

# Role of teachers in environmental education among school children

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**Abstract** -Environmental conservation and management has arisen as a big challenge in front of modern world and can be achieved from early childhood through education and awareness. The role of teachers to develop and nourish attitudes in primary school children for nature's care and safety has become an important task for a sustainable development. Every nation has to frame such an education policy that environmental studies should be mandatory from nursery classes, and teachers and students should be aware of new challenges and problems related to the global environment. This study highlights the importance of environmental education beginning from early childhood stage. The valuable role of environmental educator in reshaping the young minds for a better integration with nature is discussed. Moreover, the practical knowledge and understanding of environmental terminology and issues among school children are evaluated. Finally, the duties, abatement, and responsibilities related to environmental issues and challenges by government, NGOs and community role in addressing the problems are also addressed.

**Key Words:** environment conservation, environmental education, environment teacher, sustainable development

## INTRODUCTION

The present global environmental situation like destruction of bio-diversity, pollution, global warming, deforestation, ozone depletion, smog, the environmental education has become an urgent need to create awareness from childhood onwards and to every citizen of every genre the importance of protection, conservation, and restoration of Mother Nature. The non-formal education methods are the best technique in understanding environmental problems and issues among children [1]. Increasing global population, resources demands and increasing pollution has necessitated the importance of understanding the environment among primary students [2]. Environmental education plays vital role in sustainable development especially English primary school teachers as a national curriculum [3]. Teachers can play a significant role in bringing awareness about the environment and its problems at all levels. There should be sincere efforts for the safety and functioning of the environment. The greed, life style, selfishness should be properly focused as far the problems related to environment are concerned. The spirit of questions and the learning process should be given special attention. The process of engaging young minds in observing and understanding the patterns of the nature and surrounding worlds helps in taking good care of environment [4]. An interrelationship among school community and primary students set a quality platform in addressing, learning and understanding environmental issues [5].

## **Assessment of school children knowledge about environment**

The child-parent relationship is an important factor deciding children's environmental attitude, behavior, skill and awareness, making him a successful individual [6]. The investigation of primary school children regarding knowledge and understanding of environmental terminology and issues such as recycling, conservation, pollution and protection is limited up to a physical and biophysical attitude and they think that the environment is a place containing living things and people. Thus emphasis on environment education among school children will help in restructuring and reshaping the thoughts of youth towards the environment [4]. Children's Knowledge Scale and attitudes towards this crucial issue suggest that young students are more committed, gifted students have more knowledge, and girls were more verbal in general, and thus there arises a need to promote awareness and education to save and resolve environmental problems [2].

Children bear natural quality in connection with the nature some to be mentioned are comfortable feeling in natural spaces, attachment to natural spaces, and caring of nature. Thus there is a need of understanding psychological traits of human connection to the nature and role in development of sustainable futures [7]. Expanding preschool and kindergarten and early childhood programs at global level, needs special attention to children's health achieved through nature sustainability and environmental education. Thus there is a need in redesigning and creating novel courses and programs for strengthening concepts, knowledge and expertise for beginners and experienced teachers. The professional development of the teacher-education for learning policy, research and practice, a great deal on teachers curricular, nature and program restructuring and a target for teacher educators of designing environmental courses from family childcare to large preschools, will play a decisive role in taking care and understanding childhood teacher education [8].

A study conducted in Bangladesh secondary school level reveals positive attitude of student towards environment with urban having higher knowledge whereas rural students showing higher attitude level, mainly attributed to teachers, families background, self-reading, media, and school curriculums improving students environmental view as well as of the society [9]. An inquiry-based activity on primary school children about climate change effects in ocean ecosystems reported that all students have capability to make predictions, observation, and register facts and figures instead planning and outcomes. They were more comfortable with the outdoor activity, teamwork and the environmental understanding [10].

## **Tools and Techniques to promote children's environment awareness and education**

The primary teachers are least convinced in implementing nature activities compared to other curricular activities. Thus, there is a need of nature educator with qualitative analysis of ideas related to knowledge of nature, activities about nature for promoting children's learning, understanding and development. The strategies like inclusion of content related to science, nature, and environmental education, special focus on place-based education and the amenities of experiences in nature will help and guide teachers to gain confidence in pursuing activities in nature [11]. Digital technologies can serve young people in enhancing environmental responsibility and meaningful behaviors towards nature. The mobile apps, videoconferencing, virtual, and augmented techniques, help in providing new methods of engaging students in environmental

ministration. These technologies develop interest in student and help to gain experiences in local and distal environments, data collection and sharing outcomes among audiences [12].

The case studies like use of Plastic Resources Education (PRE) into primary school life helps to provide crucial information that can be used as a reference for other schools to integrate the technique for more efficient learning. The challenges like time management, manpower, and pupil engagement can be tackled using strategies and assistance from the appropriate stakeholders of school management and parents [13]. The study suggest that students having environmental education understandings, has ability to draw pictures related to environmental awareness, and also inspire other students towards toward environmental awareness, commune with nature and draw creative and attractive pictures [14].

