Friends' Club' to enhance sustainability. The objectives can be spreading environment awareness, promote involvement of people in environment betterment, conduct nature activities to promote belongingness

towards nature, conduct competitions to promote research in sustainably, provide platform for communication by forming groups like WhatsApp.

Some projects for society upliftment:

- The youth energy can be channelized by way of adopting an area in the society for clean and green drives and sustainability, taking care of the plants, animals, stray animals from the locality
- Awareness drives/workshops / competitions / activities can be arranged to promote action.

Suggesting some topics for sustainability curriculum:

- **Conservation science:** Spreading up-to-date knowledge about local, regional, national and global conservation issues and the ways to tackle them.
- **Awareness of population control:** Because it is the root cause of all imbalances in nature, pollution, environment degradation, etc.
- **Sustainable lifestyle:** This will include causing minimum impact on the nature by simple food, using local products, biological pest control, resource audit of the goods, using green resources, preserving biodiversity, etc.
- **Nature activities:** There is no better book than nature itself to know the intricacies of nature. Here, attitude formation is more important than imparting knowledge. The nature activities bring up adults who are eco-friendly and will nurture nature in the future. Example: Social forestry, nature camps, etc.,
- **Reproduction biology:** It is an important aspect. Propagation of useful plants and control of weeds, vasectomy, tubectomy of stray animals to keep their population in control, eradication of malaria by controlling mosquito breeding grounds, etc. should be explained to students.

Some other measures to enhance EEFS:

- Set a new trend of partial distance learning. Prepare e-learning programmes/study materials/ banners etc. for remote areas/ tribal areas/rural areas etc.
- Implement measures to make EEFS interesting.
- To enhance EEFS start activities for students like segregation of waste at school/ surrounding areas/markets etc, resource conservation practices, competitions for eco-friends, nature camps, awareness drives, afforestation and related programmes, social forestry, stray animal care, biodiversity preservation, etc.
- Compare the syllabi of different educational boards like HSC, ICSE, CBSE, etc. to include additional concepts in the EEFS given at the school.
- Develop study/activity programmes for various grades from V to X and society members.
- Correlate EEFS with other subjects like environmental physics, environmental chemistry, environmental statistics, environmental history, etc.
- Publish news-letters to provide platform for news and views to enhance EEFS.

Note

While suggesting measures, consider the views / needs of the students, teachers, parents, school administration, education policies, syllabus, need of the society, need of the environmental factors, feasibility etc.

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