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IMPORTANCE OF ENVIRONMENTAL EDUCATION IN GLOBAL WARMING

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Abstract:- Environmental education (EE) talk about to organized efforts to teach about how natural environments function. Mainly, how human beings can manage their behaviour and ecosystems in order to live sustainably. This term is regularly used to indicate education within the school system including primary to higher-secondary. Though, it is from time to time used more approximately to include all efforts to educate the public and other audiences for example including print materials, websites and media campaigns, etc. Correlated disciplines include outdoor education and experiential education.

In this paper, the researcher is going to discuss objectives of environmental education, its importance, stages of environmental education, what is value based environmental education and its importance in environmental education. This paper also presents the effectiveness of environmental education around the world and its solution.

Keywords: Environmental Education , Global Warming , natural environments.

INTRODUCTION

Environmental education is a learning process that increases people's knowledge and awareness about the environment. It is also associated with challenges, develops the necessary skills and expertise to address the challenges. Environmental education fosters attitudes, motivations and commitments to make informed decisions and take responsible action.

OBJECTIVES OF ENVIRONMENTAL EDUCATION:

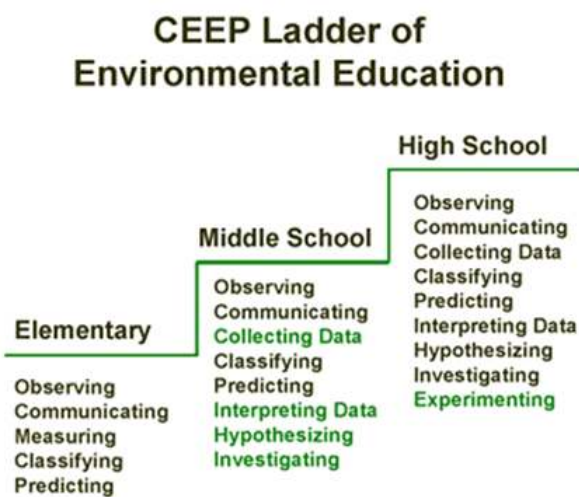
- To create awareness and sensitivity about the environment and environmental challenges
- To develop knowledge and understanding about the environment and environmental challenges
- To help for attitude concern for the environment and help to maintain environmental quality
- To develop skills to mitigate the environmental problems
- To take interest in participation for exercising existing knowledge and environmental related programs.

Environmental education has boundary with outdoor education and experiential education. Both the fields of education accompaniment environmental education so far have unique philosophies.

Outdoor education means of curriculum extension and enrichment through outdoor experiences." It means learning "in" and "for" the outdoors. Environmental education is regularly taught or improved through outdoor experiences. Whereas the out of doors experience, not strictly environmental in nature but often contain elements of teaching about the environment.

Experiential education is a process through which a learner creates knowledge, skills and value from direct experiences. Experiential education can be noticed as both a process and method to deliver the ideas and skills associated with environmental education.

Despite the fact each of these educational fields has their own objectives, there are points where they correspondence with the intentions and philosophy of environmental education.



IMPORTANCE OF ENVIRONMENTAL EDUCATION

Our nation’s future depend on on a well-educated public to be wise agents of the actual environment that sustains us, our families and communities and our future generations. Only environmental education can best help us as individuals make the difficult, conceptual connections between economic prosperity, benefits to society, environmental health and our own well-being. In the long run, the collective wisdom of our citizens, gained through education will be the most compelling and most successful approach for environmental administration.

However, many studies regularly make us known that the U.S. public suffers from a remarkable environmental literacy gap that appears to be increasing instead of decreasing. For instance, two-thirds of the public fail even a basic environmental quiz and a whopping 88 percent of the public fail a basic energy quiz. These same studies found that 45 billion Americans think that the ocean is a source of fresh water and 130 billion believe that hydropower is America's top energy source.