The teacher's attitude adopting different methods of environmental education like pedagogical play, including open-ended, modeled, and purposefully architected plays, helps in providing opportunities to young children along with educators to gain knowledge through experiences in early childhood stages [15]. Linear mixed model study in Colombia suggest that environmental education and students awareness mainly depends on the socio-economic status, parent characteristics, student's robust abilities towards science, and public or private institution with quality educational resources [16]. The factors like community organizations, localized issues, scientist's collaboration, resource managers, integrated action elements, and reporting structures are effective parameters of environmental education programs [17].

### **Short comes and actions promoting environment education: Case study**

Various case studies have revealed changes, outcomes, and influences among the school children attitude towards the environment. A case study in Australia involving students, teachers and parents exploring school environmental program suggest that student are getting aware of global environmental issues. However, there is a need of more emphasis on developing interest of students, guardians and other members in the community for appreciating relationships between the public and environments, promoting knowledge, commitments, and skills for taking appropriate action[18]. An investigation in Finland school observed that teachers are least concerned about their role in introducing environment education in nature school The most commonly used methods include trips, inquiry learning, physical activities and learning by doing various nature activities however their impact are not very strong as the student typically visits a nature school once or twice during his entire education tenure [19]. A case study of Maharashtra in India observed lack of awareness and need of environment education in school students [20]. Similar situation was also noted in a study in Turkey as environmental educations in schools are not sufficient and student participation level to environmental activities are very low. The students gain better experiences from mass media. Moreover, the female student shows high level of awareness and participation in environmental activities. The factors like family income and media can play a decisive role in environmental awareness programs [21].

The environmental problems are the consequences of joint human impact and can be sorted only with joint human efforts. A study conducted in secondary school in Bulgaria observed that interactive methods like role playing and poster presentation are effective teaching techniques for

children personal development. Observing, analyzing, documenting, and interpreting conflict situations related to environment, and their scientific solutions are some of the best environmental teaching strategies [22]. A study in Zhejiang Province China reported that teacher can play an effective role working as a role model in provoking pro-environmental behaviours in school children improving their behavior towards adopting environment friendly activities like picking up garbage or litter and their proper disposal [23]. Case study of a secondary school in Angola present a different picture as improper environmental education program and lack of school activities on environmental issues are major causes of inappropriate waste disposal causing diseases. Thus there is a need of implementing environmental education in schools that also influences the guardians and helps to teach children and adolescents about the importance of environment protection and minimizing public health problems [24].

Some countries like Indonesia have framed Adiwiyata program establishing 'Adiwiyata School' to improve environmental literacy. The environment, the core of Adiwiyata is compulsory added in primary and secondary school syllabus. These school shows good governance that support sustainable development adopting student work using green projects. In this model the students have opportunity to think and act creatively and develop various abilities, needs, and skills in tackling environmental needs. The schools are proving a working model in generating healthy and comfortable environment and producing caring and cultured citizens of the nation [25].

### **Role of Government in promoting Environment educations:**

In the present global scenario environment education should be mandatory for developing moral values for a sustainable social development. Every citizen should cultivate and develop the values, knowledge, behavior, attitudes, and insights. The learners and communities should be concern of environmental concept in their everyday learning activities [26]. The government should take initiative to encourage and promote environment education at all levels to ensure effective implementation. The international bodies and nongovernmental organizations should play an active role for a sustainable development goal [27]. The local governments should pay special attention in facing environmental challenges and problems. Public schools and school with high number of teachers shows more participation in environmental programs. Moreover, finically sound communities provide voluntary assistance in local issues and environmental management initiatives [28]. In India the quality and standard of environmental education for teacher education is better however there is a need to set an objective and to develop more knowledge in education teachers for improving their understanding about the subject [29]. There is a need of reevaluation of learning purposes regarding environmental education and the knowledge of environment and conservation of life on Earth should be made mandatory for professional teaching practices [30]. Environmental fair, excursions, adaptation of practical's on environment education, accreditation and audit, attitude and skill gradation of teaching and non-teaching staff can make environmental awareness and education more effective [31].

### **CONCLUSION**

Thus it can be concluded that in the present scenario the understanding of global environment issues and problems has become important to gain knowledge about the changing world. The

inclusion of Environmental studies from primary school level is a better idea to nurture the children mind regarding significance of preserving and protecting the environment. The environment awareness program like small plays, drawing-painting activities, plantation campaign, lectures, events and many more activities can play an important role in this novel drive. The educator's role in promoting, teaching and designing new activities related to environment education should be in merit as they can become role model with potentiality to reshape and revoke the young mind.

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