

# [Environmental education for sustainable development](https://assignbuster.com/environmental-education-for-sustainable-development/)

## Introduction to Environmental Education

Environmental education is not simply a program that teaches about the natural world and how ecosystems function, but it is

“… the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness of man, his culture and his biophysical surroundings.”

(IUCN, 1970 p. 17)

Environmental education cannot be viewed as an area of study. It is a lifelong process that is infused in various other fields of study. Environmental education should be seen through a multidisciplinary perspective. It can be thought of having three linked components:

Education about the environment: This deals with the enhancement of knowledge. The environment is seen as a subject of investigation.

Education for the environment: This emphasizes the need to instil values so as to create a pro-environmental concern. This in turn develops attitudes which generate responsibility towards sustainable living.

Education through the environment: This involves the environment as a learning medium. The environment can enhance real life situations as a basis for inquiry learning. (Department of Education and Science, 1981; Gayford, 1987)

“ Since environmental education is a process, it cannot in itself improve the environment, such as by enhancing local air or water quality. Instead, environmental education provides the capability and skills over time to analyze environmental issues, engage in problem solving, and take action to sustain and improve the environment. As a result, individuals are more capable of weighing various sides of an environmental issue to make informed and responsible decisions. Environmental education does not advocate a particular viewpoint or course of action. Rather, environmental education teaches individuals how to weigh various sides of an issue through critical thinking and it enhances their own problem-solving and decision-making skills.”

(U. S. Environmental Protection Agency, 2009, p. 2)

## Goals and Objectives of Environmental Education

The main goal of environmental education is to empower citizens so they can bring about change within their societies. With the help of creativity and co-operation, learning can be more effective towards ensuring that all species are in equilibrium with their environment.

According to Harvey & Burrows (1992) empowerment can be brought about by;

Evaluation: Not only students but the community can help share their views on the structure and the implementation of the curriculum within the area of study.

Control: Helping students become active in their own learning and involving them in decision making will empower students to achieve their goals whilst making the learning process fruitful.

Critical thinking: This involves helping our students to be creators of knowledge rather than absorbing and regurgitating it. They need to question established norms so as to reach new heights in their thinking patterns.

Boersma (1988) stated that the acquisition of knowledge, insight, awareness, skills, attitudes, values and the changes in patterns of behaviour are the main aspects in achieving a holistic approach to environmental education

Through education one can increase public awareness and knowledge about present environmental issues or problems. This will equip the public with the necessary skills to make informed decisions and take responsible action. Environmental education will hence foster:

Knowledge: Society will be aware of its environment, the issues related to it and humanity’s responsibility. This knowledge is fundamental in order to come up with “ reasoned but rapid decision making” (Stevensons, 1993)

Awareness: As Bossanyi (1977) states, becoming aware of the serious environmental problems is the first step towards action. This can in turn pose the necessary pressures for change to take place.

Skills: In order to act effectively, individuals and social groups need to acquire the skills needed to act in favour of the environment in terms of the ecological, political, economic, social, aesthetic and educational factors. In order for this to function effectively, mutual respect between all members of society is required, while trying to eliminate any practices that may harm the environment (Withrington, 1977).

Attitudes: Active participation in protecting the environment can only be brought about if individuals have strong values and concern and enough motivation to act towards protecting the environment (UNESCO, 1980),

Participation: In order to feel the need to act and be responsible in solving environmental problems for a more sustainable future.

## Converting Environmental Education to Education for Sustainable Development

Sustainable Development was introduced by the report of the World Commission on Environment and Development (WCED) in 1987, Our Common Future. It was then boosted in 1992 by the World Conference on Environment and Development in Rio de Janeiro, and was the main focus at the World Summit on Sustainable Development at Johannesburg in 2002.

The United Nations, declared 2005-2014 as the Decade for Education for Sustainable Development (ESD). It also brought up the difference between ESD and Environmental Education (EE). While EE “ is a well-established discipline, which focuses on humankind’s relationship with the natural environment and on ways to conserve and preserve it and properly steward its resources”, ESD “ encompasses environmental education but sets it in the broader context of socio-cultural factors and the socio-political issues of equity, poverty, democracy and quality of life”. United Nations (as cited by Venkataraman, 2009).