Environmental education increases student engagement in science. In many scholars’ paper, research has shown massive benefits from environmental education. When it is combined with science curriculum, environmental education obviously improves student achievement in science. Such an increase is likely because of the fact that environmental education connects classroom learning to the real world. When given a choice to the students then they will incline towards environmental science. Science fair administrators note that 40 percent of all science fair projects re-count directly to the environment. According to the Corporation for National and Community Service report more than 50 percent of the service-learning programs they fund are focused on the environment. The comparative lack of environmental education in the U.S is the main reason for why the students’ performance in science compared to other countries does not meet the U.S. expectations.

Environmental education improves student achievement in main subject areas. When it is integrated into the main curricula or used as an integrating theme across the curriculum, environmental education has a noticeably positive impact not only on student achievement in science but also in outstandingly math and social studies. The same study found that schools that taught the main subjects using the environment as an integrating context also demonstrated that it reduces discipline and classroom management problems, increases engagement and enthusiasm for learning and greater student superiority and ownership in activities.

Even more importantly for many, environmental education employs and enhances critical thinking and basic life skills. The National Science Board of the National Science Foundation confirmed the importance of environmental education to student learning in their 2000 report, Environmental Science and Engineering for the 21st Century: "The twin goals of learning are to acquire knowledge and gain skills such as problem solving, consensus building, information management, communication, and critical and creative thinking. Environmental issues offer excellent vehicles for developing and exercising many of these skills using a systems approach...changes should be made in the formal educational system to help all students, educators, and educational administrators learn about the environment, the economy, and social equity as they relate to all academic disciplines and their daily lives."

Similarly, the 2005 report to Congress submitted by the National Environmental Education Advisory Council on the status of environmental education in the United States found that "environmental education with its emphasis on critical thinking, interdisciplinary teaching and learner achievement – is also helping to meet educational reform goals."

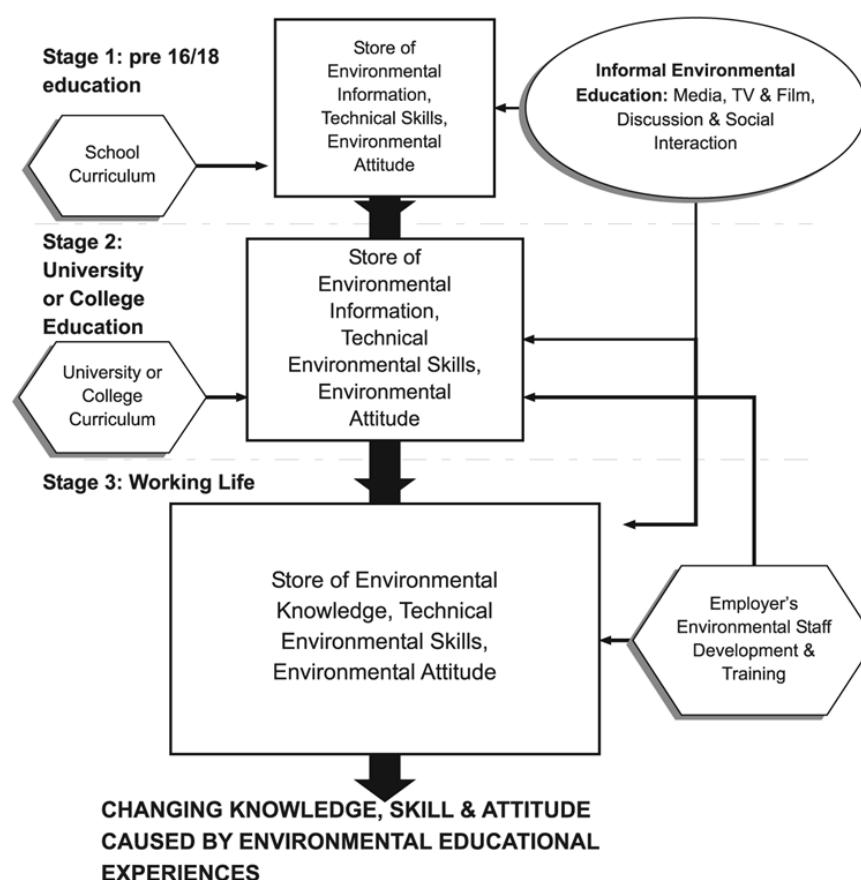
Environmental education provides life-threatening gears for a 21st century personnel. The vast majority of

