

**Impact
Factor
3.025**

ISSN 2349-638x

Refereed And Indexed Journal

**AAYUSHI
INTERNATIONAL
INTERDISCIPLINARY
RESEARCH JOURNAL
(AIIRJ)**

UGC Approved Monthly Journal

VOL-IV

ISSUE-VIII

Aug.

2017

Address

• Vikram Nagar, Boudhi Chouk, Latur.
• Tq. Latur, Dis. Latur 413512 (MS.)
• (+91) 9922455749, (+91) 8999250451

Email

• aiirjpramod@gmail.com
• aayushijournal@gmail.com

Website

• www.aiirjournal.com

CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

Education– A Key Instrument for Sustainable Development

Dr.Mandeep Kaur

Assistant Professor,

DAV College of Education, Abohar

Sustainable development is a process which involves human's intelligence, decision making efficiency, planning and management skills, power of imagination, entrepreneurship, development and production with environmental safety etc. Usually, sustainable development is a human subject. The issue associated with sustainable development can be seen as one of the basics of any society. Therefore, so far its major field of concern has been for the environment, but its applicability has been extended to wrap almost each human attempt. Environmental education is the fundamental education to study the sustainable development. In other words environmental education can be able to make a path for education for sustainable development. Any researcher who is working for education for sustainable development can support the mode of life explained by value based interpretation of sustainable development.

The education for sustainable development has been accepted as a main policy which is the utmost need of the day for each state or country. Sustainable development is a pattern of using natural resources in such a way which provides regular individual requirements considering the preservation of the environment for coming generations. After Brundtland Report sustainable development was defined as "the development which meets the needs of the present without compromising the ability of future generations to meet their own needs". After Rio Earth Summit 1992, the role of education to avoid the ecological degradation was accepted as a result of Rio Declaration on environment and development.

Education for Sustainable Development (ESD) is an idea of education which aims to empower the individuals to assume liability to build a sustainable future. The thought of sustainable development touches aspects of the institutional and social framework. There has been increasing identification of the significant role of education in promoting sustainable development since 1992 Earth Summit in Rio de Janeiro. However, any individuals or organizations do not have all the knowledge to develop learning systems which are essential to maintain sustainable development in the specific surroundings

Education for Sustainable Development (ESD) is simultaneously a sub-field of education and a conceptual tool to aid policy makers in authoring educational policies that take into account the present environmental, societal and economic challenges. According to the UNESCO, "it is based on all levels and types of learning - learning to know, learning to be, learning to live together, learning to do and learning to transform oneself and society."

To create a more sustainable world and to engage with sustainability-related issues individuals must become sustainability change-makers. They require the knowledge, skills, values and attitudes that empower them to contribute to sustainable development. Education, therefore, is crucial for the achievement of sustainable development. However, not all kinds of education support sustainable development. Education that promotes economic growth alone may well also lead to an

increase in unsustainable consumption patterns. The now well-established approach of education for sustainable development empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society for present and future generations.

ESD aims at developing competencies that empower individuals to reflect on their own actions, taking into account their current and future social, cultural, economic and environmental impacts, from a local and a global perspective. Individuals should also be empowered to act in complex situations in a sustainable manner, which may require them to strike out in new directions; and to participate in socio-political processes, moving their societies towards sustainable development. ESD has to be understood as an integral part of quality education, inherent in the concept of lifelong learning.

ESD is holistic and transformational education that addresses learning content and outcomes, pedagogy and the learning environment. Thus, ESD does not only integrate contents such as climate change, poverty and sustainable consumption into the curriculum; it also creates interactive, learner-centered teaching and learning settings. What ESD requires is a shift from teaching to learning. It asks for an action-oriented, transformative pedagogy, which supports self-directed learning, participation and collaboration, problem-orientation, interdisciplinary and the linking of formal and informal learning. Only such pedagogical approaches make possible the development of the key competencies needed for promoting sustainable development.

Three Levels of Action for Implementing ESD

ESD is such a large task that efforts from many people and disciplines are needed to make progress.

Level 1 – Disciplinary: Strengths Model

Every discipline and teacher can contribute to ESD. No one discipline should claim ownership of ESD. Mathematics helps students understand extremely small numbers (e.g., parts per hundred, thousand, or million), which allows them to interpret pollution data. Social Studies help students understand ethnocentrism, racism, and gender inequity as well as to recognize how these are expressed in the surrounding community and in nations worldwide. Language Arts, especially media literacy, creates knowledgeable consumers who can separate fact and opinion.

Level 2 - Whole School

Whole – school approaches takes more than information about sustainability to make the enormous behavioral shift needed for a more sustainable future. Schools model environmental, social, and economic sustainability in the daily operations of a school. Sustainability is practiced to reinforce concepts taught in the classroom.