As a result Chapter 36 of Agenda 21 proposes the:

## Reorientation of education towards sustainable development:

Both formal and non-formal education need to be present in order to successfully disseminate knowledge about sustainable development. Only in this way can the society change its behaviour towards “ achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development” REFERENCE?

## Increase efforts towards public awareness:

Many countries still lack the resources to adequately inform society about the “ interrelated nature of all human activities and the environment” (Agenda 21). It is only through increasing public awareness and personal responsibility for environmental problems that commitment towards sustainable development can be achieved.

Promotion of training: The only way in which the above mentioned points can be implemented is through the harvesting of skills in sustainable development. Training in these areas would aim “ at filling gaps in knowledge and skill that would help individuals find employment and be involved in environmental and development work” (Agenda 21). As a result, such initiatives will lead to more awareness.

The shift towards education for sustainable development was supported by the Department of Education and Training in New South Wales (2001), stating that:

There should be equilibrium between all Earth’s natural systems. This can be brought about by educating societies to have foresight in protecting Earth’s natural resources in favour of future generations.

In accordance to this statement, the Division of Education developed a policy “ based on the principles of ecologically sustainable development”. This policy can be adopted into our educational system with a view to encouraging and empowering students in leading a sustainable life through thorough understanding, positive attitudes and active participation. This would ensure an improved quality of life for future generations.

According to this policy students will develop:

## Knowledge and understandings about:

the nature and function of ecosystems and how they are inter-related

the impact of people on environments

the role of the community, politics and market forces in environmental decision-making

the principles of ecologically sustainable development and career opportunities associated with the environment

## Skills in:

applying technical expertise within an environmental context

identifying and assessing environmental problems

communicating environmental problems to others

resolving environmental problems

adopting behaviours and practices that protect the environment

evaluating the success of their actions

## Values and attitudes relating to:

a respect for life on Earth

an appreciation of their cultural heritage and a commitment to act for the environment by supporting long term solutions to environmental problems

## The Concept of Sustainable Development

Whilst the concept of sustainable development is constantly changing, its main aspects include reference to society, environment and economy with culture as the common denominator.

Society: learning to appreciate the evolution of institutions within the society.

Environment: understanding the physical environment around us, including knowledge about its resources and the potential damage caused through use and misuse or resources.

Economy: economic growth needs to be achieved through awareness of its effects on society and the environment, in order to control consumption and achieve the equitable sharing of resources.

Education for Sustainable Development should be integrated within the whole curriculum and cannot be tackled as a separate subject. The issues covered in schools should include local examples and encourage critical thinking and problem solving techniques.

Education for Sustainable Development programmes’ success is achieved through the coalition of the various educational institutions within the community together with the non-formal sectors. (UNESCO Associated Schools Good Practices in Education for Sustainable Development, 2009)

## Obstacles and Challenges

Serious problems such as extreme inequalities among different human races and groups, vicious conflicts, loss of biological and cultural diversity, pollution and environmental degradation and depletion of natural resources have led to a state of “ planetary emergency”. Driven by a focus on short-term benefits, individuals and society in general are not taking into consideration consequences that will impact future generations (Educators for Sustainability, 2004).

Societies tend to be alienated of such a situation and so educators have to come up with innovative solutions and approaches to the challenges currently being faced.

In order to achieve this, a campaign, Education for Sustainable Development: A Necessary Commitment, was proposed by Educators for Sustainability so as to incorporate the study of the state of the world’s environment into educational activities encouraging:

the use of environmental resources following the three R’s; Reduction, Re-using and Recycling

progress of technologies to better satisfy human needs without any detriment to the environment

the implementation of measures on both local and international scales to deter private interests that might harm future generations.

solidarity and global protection of biological and cultural diversity as essential requirements for a real solution to the problems humanity is facing.

Unfortunately changing the world’s mentality is difficult and requires time and resources. One of the major obstacles in fact is that the communities often feel helpless. This is because even though most of the people are aware of the gravity and degradation of the situation, they find it difficult to deal with it due to the “ complexity and global scale of the problems” Reference?.

Another issue is surely pessimism. This results mainly from a “ diluted responsibility within the mass” and the indecisiveness to act (UNESCO 2005).