Americans are convinced that the environment will become at least one of the leading issues and challenges of the 21st century, as the growing needs of the growing global population increasingly presses up against the limits of the earth's resources and ecosystems. It is confirmed in 2003, a report by the National Science Foundation's Advisory Committee for Environmental Research and Education by noting that "in the coming decades, the public will more frequently be called upon to understand complex environmental issues, assess risk, evaluate proposed environmental plans and understand how individual decisions affect the environment at local and global scales. Creating a scientifically informed citizenry requires a concerted, systematic approach to environmental education..."

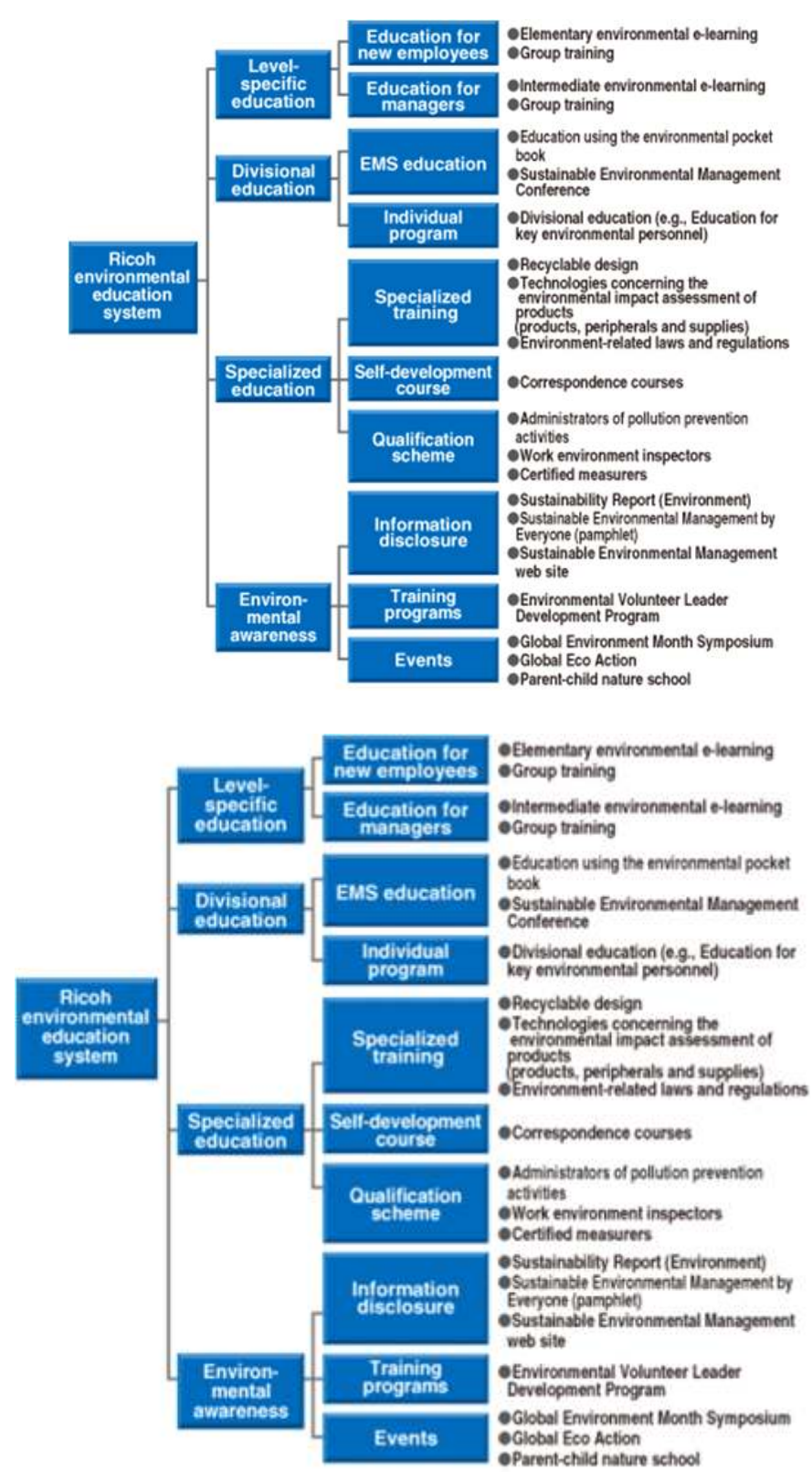
Simultaneously, business leaders increasingly believe that an environmentally knowledgeable staff is dangerous to their long term success and profitability with better environmental practices and improved efficiencies impacting positively on the bottom line while helping to better position and prepare their companies for the future. According to Charles O. Holliday, Jr., Chairman and CEO of DuPont that: "an environmentally sustainable business is just good business, given the growing concern for environmental problems across America. A key component of an environmentally sustainable business is a highly educated work force, particularly involving environmental principles." And according to the National Environmental and Training Foundation "environmental education about topics such as energy, water and waste management, improved employee health, cleaner working conditions, and recycling would save small and medium sized businesses alone at least \$25 billion/year."

