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A PROBE INTO THE IMPERATIVE NEED FOR ECOLOGISING THE CONTEMPORARY CLASSROOMS

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ABSTRACT

Educationalists, thinkers and instructors are enthusiastically searching for innovative measures to prepare students for upcoming periods, and the educational system has been advancing at a much rapider speed than ever before. Regardless of all the developments, the present educational system requires to create awareness on the 21st century learners about the immediate need to conserve the environmental resources and stay healthy by going green. This conscientisation becomes fruitful if it is delivered right from the classrooms. This paper is an outcome of the in-depth review and analysis of the emerging ecological concerns around us, and the imperative need to have a natural commitment in order to fulfil our responsibility to safeguard the world to which we belong. This paper aims at exploring the learning implications and theoretical background of ecologisation, its assessment in actual classroom situations and the learning activities to promote eco-friendliness among learners. Also, objective type questions from various disciplines for the application of ecologisation in actual classroom situations have been constructed.

Key words: 21st century learners, environmental resources, ecologisation, eco-friendliness, classrooms.

INTRODUCTION

The 21st century perceives the development of a number of new learning theories accompanied by abundant innovative learning styles. The current instructional design emphasises the elucidation of objectives and learning outcomes to the learners, as opposed to routing their creativity and activities, and constraining them to act in a scheduled fashion. The instructors, learners, learning atmosphere and classroom design- all ought to be well furnished so as to acclimatise the characteristics of the varying environment. The classroom instruction needs to be judiciously scheduled by considering the individual differences among learners, and appreciating their independences, and above all by creating a sense of concern and empathy for the people and the surrounding environment in which we thrive. This facilitates the learners to experience a feeling of accountability and possession over nature and the surrounding world.

RATIONALE OF THE STUDY

Despite the immense revolutions in our livings and ecosystem, the classroom design too necessitates to be redesigned. As the learners are subjected to a wide-ranging world, they require a healthy and encouraging environment

to make smart choices and participate in distinctive learning activities. The 21st century classrooms are directed by learners' interests, which demand unrestricted and supportive areas for the learners inside and outside the classrooms to allow them to assemble and collaborate to create and share.

In the present day scenario, it is unavoidable to genuinely think about the environment and be conscious of the consequences of not going green. The students have to be familiarised of the importance and inevitability of protecting our resources and preserving our environment. If these concepts are appropriately inculcated in learners, they will adopt those values and communicate these to the upcoming generations, thus changing the world and turn it into a healthier place to live and flourish. Thus the learners need to be enthused and empowered to develop an association to the environment through learning as well as experience, by involving in a societal approach to learning about environmental issues.

The 12th Five Year Plan (2012-17), which was granted by the Planning Commission of the Government of India in October 2011, gave due emphasis to protecting the

environment and safeguarding the energy for future India, in addition to enhancing skills and faster generation of employment, implementing technology and innovation, and improved access to quality education. The National Policy on Education 2016 also highlighted the requirement of schools to help instil crucial virtues and mind-sets like regularity and promptness, self-discipline, compassion, hard work and a spirit of entrepreneurship, sense of responsibility, wish to assist, creativity, care for the elderly, a self-directed attitude and a commitment to conserve the environment.

STATEMENT OF THE PROBLEM

'A probe into the imperative need for ecologising the contemporary classrooms'

OBJECTIVES OF THE STUDY

1. To identify the learning implications of ecologisation in the present-day classrooms.
2. To explore the theoretical background of ecologisation.
3. To frame an operational definition for 'ecologise' in the learning context.
4. To design outcome indicators to assess the extent of ecological friendliness of learners.
5. To suggest activities to promote ecologisation in learners.
6. To construct objective type questions from various disciplines for the application of ecologisation in actual classroom situations.

METHODOLOGY ADOPTED

The methodology adopted comprised a Focus Group Discussion, whose chief objective was to investigate the influence of applied instructional objectives in science classrooms to gratify the needs of the 21st century learners. Remarkable opinions emerged from the participants, who were experts in the educational field with extensive proficiencies and forward-looking outlooks. The investigator merged their viewpoints so as to sketch specific advanced implications, which would be helpful for translating the educational visualisations into practice. A key perspective, which evolved in the discussion, was the 'necessity of an educational taxonomy based on ecologisation and values in the present times'. This highlighted the need for love for all created beings of this universe through learning; emphasised feelings, together with knowledge, in the learning process; and integrated ecological viewpoints in the classroom by generating a consciousness of environmental concerns.

The investigator also conducted numerous informal interviews with educational experts who had special interest in studies related to learning ecosystem; secondary school teachers cutting across the subject disciplines, who mould the 21st century learners; and numerous other personnel who had genuine love for nature and had internalised the immediate need to preserve its resources.

DISCUSSION OF FINDINGS

Through intense review and analyses of the learning ecosystem and the ecological concerns, the investigator identified the learning implications of ecologisation in the contemporary classrooms.

Etymologically, ecologise refers to performing a scientific analysis and studying the collaborations between organisms and their surroundings. It signifies the process of making or becoming more aware of environmental considerations in the classroom. It assimilates going green across the curriculum by using recycled materials for art and science projects. Ecologisation aids to develop an ecological mind-set in students through eco-friendly activities. It makes students recognise the importance of organic farming and the nutritious value of locally grown fruits, vegetables and herbs, and include these in their food. The students could brainstorm ideas to reduce the amount of waste in their lunches and share these ideas with parents. It also helps to minimize the quantity of paper used in the classroom. It also encourages students to make connections between consumption, waste, and environmental impacts. Ecologisation integrates greening activities into current syllabi in art, science, maths, humanities, language arts, or electives. It uses the school as a hands-on workshop, which presents chances for solving problems in real-life. The students could undertake study of themes such as energy, water, forests, toxic pollution, and waste. It involves the students in practical initiatives like saving water, recycling materials and saving energy. Also, ecologisation provides hands-on, place-based, experiential education through outdoor education, and time spent in natural settings.