Communities’ numbness to commit themselves arises from various factors;

Daily life concerns

Lack of time and information

Lack of motivation and refusal to integrate systems.

Alternative behaviours are difficult to embrace due to society’s very own lack of alternatives and the general public’s reliance on consumer products. Further difficulties arise due to the perceived lack of benefits arising from such change (A UNESCO, 2005)

In a workshop report issued by UNESCO in 2006, it was clearly stated that the traditional educational structure acts as another obstacle to Education for Sustainable Development. This is due to sustainable development being a wide-ranging concept delivered via a rigid method of knowledge transmission.

For this reason, Wals and Corcoran state that one cannot just amalgamate sustainable development with the present education frameworks. However, this process requires “ a complete transformation of the educational system” ( as quoted by Venkataraman 2009, p.??)

## Exploring the Links between the Expressive Arts and Environmental Education

## Introduction

Jensen maintains that research on the arts, learning, and the brain demonstrates that the arts deserve a place in public education equal to the other disciplines. Jensen compares the arts with what he considers major disciplines or essential curriculum areas that should be studied every day. He frames his comparison within seven basic features of major disciplines, which he says:

can be measured against success criteria

are linked to specific parts of the brain

are beneficial to the cultural development

do not carry any risks

involve society at large

are essential for survival

are comprehensive

Educators need to look at education as a holistic process. It is ideal that we move away from a content-based type approach and move towards a student-based approach. In so doing so we will tailor our teaching to suit each and every student. Verlee-Williams (as cited by Billard, 2007) states that, it is past the time where educators confront their students with “ a great mass of information”.

Instead they should make the students aware of how to obtain the information and eventually make use of it. They should also help the students connect the newly acquired knowledge with prior knowledge and link it with their own lives.

In order to accomplish all the above educators need to integrate the arts in the school system. In doing so they will be offering the opportunity to students to process and master their own learning.

## Pedagogy: The ‘ Banking’ Concept of Education vs the Constructivist View

In his book Pedagogy of the Oppressed Paolo Freire (1921) mentions the banking concept of education, where teachers “ deposit” the information and the students will absorb this information without processing or analysing it. This concept of education emphasises on creating passive people who can adapt very easily. Unfortunately this pedagogy is still in use in our schools today.

Both parents and teachers create strategies that every child has to follow, which as a result

“ inhibit the creative capabilities and produce individuals who tend to grow up with a lack of confidence in their thinking and thought processes, be uncertain of self-concepts and become dependant on others in making decisions. Such children may also fail to develop realistic self-concepts because they were never provided with ‘ safe’ situations where they would have the possibility to practise and express themselves without evaluation or scrutiny”

(Mallia, 2002 p. 8)

Egan (1990) criticizes this method of teaching and compares schools that adopt this concept to “ factories in which the raw products (children) are to be shaped and fashioned into products to meet the various demands of life” (page??).

Freire’s ideal system of education is based on active learning. Long before Freire’s Pedagogy of the Oppressed, John Dewey (1959) who is considered the founder of ‘ progressive’ education and constructivist educational theory, abolished pedagogies that presented the students as containers and instead encouraged the students’ active interaction with each other and with the world around them.

Dewey also stated that when learning proceeds within significant contexts, it will aid students to apply new knowledge to pre-conceived knowledge (Billard, 2009). The role of teachers should be a challenging one, where they present problems to their students and the latter have to react using their creativity to drawing their own conclusions.

## The Importance of Integrating the Expressive Arts in the School System

“ It is believed that the provision of opportunities to link art-making to individuals’ sense of place and experience is significant in enhancing environmental and artistic perception. Such explorations may help individuals to develop a greater sense of community, and provide means to become familiar with the world, to appreciate its richness, to see themselves as part of it and to validate their experience in it.

(Savva et al. 2004, p. 247)

Helping both teachers and students in becoming aware of their local and global heritage through expressive arts will aid in their understanding of the world around them. Reflective thought can also be enhanced through art-based study. This can stimulate environmental awareness which eventually will lead to better understanding of environmental issues. For teachers to help children feel closer to the environment they live in, deepen their knowledge about the environment and become more creative they can make use of artistic activities linked to the environment.