Environmental Education supports problems like "nature deficit disorder." A current study found that children today spend an average of 6 hours each day in front of the computer and TV but less than 4 minutes a day in unstructured outdoor play, leading researchers to discover a new condition particular to this current generation that they have called "nature deficit disorder." This extreme emphasis of indoor time spent in front of screens against outdoor play and discovery has been correlated with negative psychological and physical effects including obesity, loneliness, depression, attention problems and greater social isolation due to reduced time with friends and family. Especially in the very young, it has proved in studies extremely beneficial for cognitive functioning, reduced symptoms of attention deficit disorder, increased self-discipline and emotional well-being.

Stages of Environmental Education



Source: Holt *et al.* (1999)



Value Based Environmental Education

Value is has worth, utility and importance according to the dictionary. From a historical viewpoint, a value may be de- fined as a thing which is good operationally. It may be defined as the “factors which affect human behaviour. Logically, value may be defined as a “concept which is accepted by the sub- conscious mind, is

understood by all and perceived by the individual. As a result, values are the principles which are consistent and universal and which direct our actions and activities. In other words, values are virtues in an individual. These values, if deteriorated, will speed up or go faster the breakdowns of family, society and nation as a whole. India has age-old tradition of values interwoven in the national fabric. Even though, there has been great advancement in science and technology there has been gradual destruction of values which is reflected in the day to day life of a large section of our present society. The young generation under the growing influence of negative aspects of western culture is stranded on the cross-roads and are not able to decide which direction to take.

Value based environmental education make one aware about the need to understand the significances of human actions. Truth, righteous, conduct, peace, love and non-violence are the basic values that should be incorporated in environmental education programme. These are common values and respectively represent and these are five areas of human personality. It can be identified as the foundation stone on which the value based education programs can be built up. These are widespread values and respectively represent the five domains of human personality, intellectual, physical, emotional, psychological and spiritual. They are also correspondingly correlated with five major objective of education, namely knowledge, skill, balance, vision and identity.

The programme of values based environmental education can be built adopting different approaches as a separate subject, inviting eminent thinkers, organising co-curricular activities and essential teachings of great world leaders. Mass-media can also play a vital role in this direction. It is also essential that government should take initiatives for introduction of value based education on environmental education

Value Based Environmental EducationEmphasized on:

- 1)Social values and social justice.
- 2)Cooperation.
- 3)Respect for parents, teachers and neighbours.
- 4)Patriotism.
- 5)Love for family, society and nation.
- 6)Dignity of hard-work.
- 7)Love for sincerity, punctuality, regularity and honesty.
- 8)Simplicity, national integrity.
- 9)Love for self-respect and self-reliance.
- 10)Self-worth.
- 11)Critical observation, Discovery, inquiry and investigation.
- 12)Divergent and convergent thinking.
- 13)Imaginative and creative thinking.
- 14)Observe the facts objectively.
- 15)Free from dogma and superstitious.
- 16)Open mindedness.
- 17)Search for perfection.
- 18)Systematic reasoning.
- 19)Truthfulness and honesty.
- 20)Scientific temper.
- 21)Peace-love, joy and faith.
- 22)Positive scientific attitude.