The term 'ecology' is used in varied dimensions in different contexts. The theoretical background of ecologisation is explored and briefed below.

♣ **Ecological Complexity** relates to the vibrant adaptability of ecosystems such that the conversion to manifold shifting stable states are guided by arbitrary variations of history.

♣ **Ecological Death** is the inability of an organism to operate in an ecological framework, heading to demise.

♣ **Ecology Movement** or Environmental Movement is a diverse methodical, societal and ethical undertaking for tackling environmental problems.

♣ **Ecological Succession** is the process of modification in the class composition of an ecological society over time.

♣ **Ecological Selection** refers to natural selection excluding sexual selection; that is, precisely ecological means that operate on a species' inherited traits without reference to reproducing or secondary sex traits.

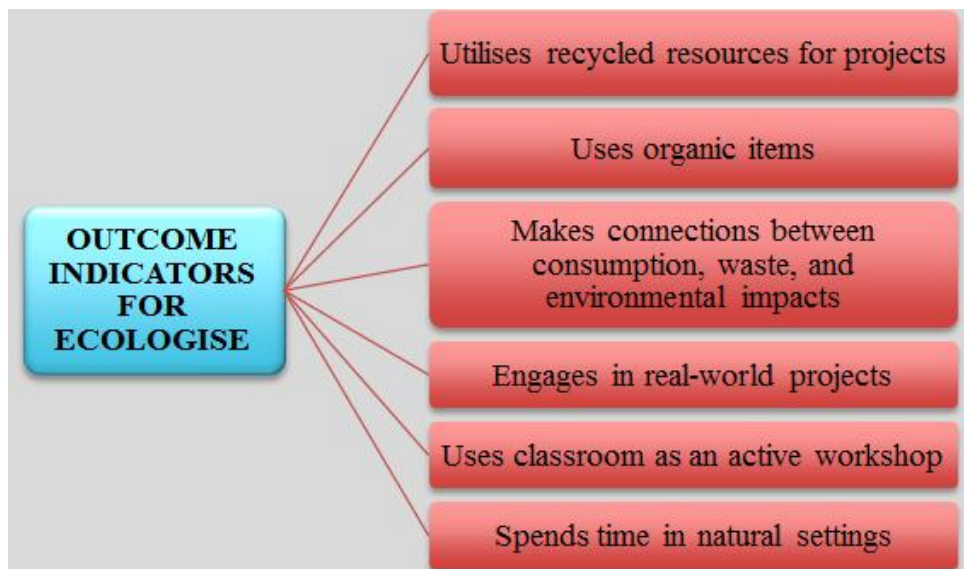
♣ **Ecological Impact of Explosives** are the impressions caused on the environment by both unexploded explosives and post-explosion products.

♣ **Ecological Sanitation**, commonly abbreviated as ecosan, is a method associated with sanitation and agriculture, which deals with safely recycling excreta sources like plant nutrients and organic matter to crop production with minimum usage of non-renewable resources.



Ecologise is defined as the process of integrating ecological viewpoints in the classroom by generating a consciousness of environmental concerns to foster meaningful interaction between man and his surroundings.

The investigator designed outcome indicators for 'ecologise' to assess the extent of ecological friendliness of learners.



In order to promote ecologisation in learners, the following activities could be performed in the classroom.



The objective type questions constructed from various disciplines for the application of ecologisation in actual classroom situations are shown below:

SCIENCE	Waste management does not include a) Collecting, transporting and disposing waste products b) Offering solutions for waste recycling c) Mixing biodegradable and non- biodegradable substances d) Using garbage as a valuable resource
MATHS	Students decided to plant trees in the school such that the number of trees that each section of each class will plant will be the same as the class in which they are studying, e.g., a section of class I will plant 1 tree, a section of class II will plant 2 trees and so on till class XII. There are three sections of each class. Find the total number of trees planted by the students. a) 350 b) 562 c) 234 d) 468
SOCIAL STUDIES	Which one of the following does not support the conservation of nature? a) Switch off the bulb when not in use b) Close the tap immediately after using c) Dispose polypacks after shopping d) Minimise the use of paper
ENGLISH	In 'A Short Monsoon Diary', what signs do we find in Nature which show that the monsoons are about to end? a) The colour of cobra lily beginning to fade b) The leaves of cobra lily turning yellow c) The stem of cobra lily becoming weak d) The seeds of cobra lily turning red

♣ **Deep Ecology** is a natural and ecological way of life advocating the inherent worth of living beings irrespective of their influential value to human needs, plus a radical restructuring of contemporary human societies consistent with such thoughts.

♣ **Ecological Footprint** denotes the determination of human impression on earth's ecologies, measured in area of wilderness or amount of neutral capital consumed each year.

The operational definition for 'ecologise' framed by the investigator in the learning context is as follows:

CONCLUSION

The main goal of environmental education in schools is to teach children to be empathetic, to love and protect nature, and carefully organise its wealth. It is desirable to use a variety of games while teaching ecology students, which will have a positive influence on their environmental education. Thus, the learners need to be permitted to investigate environmental problems, involve in problem solving, and take action to enhance the ecosystem. Consequently, they develop a profounder understanding of the environmental concerns and have the abilities to make well-versed and sensible choices.

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