“ Visual arts, used as a means of recording and analysing the experience of a place may challenge emotional responses and provoke an unlimitied exploration of space”.

(Savva, 2004, p. 2)

Jensen (2002) views learning through the arts as a way of ‘ developing thinking’ which will eventually lead to long term knowledge. According to Billard (2009) Jensen states that the arts enhance learning because the systematic integration of the arts develops sensory, cognitive, emotional and motor capabilities that are all necessary in the learning process.

Another reason that makes the arts important as a tool in our teaching is that they cater for all multiple intelligences. Armstrong (as cited in Billard, 2007) states that educators must stretch “ beyond the text and the blackboard to awaken students’ minds”. The more teachers get to know their students, the more they can cater for their needs. Integrating the expressive arts in the school system will reach all the different intelligences through manipulating approaches to student learning.

“ The arts reach students who normally disengage from the traditional setting. Integration of the arts allows students to discover, find their own level, and most of all experience real world learning”

(Billard, 2008 p. 1 )

## Teaching through the Arts

Dewey (1959) and Greene (1991) assert that the arts have long been known to deeply connect people with ideas and emotions. Unfortunately up until this day the arts are slowly being introduced in secondary schools, however they are separated from the core subjects. Research shows that arts are a very useful tool to teach core curriculum subjects such as science.

According to Jacobs, Goldberg and Bennett (1999), infusing the arts in the school curriculum has a number of advantages:

Teaching through the arts leads students to experience art rather than discussing it only.

The arts themselves are considered to be a language. However, to the contrary of other languages, they overcome written and verbal barriers among students (Gallas, 1994 and Goldberg, 1997).

The arts help students to develop creative thinking skills, enhance their self-esteem, increase their willingness to take risks and develop group skills (Gallas, 1994 and Goldberg, 1997)

“ Creativity plays a major role in the psychological functioning of an individual in such areas as mental health, coping mechanisms, educational achievement, vocational success and in the contribution of the individual to society. A person’s creativity can be viewed as one of the most important weapons in coping with life especially in times of emergencies and crises”

(Mallia, 2002 p. 8)

I believe that creativity is a fundamental tool in education; it must be at the heart of our educational philosophy and pedagogy. As a result, the expressive arts deserve a central role within the educational system. The discipline, creativity and feeling of empowerment that students gain when engaging in the expressive arts is immense and, in my opinion, it is as important as the mastering of any other subject in the curriculum. The individual is encouraged to come up with and produce his/her own ideas without being restricted with any rules and regulations.

Exercising these expressive arts in education engages the students further and makes the learning process enjoyable. A holistic approach to education is needed so as to appreciate the need of utilizing arts in education fully.

## The Idea’s Conception and its Aims

At a very young age, I was engaged in one of the above mentioned expressive arts – Dance. I used to think that dance means attending classes, passing exams, performing in front of an audience and perfecting my technique. As I grew older and dance became my passion, I reflected on what dance really gives me. It grants me a feeling that I cannot really express, it alienates me from the everyday routine and problems. Dance to me is also a medium through which I express my emotions without being judged or corrected. It is the expression of soul through lines of the body and pure movement.

Till this present day, dance gives me heaps of emotions and since I consider it an essential part in my life, I wanted to share such experience with others. This is the reason why I aspired to have not only dance but all the expressive arts as the main focus of this dissertation. I felt the need to research expressive arts and education, endeavouring to get away from the content-based approach and focus on a more student-focused approach.

Through integrating the arts in the classroom, the students get the chance to involve themselves more in the teaching and learning process. It is time to move away from the traditional method of overloading the students with content; instead educators should help students make connections with previous knowledge and relate it to their own lives.

As a result, with the help of the expressive arts I want to bring out the opportunities that these arts give the students to process and own what they have learned.

Embarking on this project will help students to:

develop creative and team work skills

be actively involved in their own learning and be part of decision-making processes

believe that they can be creators of knowledge not simply absorbers

appreciate the difference in the end results if motivation is present

learn how to manage time effectively

persevere in order to overcome difficulties

recognize the benefits of reflective writing

realize that learning is fun

## Include BRIEF conclusion for the chapter