VALUES CAN BE CATEGORIZED:

1.Personal values

Personal cleanliness, health, hygiene, dignity of labour, sincerity, punctuality, regularity, truth failing honesty, self-worth and cooperation, free from dogma and superstitious open-mindedness, search for perfection, positive scientific attitude, self-respect and self-reliance.

2.Intellectual values

Mental evolution, freedom of thought, knowledge, divergent and convergent thinking, critical observation, inquiry and investigation, imaginative and creative thinking positive scientific attitude, systematic reasoning and critical observation.

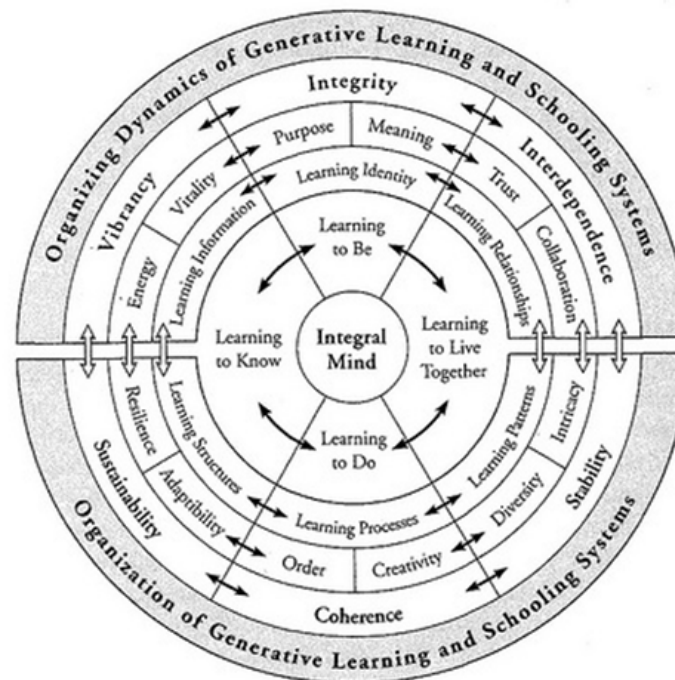
3.Moral values

Devotion to duty, self-control, honesty, sincerity, patriotism, love for family society and nation.