Level 3 - Educational System

Five key aspects of quality education at the systems level are:

- creates a legislative framework,
- implements good policies,
- builds administrative support and leadership,
- provides sufficient resources, and
- measures learning outcomes

ESD Pedagogies

Pedagogies associated with ESD stimulate pupils to ask questions, analyze, think critically and make decisions. Such pedagogies move from teacher-centered to student centered lessons and

from rote memorization to participatory learning. ESD pedagogies are often place-based or problem/issue based. ESD pedagogies encourage critical thinking, social critique, and analyses of local contexts. They involve discussion, analysis and application of values. ESD pedagogies often draw upon the arts using drama, play, music, design, and drawing to stimulate creativity and imagine alternative futures. They work towards positive change and help pupils to develop a sense of social justice and self-efficacy as community members. The following are descriptions of and sample activities for four teaching techniques: simulations, class discussions, issue analysis, and storytelling. Each technique stimulates different learning processes.

1.Simulations: Simulations are teaching/learning scenarios in which the teacher defines the context in which the pupils interact. The pupils participate in the scenarios and gather meaning from them. Often, simulations simplify the complex abstract concepts. At the same time, because they are distillations of real-world situations, simulations give a sense of reality and thus engage and motivate learners of all ages.

Concepts associated with sustainability are often abstract and complex. Simulations reduce complexity and highlight salient aspects. Simulations give concrete ways to teach abstract concepts. Providing concrete examples for abstract concepts is especially important for children and adolescents, many of whom are still in the concrete stages of cognitive development.

2.Class Discussions: Class discussions allow for the transfer of information amongst pupils and from the pupils to the teacher, in addition to the traditional route from teacher to pupils. Pupils come to the classroom with a wide variety of life experiences that can enrich the teaching of the mandated curriculum. Pupils can therefore contribute a great deal to discussions of sustainability with observations from their neighborhoods about what is sustainable and what is not. Teachers can then incorporate these experiences into their lessons through class discussions that provide pupils with real life applications of concepts.

One of the skills that ESD develops is the ability to communicate orally and in writing. Discussions give pupils opportunities to develop oral communication skills (e.g. developing focus and purpose before speaking, active listening, building on the ideas of others, summarizing, and questioning). Pupils with strong auditory learning modalities learn well from discussions, both from listening and expressing their own ideas.

3.Issue Analysis Techniques: Issue analysis is a structured technique for exploring the environmental, social, economic, and political roots of problems that face communities. Issue analysis helps pupils identify major arguments related to a community problem as well as key stakeholders and their perspectives, goals, and assumptions related to that problem. Issue analysis also looks critically at the proposed solutions and the costs and at who will bear those costs. Issue analysis can be done briefly or in depth. Issue analysis is interdisciplinary, bridging the natural and social sciences.

Sustainability is an over-arching paradigm that encompasses environmental, social, economic, and political problems and issues that face communities around the world. When the pupils of today assume positions of leadership and become voters, they will have to deal with complex issues that have no simple answers. While in school, they should develop the tools and frameworks for thinking in a way that will help them untangle the complexities of sustainability

issues that face their communities. They will also need to learn to create solutions that are locally appropriate and at the same time keep in mind global consequences (e.g. cleaning up local pollution without shipping toxic and hazardous waste to another country). Issue analysis guides pupils through a process that can be used with any issue. It is a generic process that can be applied to a wide range of environmental, social, and economic problems.

4. Storytelling: Telling stories to convey and illustrate sustainability ideas is an engaging form of teaching. Stories can be taken from current events, history, television programs, literature, drama, and personal experience. Storytelling also draws on the oral traditions of indigenous societies and folk art. Storytelling has been practiced for generations as a means of entertainment, education or cultural preservation and to instill moral values among younger generations. Storytelling is an effective ESD pedagogy as the values highlighted in traditional stories often contain the wisdom of the elders or stem from creation stories, which helps to impart respect for cultural heritage as well as the environment.

Storytelling makes ideas, theories, and concepts learned from textbooks come alive. Storytelling adds human element to otherwise dry information. This enables teachers to better transmit sustainable development information, principles and values to pupils. Storytelling is especially good for pupils whose preferred learning modality is auditory. Remembering a list of isolated concepts is difficult, but recalling the story related to these concepts may be easier for pupils. A story may also provide a non-threatening way to ease pupils into learning. Stories engage people of all ages and abilities.

Conclusion

All educational institutions – from preschool to tertiary education and in non-formal and informal education should consider it their responsibility to deal intensively with matters of sustainable development and to foster the development of sustainability competencies. ESD provides an education that matters and is truly relevant to every learner in the light of today's challenges.

References

1. McKeown, R. (n.d). Education for Sustainable Development: The Oregon Context. Retrieved from <http://www.ode.state.or.us/stateboard/meetings/mckeown-090318.ppt>
2. Sharma, B. (2014). Sustainable development through research and higher education in India. *American Journal of Educational Research*, 2(3), 117-122. Retrieved from <http://pubs.sciepub.com/education/2/3/1/#>
3. UNESCO 2012. *Education for Sustainable Development*. Retrieved from <http://faculty.fiu.edu/~obrieng/Sept3 UNESCO Education Sourcebook.pdf>
4. UNESCO 2017. *Education for Sustainable Development Goals: Learning Objectives*. Retrieved from <http://unesdoc.unesco.org/images/0024/002474/247444e.pdf>

Website visited

<https://en.reset.org/knowledge/advancing-sustainable-development-through-education-india>