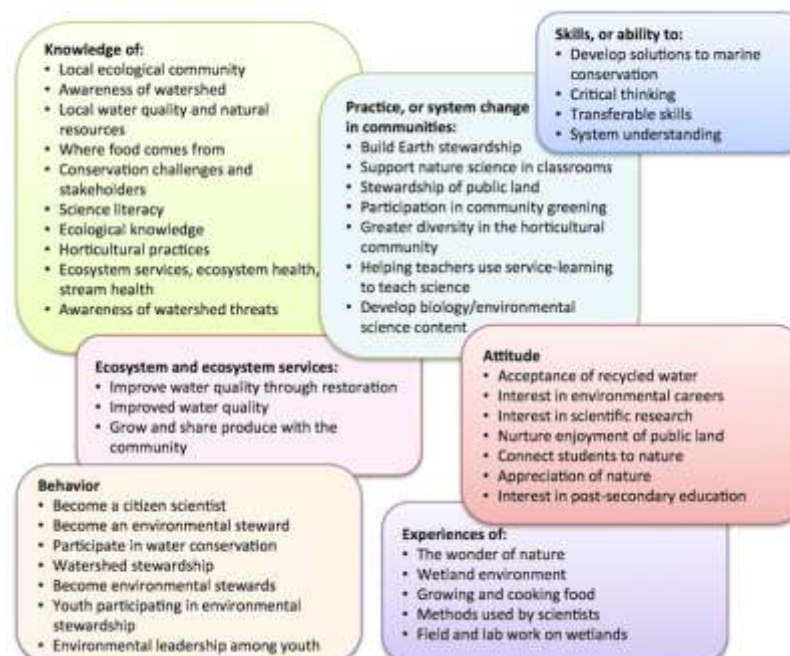
4.Social values

Cooperation, tolerance, environmental protection and preservation, punctuality, good manners, Art and Culture, respect for all religions, international understanding politeness, etiquettes, respect for parents, teachers and neighbours, social values and social justice love for family, society and nation.

Pedagogy



Desired EE outcomes: MEEO fall 2012



Effectiveness of Environmental Education around the World

Many national and international leaders are worked hard to try to implement EE. Several organizations also promote and/or deliver environmental education programs. Moreover, there are curricular materials from formal and non-formal educational agencies, media campaigns, adult education programs, out door education programs, conservation education programs and other means that challenge in one way or another to change human behaviour in an environmental measurement.

Evidence of success might also be seen in the various stories telling what young students and adult activists have done regarding the issues. Some of these stories have originated from students who have learned issue investigation and citizenship action skills in school. Some of these stories have originated from excellent conservation education programs designed to teach teenagers and preadolescents sound conservation practices. Some have initiated from governmental agencies which are funded to help humans to learn how to conserve natural resources. Many come from private agencies that strive to help human beings confront issues and deal sensibly with the environment.

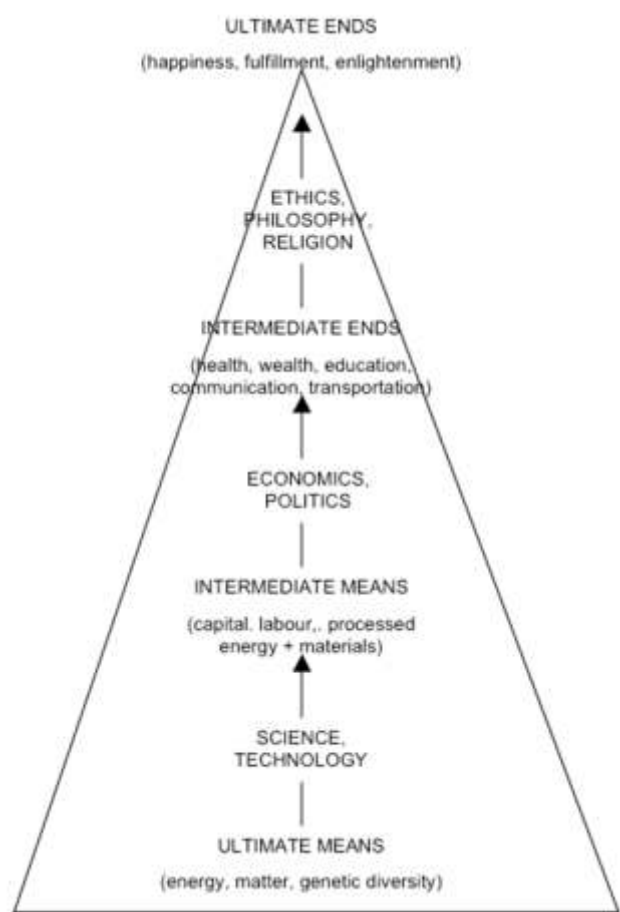
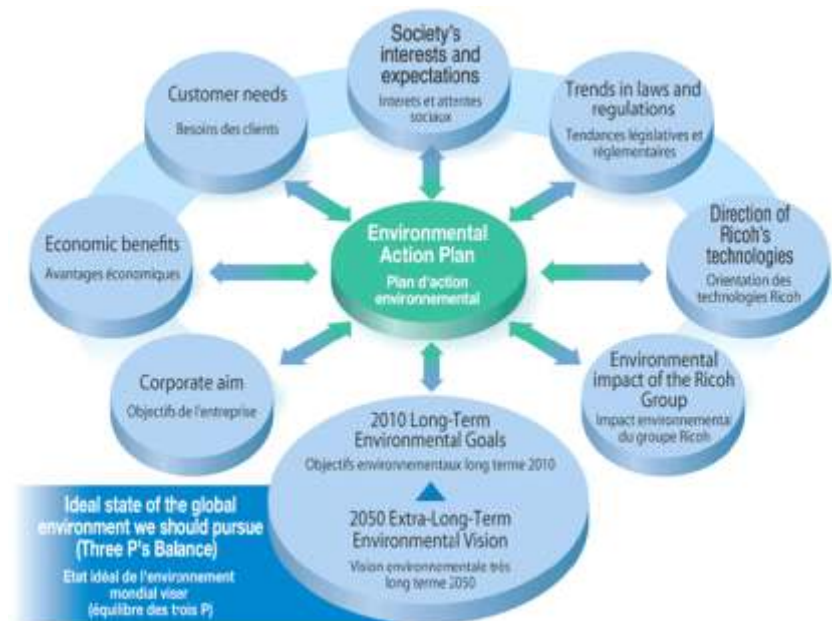
CONCLUSION

Environmental education is a learning process that increases people's knowledge and awareness about the environment. It is also associated with challenges, develops the necessary skills and expertise to address the challenges. Environmental education fosters attitudes, motivations and commitments to make informed decisions and take responsible action.

Educators can point to comparatively few successes that balance the severity of environmental degradation and the serious problems associated with human productivity is a bitter concept for educators to accept. Though we are inclined to defend our practices in environmental education. We must stop and evaluate how successful we are in the overall in the battle to resolve urgently important environmental issues. It is not our purpose here to put forward a litany of truly critical environmental issues facing human beings today. But then again, if we did this listing would extremely overshadow the successes in changing environmentally related behaviour around the world. Therefore, when current reports on environmental quality are considered, we must admit that we have not been successful on a widespread basis in convincing world citizens to act in environmentally responsible ways.

Few nations have made a commitment to EE programs that involve students throughout their schooling and that utilize a carefully constructed, research-based scope and sequence. Wherever EE exists, students naturally receive incidental exposure to environmental issues with the emphasis on the ecological foundations and/or awareness levels. Therefore, there should be concerned generally focused efforts that prepare future citizens to make environmentally sound decisions to participate responsibly in environmental maintenance and remediation. Additional, there should be efforts to try to change environmental behaviour through the media. Certainly, there are nations that can point to television programming that focuses attention on environmental issues, wildlife, or natural ecological systems. Further, when print sources regret focused on environmental issues, those issues are frequently ones that appear newsworthy to editors and coverage is almost totally at an issue awareness level. Without opportunities for rights or empowerment, it appears doubtful that these efforts will move the public to widespread participation in environmental responsibility. As a result, EE media efforts incline to focus on the awareness level which advances to be ineffective in changing behaviour and frequently fail to reach a large audience of learners.

One of the serious impediments to the kind of instruction recommended in this document is the fact that it differs substantially from typical educational practice. As stated before, most educators firmly believe that, if we teach learners about something. Behaviour can be modified. In some cases, perhaps, this is true. However. In educating for generalizable responsible environmental behaviour, the evidence is to the contrary. Typically, Issue awareness does not lead to behaviour in the environmental dimension. This means that we must look to a new model of instruction if behaviour is important. And, because all environmental behaviour is somehow issue related. It appears as though issues must be the focus of instruction beyond environmental sensitivity, ecological foundations, and issue awareness. If environmental issues are to become an integral part of instruction designed to change behaviour, instruction must go beyond an "awareness" or "knowledge" of issues. Students must be given the opportunity to develop the sense of "ownership" and "empowerment" to facilitate they are fully participated in an environmental sense and prompted to become responsible active citizens. The on environmental education is very clear. Citizenship behaviour can be developed through environmental education. The strategies are known and the tools are available. The challenge lies in a willingness to do things differently than to live in the past



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